REFERENCE

NBS
Publi-
cations

TABULATION OF DATA ON MICROWAVE TUBES

Handbook 104

United States Department of Commerce

National Bureau of Standards

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#104

1967

UNITED STATES DEPARTMENT OF COMMERCE • Alexander B. Trowbridge, *Secretary*
NATIONAL BUREAU OF STANDARDS • A. V. ASTIN, *Director*

Tabulation of Data on Microwave Tubes

J. K. Moffitt

The National Bureau of Standards
Electron Devices Data Service

National Bureau of Standards Handbook 104

Issued September 29, 1967

Supersedes Handbook 70

Library of Congress Catalog Card Number: 67-62080

Foreword

This tabulation of data on microwave tubes currently in use has been prepared as part of the National Bureau of Standards Electron Devices Data Service. Established in 1948 to provide technical data on radio tubes to members of the Bureau Staff, the service has since been extended to all scientists and engineers in government and industry. In the course of the program, a large volume of information on domestic and foreign devices was accumulated on punched cards from which it could be automatically printed. It was felt desirable to make these data available in a single reference source as an aid to circuit designers in selecting tube types for particular uses.

The engineer should find this manual useful in narrowing down the choice of tubes to one or a few types. However, it is not practical to give all possible operating conditions or to provide the characteristic curves for each tube in a tabulation such as this. It will still be necessary to consult the tube manufacturer's literature for such detailed information.

All information appearing in this publication was taken from manufacturer's published specifications, and every effort has been made to ensure accuracy and completeness. However, the Bureau cannot assume responsibility for omissions nor for results obtained with these data.

A tabulation of data on receiving tubes has been issued previously as NBS Handbook 103. Additional tabulations for other electron devices are being developed and will be issued as rapidly as they are completed. Also, revisions of this and other tabulations will be issued as deemed necessary to keep them up to date.

A. V. ASTIN, *Director.*

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Tabulation of Data on Microwave Tubes

J. K. Moffitt

A tabulation of microwave electron tubes with characteristics of each type has been arranged in the form of two major listings, a Numerical Listing in which the tubes are arranged by type number, and a Characteristic Listing in which the tubes are arranged by the kind of tube, and further ordered on the basis of minimum frequency and power output.

1. Introduction

The Electron Devices Section of the National Bureau of Standards has developed over the past decade an Electron Devices Data Service. This service collects and maintains a file of data on all electron devices, i.e., tubes, transistors, diodes, etc., manufactured in the United States and other countries. In an effort to make this service more readily available to engineers applying electronics in the laboratories throughout the country, it was decided to develop a method of tabulating the essential information pertaining to tube characteristics in handbook form for ready reference. For this publication on Microwave Tubes, an easily decipherable code and format of the tube characteristics which was adaptable to punched cards was developed. Both accuracy and flexibility are incorporated into the system. The sources of information were the manufacturers' published handbooks and data sheets. The accuracy of the printed information is reasonably assured by verifying tabulations by various sortings and cross checking with manufacturers' publications. This tabulation includes only the information normally furnished by the manufacturers in their handbooks or data sheets. All data in our files up to April 1, 1967, is included in this tabulation.

This tabulation includes only those tube types of the general class known in the field of electronics as microwave tubes, i.e., tubes employed as oscillators and power amplifiers at frequencies above approximately 1,000 MHz and which are "velocity controlled" with transit times in excess of 0.3 radian. Some developmental types have been included.

2. Organization of the Tabulation

The Microwave Tabulation comprises two principal sections as follows:

1. *Numerical Listing.* In this, the tubes are arranged by type number in the numerical-alphabetical sequence which is standard in the industry.

2. *Characteristics Listing.* Here the tubes are sorted into the basic groups and then are arranged by increasing value of one or more pertinent characteristics.

3. Sorting and Terminology of the Tabulation

To assist the user in understanding and applying the tabulation, the method of sorting and the definition of terms and code used, are explained in this section.

3.1. Sorting Methods

The Numerical Listing is arranged in the numerical-alphabetical sequence by tube type number which is explained under the heading "Type Number" in section 3.2.

In the Characteristic Listing, the tube types are arranged into basic groups or kinds, e.g., klystron amplifier, klystron oscillators, magnetrons, etc., and then sorted primarily by minimum frequency and secondarily by power output. The basic groups are listed under the heading "Kind" in section 3.2, Terminology. This method of sorting permits the user to find the type numbers which most completely satisfy his requirements.

3.2. Terminology

The Numerical and Characteristic Listings are in tabular form containing 24 columns. The headings of these columns and their meanings are given below.

A blank in any column indicates that the characteristic designated by the column is not applicable to the type number in question or that no value was given in the available data.

Definitions

Type Number. This column lists the numerical-alphabetical designation assigned by the manufacturer. The Numerical Listing on page 7 has been arranged according to the industry standard, i.e., primarily by arranging the initial numerical portion in sequence, secondarily by arranging the alphabetical prefix in sequence and finally by arranging the alphabetical suffix in order e.g.

2V315
2W401
HA3
HK3
W3MQ/1F
3K2500SG
3K3000LQ
3KM300LA

Symbols. An asterisk (*) is used to designate tube types found in the Military Preferred list issued by the Department of Defense as "Military Standard Electron Tubes, Selection and use of" MIL-STD-200H, 17 January, 1966.

An equal sign (=) designates a reliable or premium type as indicated by the manufacturer.

Kind. A three-letter code is used to describe the generic group of tubes. This is used as the primary sorting means for the Characteristic Listing.

AMA	Amplitron Amplifier or Platinotron
BWA	Backward Wave Amplifier
BWO	Backward Wave Oscillator
CAR	Carcinotron
CFA	Crossed-Field Amplifier
KLA	Klystron Amplifier
KLM	Klystron Multiplier
KLO	Klystron Oscillator
MAG	Magnetron
TWA	Traveling Wave Amplifier
TWM	Traveling Wave Multiplier

Frequency. Both minimum and maximum frequency of operation are listed in gigahertz (10^9 Hz) with the exception that the "letter-band" designation (i.e., S-band, X-band) is used when more specific information is unavailable. Fixed-tuned tubes are available at any frequency within the tabulated range. In the case of frequency multiplier tubes, *output frequency* is tabulated.

Duty Cycle. The duty cycle for pulsed operation is often specified as a percentage, although it may also appear as the product of the pulse-duration time (t_p) and the pulse-repetition rate (prf). The tabulated value is the product of the pulse-duration time and the pulse-repetition rate times 10^4 . The following table illustrates both methods of specifying Duty Cycle and the corresponding tabulated value.

Duty cycle		Tabulated
$\%$	$(t_p)(prf)$	Value
0.05	0.0005	5
.1	.001	10
1.0	.01	100
10.0	.1	1K
15.0	.15	*1K (between 10% and 20%)
20.0	.2	2K

Tuning. The method by which the tube is frequency-tuned is shown by the following alphabetical code.

FX	Fixed tuned
HY	Hydraulically tuned
MEC	Mechanically tuned
TH	Thermally tuned
VT	Voltage tuned

Manufacturer. The alphabetical code refers to either the company originally registering the tube type with the Electronic Industries Association or the manufacturer of the type. In the case of tubes produced by more than one manufacturer, this column has been left blank.

AM	Amperex Electronic Corp.
BE	Bendix Aviation Corp.
BL	Bomac Div. of Varian Assoc.
BM	Beam Tube Corporation
CS	Compagnie General de T.S.F.
CV	Canadian Varian
EC	Microwave Electronics Corp. Palo Alto
EE	English Electric Valve Co.
EI	Eimac Div. of Varian
EM	EMI Electronics Ltd.
FE	Ferranti Electric Co.
GC	General Electric Co. Ltd.
GE	General Electric Co.
HI	Hitachi, Ltd.
HP	Hughes Microwave Tube Div.
HU	Huggins Laboratories, Inc.
IT	International Telephone & Telegraph Corp.
KK	Kobe Kogyo
LI	Litton Industries
LT	Lignes Telegraphiques et Telephoniques
MA	Microwave Associates, Inc.
ME	Metcom
MR	Micron, Inc.
MU	Mullard Ltd.
NC	Aksjeselskapot Nera
NE	Nippon Electric Co.
OK	OKI Electric Industries Co.
PH	Philips Laboratories
PO	Polarad Electric Corp.
RA	Raytheon Co.
RC	Radio Corporation of America
SD	SFD Laboratories
SE	Stewart, Div. of Watkins-Johnson
SH	Siemens America, Inc.

SP Sperry Electronic Tube Division
ST Standard Telephones & Cables Ltd.
TE Telefunken G.M.B.H.
TO Tokyo Shibaura
TV Thomson-Varian
VA Varian Associates
VV Valvo G.M.B.H.
WH Westinghouse Electric Co.
WJ Watkins-Johnson Co.
WT Warnecke Electron Tube Co.

Operation. This is an alphabetical code to indicate the type or operation, as shown,

C Continuous Wave Operation

P Pulsed operation (If a manufacturer has specified different operating parameters (i.e. for both pulsed and CW), the tube is tabulated twice to include both sets of conditions.

E_h. The nominal heater or filament voltage in volts.

I_h. The nominal heater or filament current in milliamperes.

Beam or Anode Volts. The maximum anode, beam or resonator voltage. All voltages and currents given in this and the following columns are maximum values (peak values in the case of pulsed tubes) as these will aid in determining the power supplies needed to operate the tube over its complete range.

I_k. The maximum cathode or plate current in milliamperes.

P_o. The maximum power output.

Collector, Reflector, etc. Volts. The maximum collector, reflector, line, etc. voltage whichever is most applicable.

Control Volts E_{g1}. The maximum control, focusing or grid voltage.

Helix Voltage. The maximum helix or delay-line voltage of traveling wave tubes.

Gain. The maximum, small-signal gain in decibels or, in the case of frequency multiplier tubes, the multiplication factor.

NF. The typical noise factor in decibels.

Pulling Factor. The pulling factor in megahertz.

Bandwidth. The frequency difference between half-power points for amplifier tubes or the electronic tuning range for oscillator tubes.

Magnetic Field. Numerical figures indicate the magnetic field strength in millitesla (0.1 mT = Gauss); or the alphabetical code "IM" indicates an integral permanent magnet.

Cavity. The number and type of cavities characteristic of the tube is indicated by the code.

EX External Cavity
IN Internal Cavity
RE Reflex, External Cavity
RI Reflex, Internal Cavity
#I Number of internal Cavities
#E Number of external Cavities
R Reflex

Coupling. The type of output coupling of the tube is coded as follows:

CO Coaxial
SP Special
WG Waveguide
WC Waveguide or Coaxial

3.3. Unit Symbols

While the normally used electrical unit is printed at the top of each column, it will be noted that letter symbols are used following some numbers to indicate a change of unit.

Symbol	Heading	Unit
H	Frequency	100 Gigahertz (10 ¹¹ Hz)
A	I _f	Amperes
K	E _b	Kilovolts
A	I _k	Amperes
U	I _k	Microamperes
K	P _o	Kilowatts
M	P _o	Megawatts
U	P _o	Microwatts
W	P _o	Watts
K	Collector, Reflector Voltage	Kilovolts
K	Control Voltage	Kilovolts
K	Helix Voltage	Kilovolts
K	Bandwidth	Kilohertz

4. Numerical Listing of Tube Types

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM PA	I _k	P _o	COLLECTOR REF. VOLTS	CONTROL VOLTS	HELIOT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
BLK001		KLO	8.5	10.5				BL C	6.3	1320	300	32	25	240						30			
BLK002		KLO	9.3					BL C	6.3	1320	300	70	1000						15		IM		CO
BLM003	=	MAG	9.0	9.5	20	MEC		BL P	5.0	500	1600	1200	150W										
BLK004		KLO	9.8	11.2				BL C	6.3	1320	600	70	500										
BLK005		KLO	9.0	10.5				BL C	6.3	1320	500	70	500										
BLK006		KLO	10.0	11.7				BL C	6.3	1320	600	70	500										
BLM006		MAG	23.8	24.3	7	FX		BL P	5.0	2900	14K	15A	40K						30				WG
BLK007		KLO	10.0	10.2				BL C	6.3	1320	600	80	1000							30			
BLK008		KLO	10.0	10.2				BL C	6.3	1320	400	60	150										
BLM008		MAG	5.4	5.9	20	MEC		BL P	5.0	700	2250	1100	500W						15				CO
BLK010		KLO	11.0					BL C	6.3	1320	300	50	50										
RRW010		BWO	6.5	12.7				MEC SH C	6.3	1000		25	1000		200	2K							CO
BLK011		KLO	8.5	10.5				BL C	6.3	1320	300	32	20							30			
RRW040		BWO	32.0	40.0				SH C	6.3	1000		20	150		200	2K							WG
RRW040		BWO	26.5	42.0				VT SH C	6.3	1000		20	60		400	3K							WG
CO.05		BWO	H5.7	H6.3				CS C					5										
BLM060		MAG	8.5	9.5	20	MEC		BL P	5.0	500	1320	900	100W						15				CO
CO.06EA		BWO	H4.8	H5.2				CS C					30										
RRW060		BWO	40.0	61.0				VT SH C	6.3	1000		18	20		200	2K							WG
BLM071		MAG	15.9	16.0	10			BL P	14.0	3200	20K	20A	100K						12				WG
RRW080		BWO	60.0	90.0				VT SH C	6.3	1000		18	5		400	3K							WG
BLM086		MAG	5.4	5.9	20			BL P	5.0	700	2150	1100	500W						12				CO
BLM088		MAG	9.0	9.5	20			BL P	5.0	500	1350	900	200W						15				WG
CO.09EA		BWO	H3.1	H3.5				CS C					50										
SRX0921		KLO	9.0	10.5				MEC SP C	6.3	500	400	52	125	300									RI
SRX0923		KLO	8.5	10.5				MEC SP C	6.3	600	300	34	20	180						30			RI
BLM093		MAG	5.4	5.9	20			BL P	5.0	700	2200	2000	600W						15				CO
BLM095		MAG	5.4	5.9	20			BL P	5.0	700	2650	1700	1K						12				CO
CO.10-1		BWO	H2.9	H3.2				CS C					1000										
•1P.5-1		MAG	0.5	1.0				VT MR C	3.0	2000	500	2	100		100								CO
•1P.35-1		MAG	0.3	1.0				VT MR C	3.0	2000	1500	3	100		100								CO
CO.20-5		BWO	H1.3	H1.6				CS C					5000										
•25P.25-.75		MAG	0.2	0.7				VT MR C	3.0	3000	2400	5	250		100								CO
•25P.25-.755		MAG	0.2	0.7				VT MR C	3.0	3000	2400	5	250	100									CO
•25P.35-1		MAG	0.3	1.0				VT MR C	3.0	2000	2400	5	250		200								CO
•25P.35-15		MAG	0.3	1.0				VT MR C	3.0	2000	2400	5	250	200									CO
•25PL.4-1.2		MAG	0.4	1.2				VT MR C	3.0	2000	2400	5	250		200								CO
•25PL.4-1.25		MAG	0.4	1.2				VT MR C	3.0	2000	2400	5	250	200									CO
CO.40-30		BWO	68.0	77.0				CS C					30W										
•5L1-2		MAG	1.0	2.0				VT MR C	3.0	2000	1400	10	500		200								CO
•5L51-3		MAG	1.0	3.0				VT MR C	3.0	2000	2400	10	500		200								CO
•5L51-35		MAG	1.0	3.0				VT MR C	3.0	2000	2400	10	500	200									CO
•5L51.2-3.6		MAG	1.2	3.6				VT MR C	3.0	2000	2400	10	500		200								CO
•5L51.2-3.65		MAG	1.2	3.6				VT MR C	3.0	2000	2400	10	500	200									CO
•5L51.5-3		MAG	1.5	3.0				VT MR C	3.0	2000	1400	10	500		200								CO
•5P.2-.4		MAG	0.2	0.4				VT MR C	3.0	3000	1600	3	300		100								CO
•5P.2-.45		MAG	0.2	0.4				VT MR C	3.0	3000	1600	3	300	100									CO
•5P.25-55		MAG	0.2	0.5				VT MR C	3.0	3000	2100	3	500	150									CO
•5P.5-1		MAG	0.5	1.0				VT MR C	3.0	2000	1400	10	500		200								CO
•5P.25-5		MAG	0.2	0.5				VT MR C	3.0	3000	2100	3	500	150									CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY
			MIN	MAX																		
•SPL-5-1.5		MAG	0.5	1.5		VT	MR	C	3.0	2000	2400	10	500		200							CO
•SPL-5-1.5S		MAG	0.5	1.5		VT	MR	C	3.0	2000	2400	10	500		200							CO
•SPL-8-2.4		MAG	0.8	2.4		VT	MR	C	3.0	2000	2400	10	500		200							CO
•SPL-8-2.4S		MAG	0.8	2.4		VT	MR	C	3.0	2000	2400	10	500		200							CO
BWS1		BWO	2.5	3.1		VT	GC	C	8.0	2250	5000	350	150W		300						IM	CO
HAI		TWA	2.0	4.0					6.3	1000	350	4	10	525		525	30				300	CO
JNT1-500		MAG	1.2	1.4	10	MEC	MU	P	23.5	2200	27K	46A	600K					4			1400	CO
OPX1		BWO	8.5	12.5		VT	GC	C	6.0	500	2000	25	50							35	600	WG
TWS1		TWA	1.7	2.3					4.2	4300	2600	90	25W	2600		2K	35			30	RI	WG
IK20XD-A		= KLO	10.0	10.7		MEC	EI	C	6.3	800	350	55	75	500								
IK20XD-S		= KLO	10.5	11.0		MEC	EI	C	6.3	1000	450	45	120	500						30	RI	WG
IK20XF-B		= KLO	10.1	10.4		MEC	EI	C	6.3	850	350	40	50	110						30	RI	WG
IK20XK		= KLO	9.2	10.0		MEC	EI	C	6.3	800	350	55	75	500						35	RI	WG
IK20XN-A		= KLO	8.5	11.0		FX	EI	C	6.3	800	450	50	200	290						25	RI	WG
IK20XS		= KLO	8.5	9.2		MEC	EI	C	6.3	800	350	55	75	500						40	RI	WG
IK75CH		= KLO	4.3	4.3		FX	EI	C	6.3	1250	850	100	1000	500						30	RI	CO
IK75CK		= KLO	4.3	4.3		FX	EI	C	6.3	1250	850	100	1000	500						30	RI	WG
IK75CLA		= KLO	4.3	4.4		FX	EI	C	6.3	1200	550	35	240	90						50	RE	WG
IK75CS		= KLO	4.3	4.3		FX	EI	C	6.3	1200	700	55	325	85						90	RE	WG
IK125CA		= KLO	3.7	4.4		MEC	EI	C	6.3	1500	1200	110	1250							25	RI	WG
IK125CB		= KLO	4.4	5.0		MEC	EI	C	6.3	1250	1000	110	2500	750						40	RI	WG
IL1-2R		MAG	0.1	0.2		VT	MR	C	3.0	2000	2000	10	1000		300							CO
IP-25--.5		MAG	0.2	0.5		VT	MR	C	3.0	3000	2200	5	1000	250								CO
IP-25--.5S		MAG	0.2	0.5		VT	MR	C	3.0	3000	2200	5	1000	250								CO
IP-375--.75		MAG	0.3	0.7		VT	MR	C	3.0	3000	2200	8	1000	300								CO
IP-375--.75S		MAG	0.3	0.7		VT	MR	C	3.0	3000	2200	8	1000	300								CO
IP-5-1		MAG	0.5	1.0		VT	MR	C	3.0	2000	2200	10	1000		300							CO
IP-5-1R		MAG	0.5	1.0		VT	MR	C	3.0	2000	2000	10	1000		300							CO
IP-5-1S		MAG	0.5	1.0		VT	MR	C	3.0	2000	2200	8	1000	300								CO
IP-5-1S		MAG	0.5	1.0		VT	MR	C	3.0	2000	2200	8	1000	300								CO
IP-5-1S		TWA	0.7	0.7				NE	C	6.3	3300	2700	650	400W	3300	40	3K	38			IM	CO
IP-5-1S		TWA	0.4	0.9				TO	C	6.3	8500	4000	900	400W	4000	100	4K	32			IM	CO
IP-5-1S		TWA	0.7	0.8		FX	KK	C	6.3	2000	1600	180	40W	1800		2K	30					CO
BWS2		BWO	3.0	4.0		VT	GC	C	8.0	2250	5000	350	150W		300						IM	CO
HA2		TWA	2.0	4.0				HU	C	7.0	1000	450	25	1000	1100	1K	30	30			600	CO
KL2T3		KLO	32.5	36.5		MEC	LT	C	6.3	740	2000	20	25	2500	2K					50	RI	WG
KL2T5		KLO	34.0	36.0		MEC	LT	C	6.3	740	2500	30	200	3000	3K					50	RI	WG
MAG2		MAG	9.4	9.5	2	FX	GC	P	3.0	2500	15K	10A	45K					15			3250	WG
RW2		TWA	1.7	2.3			SH	C	6.3	900		100	20W	1500	30	2K	40				500	CO
TWS2		TWA	1.7	2.3			GC	C	5.5	500	550	500U	2	750	100	750	30	11			450	CO
2J30		MAG	2.9	2.9	10	FX	RA	P	6.3	1500	20K	30A	240K					15			1900	CO
2J31		MAG	2.8	3.0	10	FX	RA	P	6.3	1500	20K	30A	240K					15			1900	CO
2J32		MAG	2.8	2.8	10	FX	RA	P	6.3	1500	20K	30A	240K					15			1900	CO
2J33		MAG	2.7	2.8	10	FX	RA	P	6.3	1500	20K	30A	240K					15			1900	CO
2J34		MAG	2.7	2.7	20	FX	RA	P	6.3	1500	20K	30A	240K					15			1900	CO
2J36		MAG	9.0	9.2	20	FX	RA	P	6.3	1500	14K	12A	14K					15			2500	WG
2J42		MAG	9.3	9.4	25	FX	P	P	6.3	515	6000	5500	8K					15			IM	WG
2J42H	=	MAG	9.3	9.4	20	FX	P	P	7.0	500	6000	4500	7K					15			60	WG
2J49		MAG	9.0	9.2	12	FX	P	P	6.3	1000	16K	16A	50K					15			5400	WG
2J50		MAG	8.8	8.9	12	FX	P	P	6.3	1000	16K	16A	50K					15			5400	WG
2J51		MAG	8.5	9.6	11	MEC	P	P	6.3	1000	16K	16A	50K					15			IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHz																			
			MIN	MAX																		
2J51A		MAG	8.5	9.6	11	MEC		P	6.3	1000	16K	15A	50K					18		IM		WG
2J52		MAG	3.3	3.4	20	MEC	RA	P	6.3	1500	15K	16A	70K							1400		WG
2J53		MAG	9.3	9.4	12	FX		P	6.3	1000	16K	16A	40K							5400		WG
2J55		MAG	9.3	9.4	10	FX		P	6.3	1000	16K	16A	50K							IM		WG
2J56A		MAG	9.2	9.3	10	FX		P	6.3	1000	12K	12A	40K							IM		WG
2J66		MAG	2.8	2.9	20	MEC	RA	P	6.3	1500	20K	25A	150K							1700		
2J67		MAG	2.8	2.9	20	MEC	RA	P	6.3	1500	20K	25A	150K							1700		
2J68		MAG	2.7	2.8	20	MEC	RA	P	6.3	1500	20K	25A	150K							1700		
2J69		MAG	2.7	2.8	20	MEC	RA	P	6.3	1500	20K	25A	150K							1700		
2J70		MAG	3.0	3.1	20	FX	RA	P	6.3	1400	7500	15A	25K					13		IM		CO
2K22		KLO	4.2	5.0		MEC	RA	C	6.3		300	25	115	235					35		RI	WC
2K25		KLO	8.5	9.7		MEC		C	6.3	440	300	22	35	300					37		RI	CO
2K26	*	KLO	6.2	7.1		MEC	KK	C	6.3	440	330	35	100	350							RI	CO
2K28		KLO	1.8	4.0		MEC	RA	C			300	30	100	250						EX		
2K29		KLO	3.4	4.0		MEC	RA	C	6.3		300	25	110	150					35		RI	WC
2K33		KLO	22.0	25.0		MEC	RA	C	6.3	580	2300	9	40	500	100				40		RI	WG
2K39		KLO	7.5	10.3		SP	C		6.3	1000	1250	50	700	750					15		RI	
2K41		KLO	2.7	3.5		SP	C		6.3	1000	500	25	100	200							RI	
2K42		KLO	3.3	4.2		SP	C		6.3	1000	1250	50	700	750					10		RI	
2K43		KLO	4.2	5.7		SP	C		6.3	1000	1250	50	400	750					15		RI	
2K44		KLO	5.7	7.5		SP	C		6.3	1000	1250	50	400	750					15		RI	
2K50	*	KLO	23.5	24.5		TH		C	6.3	755	330	28	10	150					125		RI	WG
2K54A		KLO	4.0	4.3		MEC	KK	C	6.3	440	430	25	500	500							RI	CO
2K54B		KLO	3.9	4.1		MEC	KK	C	6.3	440	430	25	500	500							RI	CO
2K54C		KLO	3.6	3.9		MEC	KK	C	6.3	440	430	25	500	500							RI	CO
2K54D		KLO	4.2	4.4		MEC	KK	C	6.3	440	430	25	350	500							RI	CO
2L1-2		MAG	1.0	2.0		VT	MR	C	6.3	450	250	12	50						35		IN	CO
2L1-2S		MAG	1.0	2.0		VT	MR	C	3.0	2000	2200	15	2000	300							CO	
2LS1.5-3		MAG	1.5	3.0		VT	MR	C	3.0	2000	2200	15	2000	300							CO	
2LS1.5-3S		MAG	1.5	3.0		VT	MR	C	3.0	2000	2200	15	2000	300							CO	
2M40		MAG	2.4	2.5		FX	TO	C	6.3	3500	1700	135	100W							IM		CO
2M50		MAG	2.4	2.6		FX	TO	C	5.3	3200	1900	230	200W							IM		CO
2M60		MAG	2.4	2.5		FX	TO	C	9.0	75A	6700	1300	2500							1000		WG
2M89		MAG	2.4	2.5		FX		C	5.0	16A	7700	2000	1K							1800		CO
2P.5-1		MAG	0.5	1.0		VT	MR	C	3.0	2000	2200	10	2000	300								CO
2P.5-1S		MAG	0.5	1.0		VT	MR	C	3.0	2000	2200	10	2000	300								CO
2PL.75-1.5		MAG	0.7	1.5		VT	MR	C	3.0	2000	2200	15	2000	300								CO
2PL.75-1.5S		MAG	0.7	1.5		VT	MR	C	3.0	2000	2200	15	2000	300								CO
2S2-4		MAG	2.0	4.0		VT	MR	C	3.0	2000	2200	15	2000	300								CO
2S2-4S		MAG	2.0	4.0		VT	MR	C	3.0	2000	2200	15	2000	300								CO
2V10		KLO	2.4	2.6		MEC	TO	C	6.3	440	330	35	80	400					20		RI	CO
2V32		KLO	2.1	2.3		MEC	TO	C	6.3	800	1000	110	3500	1000					35		RI	CO
2V311		KLO	1.7	1.8		MEC	TO	C	6.3	800	900	110	1200	850					16		RI	CO
2V312		KLO	1.8	2.0		MEC	TO	C	6.3	800	900	110	1200	850					16		RI	CO
2V313		KLO	1.9	2.1		MEC	TO	C	6.3	800	900	110	1200	850					16		RI	CO
2V314		KLO	2.1	2.3		MEC	TO	C	6.3	800	900	110	1200	850					16		RI	CO
2V315		KLO	2.3	2.5		MEC	TO	C	6.3	800	900	110	1200	850					16		RI	CO
2W401		TWA	1.7	2.3		TO	C		6.3	900	1700	80	20W	2700	20						IM	CO
HA3		TWA	4.0	8.0		HU	C		6.3	1000	450	2	10	800	30							CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			GHz																					
			MIN	MAX																				
HK-3		KLA	2.7	2.8	20	MEC	KK	P	7.5	38A	140K	110A	4M									41	WG	
KL3T2		KLO	34.0	36.0		MEC	LT	C	6.3		500	40	20	600					100			RI	WG	
LB3-250B		TWA	2.7	3.3		VT	MU	C	6.3	1000	800	250W											WG	
W3/2G		TWA	10.7	13.2			ST	C	6.3	820	35	12W	2000	3K	4K	45					IM		WG	
W3M3/1D		TWA	7.0	11.5			ST	C	6.3	500	600	500U	15	1200	1K	39	10				IM		CO	
W3M3/1F		TWA	7.0	11.5			ST	C	6.3	500	600	500U	15	1200	1K	39	10				IM		WG	
3K2500LX		KLA	1.0	1.2		MEC	ET	C	7.5	5800	7000	600	1K								31	CO		
3K2500SG		KLA	1.7	2.4		MEC	ET	C	7.5	5500	7000	600	1K								31	CO		
3K3000LQ		KLA	0.7	1.0		MEC	ET	C	5.0	31A	9000	750	3K								31	CO		
3K50000LA		KLA	0.4	0.6		MEC	ET	C	8.0	40A	20K	2500	12K								31	CO		
3K50000LF		KLA	0.6	0.7		MEC	ET	C	8.0	40A	20K	2500	12K								31	CO		
3K50000LQ		KLA	0.7	1.0		MEC	ET	C	8.0	40A	20K	2500	12K								31	CO		
3KM3LB		KLA	0.4	0.5		MEC	ET	C	5.0	31A	9K	590	2K								3E	CO		
3KM3000LA		KLA	0.3	0.5		MEC	ET	C	26.0	12A	30K	9000	100K								31	CO		
3KM3000LA		KLA	0.4	0.6	60	MEC	ET	P	5.0	31A	20K	2800	20K	15K							3E	CO		
3KM4000LT		KLA	1.0	1.2		MEC	ET	P	7.5	5500	26K	4200	40K								3E	CO		
3KM50000PA		KLA	0.2	0.4		MEC	ET	C	7.5	40A	23K	2750	24K	500							IM	3E	CO	
3L1.4-1.6		MAG	1.4	1.6		VT	MR	C	3.0	2000	1100	15	3000	300									CO	
3L1.8-2.1		MAG	1.8	2.1		VT	MR	C	3.0	2000	1100	15	3000	300									CO	
3M95		MAG	2.7	2.9	10	MEC	TO	P	8.2	79A	75K	135A	5M								IM		WG	
3M901		MAG	2.8	2.8	10	MEC	TO	P	7.7	76A	75K	135A	5M								IM		WG	
3M902		MAG	2.8	2.8	10	MEC	TO	P	7.7	76A	75K	135A	5M								IM		WG	
3M903		MAG	2.8	2.8	10	MEC	TO	P	7.7	76A	75K	135A	5M								IM		WG	
3M904		MAG	2.8	2.9	10	MEC	TO	P	7.7	76A	75K	135A	5M								IM		WG	
352.8-3.1		MAG	2.8	3.1		VT	MR	C	3.0	2000	1100	15	3000	300									CO	
3V31		KLO	2.5	2.7		MEC	TO	C	6.3	800	900	110	1000	850					15		RI		CO	
3W20		TWA	2.4	3.2			TO	C	6.3	700	2800	45	5000	2800	20	3K	35						CO	
3W80		TWA	2.6	2.9	10		TO	P	6.3	2000	1000	550W	8500	220	8K	30					1300		CO	
3W80A		TWA	2.6	2.9	10		TO	P	6.3	2000	1200	1K	9000		9K	32					1300		CO	
3W90		TWA	2.7	2.9			NE	C	6.0	450	20	200U	3	700	430	28	6				650		WG	
3W402		TWA	2.3	2.9			TO	C	6.3	900	1700	80	18W	2700	20	3K	38				IM		CO	
BWJ4		BWO	14.9	18.0		VT	GC	C	6.3	6000	2000	375	100W	4800	1K						IM		WG	
HA4		TWA	7.0	12.4			HU	C	6.3	1200	600	2	10	1300	50	1K	30				400		CO	
LB4-20		TWA	3.7	4.2		VT	MU	C	6.3	1000	2600	70	10W	2000	250	3K	39	30					WG	
RW4		TWA	3.3	4.3			SH	C	6.3	900		65	10W	1200	30	2K	39	25					WG	
TK4		KLO	23.5	24.5		MEC	BE	C	6.3	750	300	32	14	90					70		RI		WG	
TL4		TWA	1.5	3.0		VT	TE	C	6.3	1000	850	70	12W	1300	1K	45			30			CO		WG
W4/2G		TWA	7.0	8.5			ST	C	6.3	730		40	15W	2000	3K	47					IM		WG	
4J31		MAG	2.9	2.9	10	FX	RA	P	16.0	3100	30K	70A	685K					15			2700		CO	
4J32		MAG	2.8	2.9	10	FX	RA	P	16.0	3100	30K	70A	685K					15			2700		CO	
4J33		MAG	2.8	2.8	10	FX	RA	P	16.0	3100	30K	70A	685K					15			2700		CO	
4J34		MAG	2.7	2.8	10	FX	RA	P	16.0	3100	30K	70A	685K					15			2700		CO	
4J35		MAG	2.7	2.7	10	FX	RA	P	16.0	3100	30K	70A	685K					15			2700		CO	
4J36		MAG	3.6	3.7	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J37		MAG	3.6	3.6	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J38		MAG	3.6	3.6	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J39		MAG	3.5	3.6	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J40		MAG	3.4	3.5	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J41		MAG	3.4	3.4	10	FX	RA	P	16.0	3100	30K	70A	850K					10			2500		WG	
4J43		MAG	3.0	3.0	10	FX	RA	P	16.0	3100	30K	70A	900K					10			2700		CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, V	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
4J44	MAG		3.0	3.0	10	FX	RA	P	16.0	3100	30K	70A 900K						12	2700	IM	WG	CO
4J50	MAG		9.3	9.4	10	FX	P	P	13.7	3200	23K	28 270K						12		IM	WG	WG
4J50A	MAG		9.3	9.4	10	FX	P	P	13.7	3200	23K	28 270K								IM	WG	WG
4J50TO	MAG		8.5	9.6	10		CS	P	9.0	2600	22K	28A 220K										
4J50TR	MAG		8.5	9.6	10		CS	P	9.0	2600	22K	28A 220K										
4J52A	MAG		9.3	9.4	13	FX	P	P	12.6	2200	15K	15A 70K						10	2	IM	WG	WG
4J53	MAG		2.8	2.8	10	FX	RA	P	16.0	3100	30K	70A 500K								2150	CO	CO
4J54	MAG		6.8	6.9	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J55	MAG		6.7	6.8	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J56	MAG		6.6	6.7	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J57	MAG		6.5	6.6	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J58	MAG		6.4	6.5	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J59	MAG		6.3	6.4	10	FX	RA	P	12.6	3750	25K	35A 250K						15		IM	WG	WG
4J62	MAG		2.8	3.0			RA	C			1200	125 50W								IM	CO	CO
4J63	MAG		3.0	3.4			RA	C			1200	125 50W								IM	CO	CO
4J64	MAG		3.3	3.7			RA	C			1200	125 50W								IM	CO	CO
4J78	MAG		9.0	9.2	20	FX	P	P	13.8	3350	23K	30A 240K						15	3	IM	WG	WG
4K1CB	KLA		4.4	5.0		MEC	EI	C	6.5	7500	4500	220 200W						35	7	IM	41	WG
4K3CB	KLA		4.4	5.0		MEC	EI	C	6.5	7500	4500	220 200W						46	8	IM	41	WG
4K35J	KLA		1.7	2.4		MEC	EI	C	6.0	4500	6000	540 1K						45	6	IM	41	CO
4K35K	KLA		2.4	2.7		MEC	EI	C	6.0	4500	7000	540 1K						47	7	IM	41	CO
4K35L	KLA		1.7	2.4		MEC	EI	C	6.0	4500	6000	540 1K						37	13	IM	41	CO
4K55L-1	KLA		1.7	2.4		MEC	EI	C	6.0	4500	8600	800 2K						43	6	IM	41	CO
4K50000LQ	KLA		0.7	1.0		MEC	EI	C	8.0	40A	20K	2500 11K	500					58			4E	CO
4KH100LH	KLA		0.7	0.9		ST	C	ST	26.0	11A	19K	6000 25K						40			41	CO
4KM50LB	KLA		0.4	0.5		MEC	EI	C	7.5	40A	17K	1900 10K						33	3		4E	CO
4KM50SJ	KLA		1.7	2.4		MEC	EI	C	7.5	12A	18K	1800 10K						40	12		41	WG
4KM50SK	KLA		2.6	2.7		MEC	EI	C	7.5	12A	18K	1800 10K						40	11		41	WG
4KM70LAM	KLA		0.5	0.6		MEC	EI	C	26.0	12A	13K	2800 12K						30	8		4E	CO
4KM70SJ	KLA		1.7	2.4		MEC	EI	C	7.5	12A	21K	2450 20K						43	12		41	WG
4KM100LA	KLA		0.5	0.6		MEC	EI	C	26.0	12A	16K	3800 25K						30	8		4E	CO
4KM100LF	KLA		0.6	0.7		ST	C	ST	26.0	11A	19K	6000 25K						40			4E	CO
4KM150LA	KLA		0.5	0.6		MEC	EI	C	26.0	12A	20K	5400 50K						30	8		4E	CO
4KM3000LQ	KLA		0.7	1.0		MEC	EI	C	5.0	33A	10K	750 2K	500					25	7		4E	CO
4KM3000LR	KLA		0.6	1.0		MEC	EI	C	5.0	31A	10K	750 2K	500					30	7		4E	CO
4KM500000LA3	KLA		0.4	0.6		MEC	EI	C	7.5	40A	17K	1800 10K						30	5		4E	CO
4KM50000LA5	KLA		0.4	0.6		MEC	EI	C	7.5	20A	20K	2500 10K						50	4		41	CO
4KM50000LF	KLA		0.6	0.8		MEC	EI	C	7.5	40A	18K	2000 10K						30	7		4E	CO
4KM50000LQ	KLA		0.6	1.0		MEC	EI	C	7.5	40A	17K	1800 10K						30	5		4E	CO
4KM50000LR	KLA		0.8	1.0		MEC	EI	C	7.5	40A	17K	1800 10K						30	7		4E	CO
4KM170+000LA	KLA		0.4	0.5		MEC	EI	C	11.0	23A	35K	5300 75K	400					45			4E	CO
4KMP10000LF	KLA		0.6	0.6	100	MEC	EI	P	11.0	22A	65K	16A 400K						57	10		4E	WG
4KMP150LA	KLA		0.5	0.6		ST	C	ST	26.0	11A	23K	6500 50K						40			4E	CO
4KMP150LF	KLA		0.6	0.7		ST	C	ST	26.0	11A	23K	6500 50K						40			4E	CO
4KMP150LH	KLA		0.7	0.9		ST	C	ST	26.0	11A	23K	6500 50K						40			41	CO
4V27	KLO		3.6	4.3		MEC	NE	C	6.3	675	325	25 120 250									EX	WG
4V32	KLO		3.6	4.2		MEC	TO	C	6.3	800	1000	110 1500 1000							30		RI	CO
4V62	KLO		3.3	3.6		MEC	KK	C	6.3	800	825	85 1200 1000									RI	WG
4V551	KLO		4.2	4.5		MEC	KK	C	6.3	440	330	30 100 350									RI	CO
4W61	TWA		3.8	4.2		FX	KK	C	6.3	850	3000	40 16K 1600						3K 35				WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
4W62	TWA	3.2	3.9	FX	KK C	6.3	850	3000	40	16K	1600	43	35										WG
4W80	TWA	3.6	4.2	NE C	6.3	700	3200	45	20W	2000	50	3K	33										IM
BW5	BWO	7.5	10.4	VT	GC C	6.3	2500	5000	375	100W													IM
HA5	TWA	1.0	2.0	HU C	6.3	1300	150	4	10	370	5	220	30										400
JB5-04B	MAG	5.6	5.7	10 FX	MU P	6.3	1200	1200	225	70W													IM
JB5-04C	MAG	5.8	5.9	10 FX	MU P	6.3	1200	1200	225	70W													IM
TK5	TWA	5.9	6.4	GC C	4.0	3800																	WG
TK5A	TWA	7.4	7.8	GC C	4.0	3800																	WG
TK5B	TWA	6.9	7.4	GC C	4.0	3800																	WG
W5/1G	TWA	5.8	7.2	ST C	6.3	730																	IM
W5/2G	TWA	5.8	8.2	MEC ST C	6.3	700																	IM
W5/3G	TWA	5.8	6.5	MEC ST C	6.3	1200	1200	225	70W														IM
JB5-04	MAG	5.4	5.5	10 FX	MU P	6.3	1200	1200	225	70W													IM
5C4-5	MAG	4.0	5.0	VT	MR C	3.0	3000	2200	20	5000	400												CO
5C4-55	MAG	4.0	5.0	VT	MR C	3.0	3000	2200	20	5000	400												CO
5J26	MAG	1.2	1.4	25	MEC PH P	23.5	2200	31K	55A	450K													1400
5L1-2	MAG	1.0	2.0	VT	MR C	3.0	3000	2400	20	5000	400												CO
5L1-2S	MAG	1.0	2.0	VT	MR C	3.0	3000	2400	20	5000	400												CO
5K50CB	KLA	4.4	5.0	MEC EI C	10.0	3000	15K	2000	10K														59
5K70SG	KLA	2.0	2.1	MEC EI C	7.5	12A	20K	2425	24K														51
5K210-000LQ	KLA	0.8	1.0	MEC EI C	15.0	18A	25K	8A	75K														5E
5KM50SJ	KLA	1.7	2.4	MEC EI C	7.5	12A	18K	1750	10K														44
5KM70SF	KLA	1.7	1.8	MEC EI C	7.5	12A	18K	3750	20K														43
5KM3005I	KLA	2.1	2.4	MEC EI C	13.0	5400	38K	7900	100K														43
5M71	MAG	5.3	5.3	10 FX	TO P	10.0	3200	16K	16A	85K													55
5P-35-5	MAG	0.3	0.5	VT	MR C	3.0	3000	2300	10	5000	300												IM
5P-35-55	MAG	0.3	0.5	VT	MR C	3.0	3000	2300	10	5000	300												CO
5P-4-8	MAG	0.4	0.8	VT	MR C	3.0	3000	2900	15	5000	400												CO
5P-4-85	MAG	0.4	0.8	VT	MR C	3.0	3000	2900	15	5000	400												CO
5PL-6-1.2	MAG	0.6	1.2	VT	MR C	3.0	3000	2800	25	5000	400												CO
5PL-6-1.25	MAG	0.6	1.2	VT	MR C	3.0	3000	2800	25	5000	400												CO
552.7-2.85	MAG	2.7	2.8	VT	MR C	3.0	2000	1000	25	5000	300												CO
553.4-3.7	MAG	3.4	3.7	VT	MR C	3.0	2000	1200	20	5000	300												CO
5V552	KLO	4.5	4.8	MEC KK C	6.3	440	330	30	100	500													RI
5V553	KLO	4.8	5.1	MEC KK C	6.3	440	330	30	100	500													RI
HA6	TWA	4.0	8.0	HU C	7.0	1300	700	20	500	1500													CO
K56-1000D	KLO	6.5	6.8	MEC MU C	6.3	800	750	65	1000	350													RI
K56-1000E	KLO	6.1	6.4	MEC MU C	6.3	800	750	65	1000	350													RI
K56-1000F	KLO	5.9	6.2	MEC MU C	6.3	800	750	65	1000	350													RI
K56-1000G	KLO	6.4	6.5	MEC MU C	6.3	800	750	65	1000	350													RI
LB6-10	TWA	5.9	6.4	VT	MU C	6.3	950	3000	46	5000	1800	350											WG
LB6-12	TWA	5.9	7.1	VT	MU C	6.3	900	1900	40	5000	1700	8											WG
LB6-15	TWA	5.9	6.4	VT	MU C	6.3	950	3000	46	7500	1800	350											WG
LB6-20	TWA	5.9	6.5	VT	MU C	6.3	850	3000	50	10W	2000	250											WG
PA6	TWA	2.0	4.0	HU C	7.0	1200	600	20	100	1000	100												IM
PA6	TWA	2.0	4.0	12	HU P	7.0	1200	600	50	1000	1000	150											IM
PK6	KLO	5.8	5.9	MEC SH C	6.3	1000	400	70	175	500													CO
TK6	KLO	3.7	4.3	MEC TE C	6.3	400	300	28	180	300													RI
TL6	TWA	3.4	4.5	TE C	6.3	1000	1000	33	6500	1600													550
TW56	TWA	3.3	3.3	GC C	3.5	4000	2500	20	1000	3000													CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM 3R VOLTS	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTAGE	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
6BL6	KLO	1.6	6.5		MEC			P	6.3	750	325	28	250	220						6		RE	
6BM6	KLO	0.6	3.8		MEC			P	6.3	650	350	29	175	700						6		RE	
6BM6A	KLO	0.6	3.8		MEC			P	6.3	650	320	29	175	700						6		RE	
6W70	MAG	5.5	5.5		10	FX	TO P	MEC	10.0	3200	13K	16A	50K							50	IM	WG	
6V23	KLO	6.2	6.3		MEC			NE C	6.3	760	750	70	400	130						50		IN WG	
6V26	KLO	5.8	6.5		MEC			KK C	6.3	440	330	35	100	350			2K	30				CO	
6V26A/R	KLO	6.1	6.5		MEC			NE C	6.3	450	300	25	100	100						55		IN CO	
6V26A/R	KLO	6.1	6.5		MEC			NE C	6.3	450	300	25	100	100						35		IN CO	
6V32	KLO	5.9	6.4		MEC			TO C	6.3	800	1000	110	1500	1000						60		RI WG	
6V200	KLO	6.2	6.3		MEC			NE C	6.3	760	750	70	400	130						50		IN WG	
6V201	KLO	5.9	6.2		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V202	KLO	6.1	6.4		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V203	KLO	6.4	6.6		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V211	KLO	6.0	6.3		MEC			NE C	6.3	440	300	23	35	100						45		IN WG	
6V212	KLO	6.3	6.6		MEC			NE C	6.3	440	300	23	35	100						40		IN WG	
6V221	KLO	5.9	6.2		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V222	KLO	6.1	6.4		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V241	KLO	5.8	6.6		MEC			NE C	6.3	750	750	75	1300	375						60		IN WG	
6V251	KLO	5.9	6.2		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V252	KLO	6.1	6.4		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
6V271	KLO	5.8	6.6		MEC			NE C	6.3	750	750	75	1300	375						60		IN WG	
6V301	KLO	5.9	6.2		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6V302	KLO	6.1	6.4		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6V303	KLO	6.3	6.6		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6V431	KLO	5.9	6.2		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6V432	KLO	6.1	6.4		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6V433	KLO	6.3	6.6		MEC			TO C	6.3	800	900	110	1000	850						45		RI WG	
6W51	TWA	5.8	6.4		NE C			NE C	6.3	600	2700	40	20W	2000			40	3K	40		IM		
6W85	TWA	5.0	6.8		HI C			HI C	6.3	300	1000	3	80	1100			1K	30		600			
6W86	TWA	3.0	6.8		HI C			HI C	6.3	1000	2500	35	5000	2600			50	2K	23		700		
6W87	TWA	5.0	6.8		HI C			HI C	6.3	400	400	300U	2	1100			800	25	11		600		
HA7	TWA	0.5	1.0		HU C			HU C	6.3	1400	90	4	10	270			50	120	30		300		CO
K57-85	KLO	6.5	7.5		MEC			MU C	6.3	500	300	24	100	140								RI CO	
K57-1000A	KLO	7.4	7.8		MEC			MU C	6.3	800	750	65	1000	350								RI WG	
K57-1000B	KLO	7.1	7.4		MEC			MU C	6.3	800	750	65	1000	350								RI WG	
K57-1000C	KLO	6.9	7.1		MEC			MU C	6.3	800	750	65	1000	350								RI WG	
K57-1000Z	KLO	7.7	8.1		MEC			MU C	6.3	800	750	65	1000	350								RI WG	
LB7-5	TWA	7.0	7.5		VT			MU C	6.3	900	2600	46	4000	1800			350	3K	34	30		WG	
SRL7C	KLO	1.8	2.1		MEC			SP C	6.3	2000	1000	220	10W	1000						20		RI CO	
SRL7F	KLO	1.7	1.9		MEC			SP C	6.3	2000	1000	220	10W	1000						20		RI CO	
SRL7G	KLO	1.9	2.2		MEC			SP C	6.3	2000	1000	220	10W	1000						20		RI CO	
SRL7H	KLO	2.2	2.4		MEC			SP C	6.3	2000	1000	220	10W	1000						20		RI CO	
TW57	TWA	2.4	3.6		GC C			GC C	3.5	4000	2500	25	2000	3000			30					WG	
W7/3G	TWA	3.6	4.2		ST C			ST C	6.3	700		40	7000	3050			2K	3K	30		500		
W7/4G	TWA	3.6	5.0		ST C			ST C	6.3	730		40	15W	2000			3K	3K	42		IM		
W7/5G	TWA	3.6	4.2		ST C			ST C	6.3	1000	2K	80	30	1800			50	3K	46		IM		WG
TV26	KLO	6.4	7.2		MEC			KK C	6.3	440	330	35	100	350								RI CO	
TV40	KLO	7.1	7.8		MEC			KK C	6.3	440	330	30	60	350								RI CO	
TV206	KLO	7.1	7.4		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	
TV204	KLO	6.6	6.9		MEC			NE C	6.3	760	750	70	1200	330						35		IN WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
7V204		KLO	6.5	6.9	10:4	MEC	KK	C	6.3	750	90	1100	1000								RI	WG
7V205		KLO	6.9	7.2		MEC	KK	C	6.3	750	825	1100	1000								RI	WG
7V205		KLO	6.9	7.1		MEC	NE	C	6.3	760	750	1200	330						35		IN	WG
7V213		KLO	6.5	6.7		MEC	NE	C	6.3	440	300	23	40	100					40		IN	WG
7V214		KLO	6.7	7.0		MEC	NE	C	6.3	440	300	23	40	100					40		IN	WG
7V215		KLO	7.0	7.3		MEC	NE	C	6.3	440	300	23	40	100					40		IN	WG
7V216		KLO	7.3	7.6		MEC	NE	C	6.3	440	300	23	40	100					40		IN	WG
7V223		KLO	6.4	6.6		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V224		KLO	6.6	6.9		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V225		KLO	6.9	7.1		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V226		KLO	7.1	7.4		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V242		KLO	6.5	7.3		MEC		C	6.3	750	750	75	1300	375					60		IN	WG
7V243		KLO	7.1	7.8		MEC		C	6.3	750	750	75	1300	1000					45		RI	WG
7V254		KLO	6.6	6.9		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V255		KLO	6.9	7.1		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG
7V272		KLO	6.4	7.2		MEC	NE	C	6.3	750	750	75	1300	375					60		IN	WG
7V273		KLO	7.1	7.8		MEC	NE	C	6.3	750	750	75	1300	375					45		IN	WG
7V434		KLO	6.6	6.9		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7V304		KLO	6.6	6.9		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7V305		KLO	6.9	7.1		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7V306		KLO	7.1	7.4		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7V435		KLO	6.9	7.1		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7V436		KLO	7.1	7.4		MEC	TO	C	6.3	800	900	110	1000	850					45		RI	WG
7W10		TWA	5.8	7.8		TO		C	6.3	550	120	1	10	1300	20	1K	25				IM	WG
7W62		TWA	6.5	7.8		FX	KK	C	6.3	800	3000	40	12K	1600		3K	38					WG
7W86		TWA	6.0	7.0		HI		C	6.3	1000	2600	30	5000	2700	50	3K	25			700		WG
7W402		TWA	6.4	7.1		TO		C	6.3	600	2700	50	16K	3700	20	4K	40			IM		WG
HAB		TWA	0.5	1.0		HU		C	7.0	2200	500	60	1000	500	200	500	30			560	CO	WG
JP8-02B		MAG	8.8	8.8	22	FX	MU	P	6.3	1200	800	150	25W					12		IM	WG	WG
JP8-02C		MAG	8.8	8.8	22	FX	MU	P	6.3	1200	850	150	25W					15		IM	WG	WG
JP38-01		MAG	8.6	9.2		MEC	MU	C	6.3	1200	960	50	12W					20		IM	WG	WG
JP38-01B		MAG	8.0	8.6		MEC	MU	C	6.3	1200	960	50	12W							IM	WG	WG
JP38-01E		MAG	8.5	8.8		MEC	MU	C	6.3	1200	1090	60	18W					32		IM	WG	WG
JP38-02B		MAG	8.5	9.0	500			P	6.3	1200	1150	150	30W					25		IM	WG	WG
JP18-01		MAG	8.6	9.2		MEC	MU	C	6.3	1200	960	50	12W					20		IM	WG	WG
JP18-01B		MAG	8.0	8.6		MEC	MU	C	6.3	1200	960	50	12W					20		IM	WG	WG
LB8-20		TWA	7.7	8.5		VT	MU	C	6.3	850	3000	50	10W	2000	250	4K	38	30				WG
MGB		MAG	2.4	2.4		FX	TE	C	4.5	2500	1500	340	200W							1500	CO	WG
TK8		KLO	3.7	4.3		MEC	TE	C	6.3	380	300	28	250	325					27		RI	CO
TWX8		TWA	7.0	11.5		GC		C	6.0	10A		10	1000	2800	30	3K	30					WG
8V69		KLO	7.4	7.8		MEC	NE	C	6.3	440	300	25	80	100					40		IN	CO
8V77		KLO	7.6	8.2		MEC	NE	C	6.3	440	300	25	60	100					40		IN	CO
8V77		KLO	7.7	8.2		MEC	KK	C	6.3	440	330	30	100	350							RI	CO
8V207		KLO	7.4	7.8		MEC	NE	C	6.3	760	750	70	1100	330					30		IN	WG
8V208		KLO	7.8	8.1		MEC	NE	C	6.3	760	750	70	1100	330					28		IN	WG
8V217		KLO	7.6	7.8		MEC	NE	C	6.3	440	300	23	35	100					40		IN	WG
8V227		KLO	7.4	7.8		MEC	NE	C	6.3	760	750	70	1100	330					30		IN	WG
8V257		KLO	7.4	7.8		MEC	NE	C	6.3	760	750	70	1100	330					30		IN	WG
8V228		KLO	7.8	8.1		MEC	NE	C	6.3	760	750	70	1100	330					28		IN	WG
8V274		KLO	7.7	8.2		MEC	NE	C	6.3	750	750	75	1300	375					35		IN	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BETA OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR e.c. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
8V308		KLO	7.7	8.0		MEC	TO C		6.3	800	900	110	700	850						45	RI	WG	
8V307		KLO	7.4	7.7		MEC	TO C		6.3	800	900	110	1000	850						45	RI	WG	
8V437		KLO	7.4	7.7		MEC	TO C		6.3	800	900	110	1000	850						45	RI	WG	
8W76A		TWA	6.0	7.8			NE C		6.3	1100	2200	30	10W	3200	30	3K	40					IM	WG
8W86		TWA	6.5	7.8			HI C		6.3	1000	2500	35	3000	2600	50	2K	33					800	
8W403		TWA	7.1	7.9			TO C		6.3	600	2700	50	12W	3700	20	4K	40					IM	WG
BA9-20M		BWO	8.0	12.4		VT	MU C		6.3	1700	350	35	150	2200	150							1000	CO
HA9		TWA	8.0	11.0			HU C		6.3	1200	1800	20	500	2400								IM	WG
JP9-01		MAG	9.3	9.4		FX	MU C		6.3	1200	930	50	10W							13		IM	WG
JP9-2.5		MAG	9.3	9.5		2 FX	MU P		6.3	500	3400	3000	3K							15		IM	WG
JP9-2.5B		MAG	9.2	9.2		2 FX	MU P		6.3	500	3800	3000	3K							18		IM	WG
JP9-2.5C		MAG	9.6	9.6		2 FX	MU P		6.3	500	3800	3000	3K							18		IM	WG
JP9-2.5D		MAG	9.4	9.4		2 FX	MU P		6.3	500	3800	3000	3K							18		IM	WG
JP9-2.5E		MAG	9.4	9.4		2 FX	MU P		6.3	500	3800	3000	3K							18		IM	WG
JP9-5		MAG	9.3	9.5		4 FX	MU P		6.3	500	4400	5000	6K							18		IM	WG
JP9-7		MAG	9.3	9.4		10 FX	MU P		6.3	600	5700	4500	8K							15		IM	WG
JP9-7A		MAG	9.2	9.3		25 FX	PH P		6.3	600	6000	5500	7K							14		IM	WG
JP9-7B		MAG	9.5	9.6		10 FX	MU P		6.3	600	5700	4500	8K							15		IM	WG
JP9-7D		MAG	9.3	9.4		2 FX	MU P		6.3	600	5900	7000	10K							14		IM	WG
JP9-15		MAG	9.3	9.4		15 FX	P		6.3	550	8200	9000	22K							17		IM	WG
JP9-15B		MAG	9.4	9.4		2 FX	P		6.3	550	8200	7500	18K							18		IM	WG
JP9-15D		MAG	9.3	9.4		15 FX	P		6.3	550	8200	9000	22K							17		IM	WG
JP9-50		MAG	9.2	9.3		10 FX	MU P		6.3	1000	14K	12A	50K							15		IM	WG
JP9-50A		MAG	9.3	9.4		10 FX	MU P		6.3	1000	13K	12A	50K							12		IM	WG
JP9-75		MAG	9.3	9.4		10 FX	MU P		10.0	2850	15K	15A	80K							10		IM	WG
JP9-75B		MAG	9.4	9.4		10 FX	MU P		10.0	2850	16K	15A	80K							15		IM	WG
JP9-80		MAG	9.3	9.4		10 FX	MU P		12.6	2200	15K	15A	80K							12		IM	WG
JP9-80A		MAG	9.2	9.3		10 FX	MU P		12.6	2200	15K	15A	80K							12		IM	WG
JP9-180		MAG	9.3	9.4		4 FX	MU P		12.6	2250	20K	23A	180K							13		IM	WG
JP9-250		MAG	9.3	9.4		10 FX	MU P		13.8	3250	22K	27A	250K							14		IM	WG
JP9-250A		MAG	9.0	9.2		10 FX	MU P		13.8	3250	22K	27A	250K							14		IM	WG
JP9-250B		MAG	8.8	9.0		10 FX	MU P		13.8	3250	22K	27A	250K							14		IM	WG
JP9-250C		MAG	8.9	9.0		10 FX	MU P		13.8	3250	22K	27A	250K							14		IM	WG
JP9-250D		MAG	8.7	8.8		10 FX	MU P		13.8	3250	22K	27A	250K							14		IM	WG
JP9-250E		MAG	8.5	8.7		10 FX	MU P		13.8	3250	23K	27A	250K							14		IM	WG
JP9-01		MAG	9.1	9.6		MEC	MU C		6.3	1200	920	50	10W							19		IM	WG
JP9-01B		MAG	9.3	9.3		MEC	MU C		6.3	1200	1090	60	18W							32		IM	WG
JP9-02		MAG	9.2	9.6		5	MEC	MU P	6.3	1200	1150	120	25W							20		IM	WG
JP9-02B		MAG	9.0	9.5		500	MEC	MU P	6.3	1200	1050	150	30W							25		IM	WG
JP9-02C		MAG	9.1	9.6		500	MEC	MU P	6.3	1200	1020	140	25W							20		IM	WG
JP9-01		MAG	9.2	9.6		MEC	MU C		6.3	1200	920	50	10W							19		IM	WG
JP9-01C		MAG	9.3	9.5		22	MEC	PH P	6.3	1200	1100	140	15W							16		IM	WG
JP9-02		MAG	9.2	9.6		5	MEC	MU P	6.3	1200	1150	120	25W							20		IM	WG
JP9-60		MAG	8.5	9.6		11	MEC	MU P	6.3	1000	16K	16A	63K							10		IM	WG
K59-20		KLO	8.7	9.5			MEC	MU C	6.3	600	300	22	25	400						40		RI	CO
K59-20A		KLO	8.5	9.7			MEC	MU C	6.3	450	300	22	50	190						40		RI	CO
K59-20B		KLO	8.7	9.5			MEC	PH C	6.3	600	330	32	25	400						40		RI	CO
K59-20D		KLO	8.7	9.5			MEC	PH C	6.3	600	330	32	25	400						40		RI	CO
K59-30		KLO	8.5	9.6			MEC	MU C	6.3	500	300	38	145							41		RI	WG
K59-40		KLO	9.3	9.5			MEC	MU C	6.3	800	300	35	40	90						40		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR MODE	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
KS9-40D		KLO	9.4	9.5				MEC	6.3	700	300	33	35		88					40		RI	WG
MAG9		MAG	9.3	9.5	10	FX	GC	P	3.0	2500	15K	15A	61K					15			3250	WG	
MG9T3		MAG	34.4	35.4	4	FX	LT	P	6.3	4000	15K	16A	40K					45				IM	WG
W9/2E		TWA	2.5	4.1			ST	C	5.0	550	1000	500U	20	650	100	450	42	10			550	CO	CO
9M10		MAG	9.4	9.4	10	FX	TO	P	6.3	550	3800	3000	2800									IM	WG
9M40		MAG	9.4	9.4	25	FX	TO	P	6.3	520	8000	8000	20K									IM	WG
9M40		MAG	9.3	9.4	25	FX	NE	P	6.3	515	8000	8000	20K					15				IM	WG
9M63		MAG	9.2	9.3			MEC	KK	C	5.5	16A	4800	900	1K	1000					30		RI	WG
9V10		KLO	8.5	10.0			MEC	TO	C	6.3	1200	350	42	70	1000					46		IN	WG
9V54		KLO	8.2	9.6			MEC	NE	C	6.3	450	450	50	400	270								
9W90		TWA	8.5	9.5			NE	C	6.0	450	20	200U	3	1200	5	840	23	6			800		WG
HA10		TWA	8.2	12.4			HU	C	7.0	1200	800	8	100	2300		2K	25				1000	CO	CO
MAG10		MAG	9.7	9.9	5	FX	GC	P	6.3	1300	15K	10A	52K					15				IM	WG
MAG10A		MAG	9.6	9.7	5	FX	GC	P	6.3	1300	13K	10A	42K					15				IM	WG
MKG10		KLO	18.1	18.3			FX	ME	C		200		100	400									WG
MXM10		MAG	9.3	9.4	15	FX	ME	P			2800	1500	800W										CO
PA10		TWA	2.0	4.0	12		HU	P	7.0	1200	700	60	10W	1100		1K	30					IM	CO
TWS10		TWA	1.7	2.3			GC	C	6.3	1750	1700	75	18W	3000	7	2K	30					IM	CO
VF10		MAG	9.0	9.5	8	FX	FE	P			32K	60A	800K					12			6300	WG	
W10/3E		TWA	2.7	3.7			ST	C	5.0	580		600U	3	100	050	750	26	7			1500	WG	
W10/4G		TWA	2.6	3.6			ST	C	6.3	730		50	15W	2000	3K	3K	42					IM	CO
10L1-1.5		MAG	1.0	1.5			VT	MR	C	3.0	3000	2500	25	10W	400							CO	CO
10L1-1.5S		MAG	1.0	1.5			VT	MR	C	3.0	3000	2500	25	10W	400							CO	CO
10L1.5-2		MAG	1.5	2.0			VT	MR	C	3.0	3000	2200	25	10W	400							CO	CO
10L1.5-2S		MAG	1.5	2.0			VT	MR	C	3.0	3000	2200	25	10W	400							CO	CO
10P.5-.75		MAG	0.5	0.7			VT	MR	C	3.0	3000	2700	15	8000	300							CO	CO
10P.5-.75S		MAG	0.5	0.7			VT	MR	C	3.0	3000	2700	15	8000	300							CO	CO
10P.75-1		MAG	0.7	1.0			VT	MR	C	3.0	3000	2400	15	10W	400							CO	CO
10P.75-1S		MAG	0.7	1.0			VT	MR	C	3.0	3000	2400	15	10W	400							CO	CO
10S2-3		MAG	2.0	3.0			VT	MR	C	3.0	3000	2300	25	10W	400							CO	CO
10S2-3S		MAG	2.0	3.0			VT	MR	C	3.0	3000	2300	25	10W	400							CO	CO
10S2.5-3R		MAG	2.5	3.0			VT	MR	C	3.0	3000	1800	25	10W	400							CO	CO
10S2.5-3.5		MAG	2.5	3.5			VT	MR	C	3.0	3000	2200	25	10W	400							CO	CO
10S2.5-3.5S		MAG	2.5	3.5			VT	MR	C	3.0	3000	2200	25	10W	400							CO	CO
10S3-4		MAG	3.0	4.0			VT	MR	C	3.0	3000	2300	25	10W	400							CO	CO
10S3-4S		MAG	3.0	4.0			VT	MR	C	3.0	3000	2300	25	10W	400							CO	CO
10S-3.5R		MAG	3.0	3.5			VT	MR	C	3.0	3000	2200	25	10W	400							CO	CO
10SC3.5-4.5		MAG	3.5	4.5			VT	MR	C	3.0	3000	2500	25	10W	400							CO	CO
10SC3.5-4.5S		MAG	3.5	4.5			VT	MR	C	3.0	3000	2500	25	10W	400							CO	CO
10V13		KLO	8.1	12.4			MEC	NE	C	6.3	450	500	55	350	300				65			IN	WG
10V54		KLO	9.4	10.7			MEC	NE	C	6.3	450	450	50	250	190				65			IN	WG
10X6.8-7.2		MAG	6.8	7.2			VT	MR	C	3.0	3000	2300	30	10W	600							CO	CO
10X7.2-7.6		MAG	7.2	7.6			VT	MR	C	3.0	3000	2400	30	10W	600							CO	CO
10X7.4-7.8		MAG	7.4	7.8			VT	MR	C	3.0	3000	2500	30	10W	600							CO	CO
HA11		TWA	2.0	4.0			HU	C	6.3	1100	150	2	3	475		475	25	15				CO	CO
MAG11		MAG	9.4	9.5	10	FX	GC	P	2.0	3800	16K	15A	45K					15			3250	WG	
MCM11		MAG	5.4	5.9	20	MEC	ME	P			1500	1200	100W									CO	CO
MKK11		KLO	13.3	13.3			FX	ME	C		3000		15W									21	WG
MXM11		MAG	9.1	9.5	20	MEC	ME	P			1200	800	100W									CO	CO
SMC11A		KLM	4.6	4.7			MEC	SP	C	6.3	1100	1000	35	400				6				IN	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTAGE	HELIX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
SMC11B		KLM	4.9	4.9		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11C		KLM	5.0	5.0		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11D		KLM	5.0	5.0		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11F		KLM	4.9	5.0		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11G		KLM	4.8	4.8		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11I		KLM	4.5	4.6		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11J		KLM	4.6	4.6		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11L		KLM	4.8	4.9		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11M		KLM	4.7	4.7		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11N		KLM	5.6	5.7		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
SMC11S		KLM	4.9	4.9		MEC	SP	C	6.3	1100	1000	35	400				6					IN	CO
VF11		MAG	9.0	9.5	10	MEC	FE	P	6.3	450	300	26	75	220						25	6300	IN	WG
11V18		KLO	10.5	10.5		FX	NE	C	6.3	450	300	26	75	220						43		IN	WG
11V53		KLO	10.7	11.7		MEC	NE	C	6.3	1100	300	28	90	180								RI	WG
11V53A		KLO	10.7	11.7		MEC		C	6.3	1200	475	75	160	1000								RI	WG
11V54		KLO	10.7	11.7		MEC		C	6.3	450	330	25	50	1000								RI	WG
11V54A		KLO	10.7	11.7		MEC	NE	C	6.3	450	450	50	250	260						50		IN	WG
11V54B		KLO	10.7	11.7		MEC		C	6.3	450	500	65	450	1000								RI	WG
11V64		KLO	10.7	11.7		MEC	NE	C	6.3	500	450	50	300	250						45		IN	WG
11V71		KLO	10.4	10.8		MEC	NE	C	6.3	1200	1250	58	1700	360						60		IN	WG
11V651		KLO	10.7	11.2		MEC	NE	C	6.3	500	550	60	550	250						55		IN	WG
11V652		KLO	11.2	11.7		MEC	NE	C	6.3	500	550	60	550	250						55		IN	WG
11W15		TWA	10.7	11.7		MEC	NE	C	6.3	450	1100	10	1500	2500	20	2K	30					IM	WG
11W18		TWA	10.0	12.0		TO	C		6.3	550	1400	10	1000	2700	50	3K	32					IM	WG
11W30		TWA	10.0	12.0		TO	C		6.3		2200	26	4000	3000	50	3K	40					IM	WG
11W62		TWA	10.7	11.7		FX	KK	P	6.3	750	2300	20	4500	1500								WG	
11W70		TWA	10.7	11.7		NE	C		6.3	600	1800	22	6000	2000	30	4K	34					IM	WG
MAG12		MAG	9.0	10.0	10	FX	GC	P	0.6	2900	2500	4000	2K					15				IM	WG
MAG12A		MAG	9.0	10.0	7	FX	GC	P	0.6	2900	2100	3000	2K					15				WG	
MC12		MAG	5.4	5.9	20	MEC	ME	P			2000	1100	400W									CO	
MKK12		KLO	13.3	13.3		ME	C				3000		15W									21	
TWS12		TWA	1.7	2.7		GC	C		6.3	1750	2500	75	20W	2100								CO	
X12		KLO	12.4	18.0		MEC	VA	C	6.3	450	625	60	300	1000						65		RI	WG
12V25		KLO	11.6	12.8		MEC	TO	C	6.3	450	500	70	250	1000						55		RI	WG
MXW13		MAG	8.5	8.9	20	MEC	ME	P			1400	1000	150W										
TWC13		TWA	5.9	6.4		GC	C		6.3	800		45	15W	1700	100	4K	40	27				WG	
X13		KLO	8.1	12.4		MEC	CV	C	6.3	450	500	65	350	350						50		RI	WG
X13B		KLO	7.5	11.0		MEC	VA	C	6.3	450	500	54	310	1000						75		RI	WG
X13C		KLO	7.0	10.0		MEC	VA	C	6.3	450	500	54	550	1000						71		RI	WG
13V64		KLO	12.5	13.5		MEC	NE	C	6.3	500	500	58	300	250						45		IN	WG
HA14		TWA	1.0	2.0		HU	C		6.3	800	120	2	2	500								1000	WG
MAG14		MAG	9.0	9.1	10	MEC	GC	C	6.3	1300	14K	12A	50K						15			3250	WG
MC14		MAG	5.4	5.9	20	MEC	ME	P			2200	1100	500W									CO	
MKK14		KLO	11.0	14.0		FX	ME	C			500	400	350									RI	WG
MXW14		MAG	9.0	9.6	20	MEC	ME	P			1400	1000	150W										
TWC14		TWA	5.8	6.5		MEC	GC	C	6.3	1200		45	20W	1800								IM	WG
TWC14A		TWA	7.4	7.8		MEC	GC	C	6.3	1200		45	20W	1800								IM	WG
TWC14B		TWA	6.9	7.4		MEC	GC	C	6.3	1200		45	20W	1800								IM	WG
EM15LS		MAG	0.9	0.9		FX	E1	C	13.0	115A	12K	2400	25K									WG	
MAG15		MAG	9.0	10.0	10	FX	GC	C	0.4	5000	5800	5000	8K						13			IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
MCM15		MAG	5.4	5.9	20	MEC	ME P				2000	1100	400W										CO
MXM15		MAG	9.3	9.4	15	FX	ME P				2800	2500	3K										IN WG
15V64		KLO	14.4	15.4			MEC NE C		6.3	500	600	55	250							45		IN WG	
15V66		KLO	14.4	15.2			MEC NE C		6.3	650	650	65	550	250						50		IN WG	
BA16-10B		BWO	11.0	18.0		VT	MU C		6.3	800	500	30	70	2700	150								IN WG
HA16		TWM	8.8				HU C		7.0	1200	550	25	2	1200		1K	5				600	CO	
MAG16		MAG	9.4	9.4	10	FX	GC P		6.3	500	8600	9000	25K						15		IM	WG	
MCM16		MAG	5.4	5.9	20	MEC	ME P				2800	1900	1K										21
MKK16		KLO	13.3	13.3			MEC				2200		5000										
MXM16		MAG	8.8	9.6	20	MEC	ME P				2900	1900	1K										
TX16		TWA	8.0	9.3	60		GC P		7.0	9000		50	5K	25K		25K	40			500		WG	
HA17		TWA	1.0	2.0			HU C		6.3	800	120	2	2	500		200	25	15			1000	CO	
MKK17		KLO	13.4	13.6			MEC ME C				1700		750	300								2R WG	
SRL17		KLO	0.8	1.0			MEC SP C		6.3	1500	1000	90	3000	1500	200					9		R1 CO	
17V10		KLO	15.5	18.5			MEC OK C		6.3	650	2200	14	50	600	200					45		WG	
HA18		TWA	1.0	2.0			HU C		7.0	1400	550	75	2000	850		850	33				750	CO	
MCM18		MAG	5.4	5.9	20	MEC	ME P				2500	1500	700W										WG
MKK18		KLO	17.0	18.0		VTC	ME C				750		300	300									WG
HA19		TWA	1.6	2.6			HU C		6.3	800	120	2	3	500		200	25	15			1000	CO	
MKK19		KLO	23.5	24.5		VT	ME C				400		20	200								WG	
BT020		= MAG	2.6	3.7		VT	BL C		2.5	3000	2300	40	10W			1K	30			600		CO	
HA20		TWA	8.0	12.4			HU C		6.3	1200	450	2	10	1300							IM	CO	
MCM20		MAG	5.5	5.8	20	MEC	ME P				500	190	25W										CO
MKK20		KLO	34.0	35.6			ME C				2000		300	300								2R	
MG20		MAG	5.8	5.8		FX	TE C		3.5	3000	1100	120	40W								2400	CO	
VF20		MAG	16.0	17.0	10	FX	FE P				26K	40A	400K					25			8500	WG	
20V10		KLO	18.0	22.0		MEC	OK C		6.3	650	2200	14	50	500	200					45		WG	
HA21		TWA	8.0	11.0			HU C		7.0	1200	2200	20	500	2400		2K	33				IM	CO	
MKK21		KLO	34.0	35.6		VT	ME C				400		15	100								WG	
MXM21		MAG	9.3	9.4	20	FX	ME P				3000	4000	2K										WG
RW21		TWA	2.5	2.7			SH C		6.3	1000		100	20W	1500	30	2K	40				500	CO	
HA22		TWA	1.6	2.6			HU C		6.3	1000	400	4	10	500		500	30				300	CO	
MKK22		KLO	13.3	13.3		VT	ME C				2200		2000									21	
MXM22		MAG	8.9	9.0	20	MEC	ME P				2700	2000	1K									WG	
SZ22		= KLO	8.5	10.0		FX	FE C		6.3	1000	1350	125	5000	1350								21 WG	
22V10		KLO	20.0	24.0		MEC	OK C		6.3	650	2200	14	50	500	200					40		WG	
HA23		TWA	8.2	12.4			HU C		6.3	1100	500	2	3	1250		1K	25	10			1000	CO	
MKK23		KLO	12.4	14.5			MEC ME C				300		20	400									
MXM23		MAG	8.5	8.9	20	MEC	ME P				2600	2000	1K									IN WG	
V-23		KLO	9.1	11.0		FX	VA C		6.3	1000	1350	125	5000	1350									
HA24		TWA	12.4	16.0			HU C		6.3	1200	450	2	5	1300	50	1K	25				400	CO	
MKK24		KLO	15.8	16.2			MEC ME C				300		20	130								WG	
MXM24		MAG	8.9	9.6	20		MEC ME P				3400	3500	2K										
V24C		KLA	9.0	9.6	23	MEC	VA P		6.3	2100	38K	7000	64K			56				23	IM	IN WG	
V24E		KLA	9.0	10.0		MEC	VA P		8.0	8000	36K	6000	50K			55				35		51 WG	
24V10A		KLO	22.0	26.0		MEC	OK C		6.3	650	2200	14	80	500	200					50		WG	
24V11		KLO	23.0	26.0		MEC	OK C		6.3	650	1800	40	150	750	100					50		WG	
24V20		KLO	23.0	25.5		MEC	NE C		6.3	1200	600	35	50	500						60		IN WG	
MKK25		KLO	14.0	17.5		MEC	ME C				300		30	300									
RK25		KLO	3.6	4.5		MEC	SH C		6.3	1000	310	50	180	500						60		WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REF. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			GHz																				
			MIN	MAX																			
VF25		MAG	16.0	17.0	15	FX	FE	P	5.0	2900	25K	30A	250K						25		IM	WG	
25V10		MAG	24.2	24.7	7	FX	NE	P	6.3	1000	16K	18A	40K						30		IM	WG	
HA26		TWA	4.0	8.0			HU	C	6.3	1000	450	2	10	800	800	30					400	CO	
MCM26		MAG	5.4	5.9	20	MEC	ME	P			2700	1700	1K									WG	
MKK26		KLO	16.0	17.0		MEC	ME	C			300		20	100									
MXM26		MAG	8.9	9.5	10	MEC	ME	P	6.3	4000	1300	1000	150W										
MCM27		MAG	5.4	5.9	20	MEC	ME	P	6.3	4000	2200	1100	500W										
SMS27		KLM	2.6	2.7		MEC	SP	C	6.3	1000	1250	70	300	100	10						IM	CO	
HA28		TWA	4.0	8.0			HU	C	6.3	1000	450	2	10	800	50	800	30				IM	CO	
MKK28		KLO	15.8	16.2		MEC		C			350		40	150								WG	
MXM28		MAG	9.0	9.6	10	MEC	ME	P	7.5	11A	2600	2000	1K										
SAS28		KLA	2.6	2.7		FX	SP	C	6.3	1000	4000	350	150W	200	28						3I	CO	
HA29		TWA	2.0	4.0			HU	C	6.3	1000	350	4	20	525	525	35					IM	CO	
MCM29		MAG	5.4	5.9	20	MEC	ME	P			3300	3500	2K									CO	
HA30		TWA	2.0	4.0			HU	C	7.0	1200	450	25	1000	1100	1K	30					IM	CO	
MCM30		MAG	5.4	5.9	20	MEC	ME	P			1300	1000	159W									CO	
MXM30		MAG	8.9	9.4	10	MEC	ME	P			3000	2500	2K										
VF30		MAG	5.2	5.6	15	FX	FE	P	6.3	650	29K	90A	2M							3500		WG	
30V10		KLO	28.0	32.0		MEC	OK	C	6.3	650	2200	14	40	500	200					70		WG	
30V11		KLO	28.0	32.0		MEC	OK	C	6.3	650	2200	30	100	500	200					75		WG	
30V16		KLO	29.5	30.0		MEC	OK	C	6.3	2200	2200	30	180	325	80					80		WG	
30V150		KLO	29.5	30.5		MEC	OK	C	6.3	2000	12	50	350	100						80		WG	
HA31		TWA	1.0	2.0			HU	C	6.3	1400	180	6	10	220	220	30					IM	CO	
KC31A		KLO	31.0	31.0		FX	OK	C	7.0	3000	3000	150	3000	300								WG	
KTC31B		KLO	31.0	31.0		FX	OK	C	6.3	3000	3000	150	1000	300								WG	
MCM31		MAG	5.4	5.9	20	MEC	ME	P	6.3	11A	1500	1100	250W									CO	
MG31T4		MAG	34.8	34.8	10	FX	LT	P			22K	28A	100K						40		IM	WG	
MXM31		MAG	9.3	10.0	10	MEC	ME	P			3700	4500	8K								IM		
SZ31		KLO	8.0	9.0		MEC	FE	C			8000	40	20								2I	WG	
31V151		KLO	30.5	31.5		MEC	OK	C					80									WG	
HA32		TWA	4.0	8.0			HU	C	5.0	1100	500	2	3	800	700	25	15				1000	CO	
MXM32		MAG	8.8	9.5	20	MEC	ME	P			2400	1500	500W								IM		
SMX32		KLM	9.0	10.5		MEC	SP	C	6.3	1600	1000	150	2200					2			3I	WG	
32V152		KLO	31.5	32.5		MEC	OK	C			3300	3000	2K									WG	
MCM33		MAG	5.4	5.9	20	MEC	ME	P	6.3	1500	2200	120	10W	600	400						200	IM RI	
MKK33		KLO	14.4	15.4		VT	ME	C			500		200	250								WG	
33V153		KLO	32.5	33.5		MEC	OK	C	6.3	1000	200	6	2	550	550							WG	
HA34		TWA	2.0	4.0			HU	C	6.3	1000	200											CO	
MCM34		MAG	5.4	5.9	20	MEC	ME	P	6.3	1500	1300	1000	150W								550	CO	
34LV20		KLO	33.2	34.8		MEC	OK	C	6.3	1500	2200	120	10W	600	400						200	IM RI	
34V154		KLO	33.5	34.5		MEC	OK	C					80									WG	
34LV10		KLO	34.0	34.0		MEC	OK	C	6.3	1500	2100	140	3000							60		WG	
MKK35		KLO	13.5	13.5		MEC	ME	C			600		385	300							RI	WG	
HA35		TWA	4.0	8.0			HU	C	7.0	1300	700	20	500	1600							IM	CO	
35V10		KLO	32.0	37.0		MEC	OK	C	6.3	650	2200	14	40	500	200	2K	30					WG	
35V11		KLO	32.0	37.0		MEC	OK	C	6.3	650	2200	30	100	500	200							WG	
35V20		KLO	34.0	36.0		MEC	NE	C	6.3	1200	600	35	25	400							IN	WG	
35V30		KLO	34.0	36.0		MEC	OK	C	6.3	1000	25	20	145	125								WG	
35V61		= KLO	35.0	35.0		FX	OK	C	6.3	1000	25	15	500	200								WG	
35V51		= KLO	35.0	35.0		FX	OK	C	6.3	2200	30	80	500	200								WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
35V155		KLO	31.0	35.0		MEC	OK	C	6.3	2200	14	50	350	100	300	20				80			WG
HA36		TWA	0.5	1.0				HU	C	6.3	1400	175	8	20	300							IM	CO
MCM36		MAG	5.4	5.9	20	MEC	ME	P			2100	1500	900W									CO	CO
MKK36		KLO	17.0	19.0		MEC	ME	C			750			500									WG
MXM36		MAG	9.3	9.5	3	FX	ME	P			550	150	10W										
36V156																							
HA37		KLO	35.5	36.5		MEC	OK	C	5.4	1000	150	2	3	700		475	25	10					WG
MCM37		TWA	2.3	4.4				HU	C		4300	4200	4K										CO
MKK37		MAG	5.4	5.9	10	MEC	ME	P			1600	1000											CO
MXM37		KLO	13.3	13.3		ME	C				1400	1100	150W									21	
		MAG	9.1	9.1	30	FX	ME	P															
MCM38		MAG	5.4	5.9	20	MEC	ME	P			2300	1100	400W										CO
MXM38		MAG	8.6	9.0	20	MEC	ME	P			2300	1300	500W										WG
HA39		TWA	1.6	2.6				HU	C	7.0	1200	450	25	1000	1250	1K	30				600		CO
MCM39		MAG	5.4	5.9	20	MEC	ME	P			2900	2000	2K										CO
MXM39		MAG	8.6	9.0	20	MEC	ME	P			2600	1700	750W										WG
V-39B																							
HA40		KLO	10.0	15.5		MEC	VA	C	6.3	1200	800	42	450	750						32		RE	SP
MCM40		TWA	0.5	1.0				HU	C	6.3	1000	50	2	3	400	120	25	15				820	CO
MXM40		MAG	5.2	5.7	20	MEC	ME	P			3000	2100	900W										CO
V40B		MAG	8.9	9.6	20	MEC	ME	P			3300	3000	2K										WG
		KLO	15.0	21.0		MEC	VA	C	6.3	1200	800	42	90	750								RE	WG
40V10																							
MCM41		KLO	37.0	42.0		MEC	OK	C	6.3	650	2500	30	35	500	200					90			WG
MXM41		MAG	5.4	5.9	20	MEC	ME	P			2400	1300	400W										CO
NVF41A		MAG	8.8	10.0	12	FX	ME	C			930	55	20K										
NVF41B		KLO	3.7	4.1		MEC	NC	C	4.8	730	400	60	700	400	350					12		EX	WG
			4.0	4.3		MEC	NC	C	4.8	730	400	60	700	400	350					12		EX	WG
SAC41		KLA	3.7	4.2		VT	SP	C	6.3	200	750	200	7000			25				16		1700	41
SY41		KLA	8.0	9.0		MEC	FE	C			13K	700	3K			47							WG
MXM42		MAG	8.8	9.2	45	MEC	ME	P			2100	1300	400W										CO
RW42		TWA	3.6	4.2				SH	C	6.3	800	70	16W	1500	20	2K	38			25			CO
SAC42		KLA	5.4	5.9	20			SP	P		135K	112A	3M			24							
MCM43																							
HA44		MAG	5.4	5.9	20	MEC	ME	P			2800	1700	600W										CO
MG44T2		TWA	8.2	12.4				HU	C	6.3	1100	500	2	1	1250	1K	25	15				1000	CO
HA45		MAG	34.4	35.4	10	LT	P				6.3	2000	10K	600	6K			60				IM	WG
MXM45		TWA	0.5	1.0				HU	C	6.3	1000	50	2	3	400	120	25	10				820	CO
		MAG	9.0	9.6	20	MEC	ME	P			2600	1700	750W										WG
SAC45A		KLA	5.4	5.9		MEC	SP	C	6.3	1400	1100	175	600W			16				515		3E	CO
V-45		KLM	9.0	10.0		MEC	VA	C	6.3	1000	1000	80	1500									IN	WG
W45B/5E		TWA	0.5	1.0				ST	C	6.3	2800	750	200W	3100	1K	33						IM	CO
45LV10		KLO	45.0	45.0		FX	OK	C			6.3	1500	2200	135	1000	500				60			WG
45V10		KLO	42.0	48.0		MEC	OK	C	6.3	650	2500	30	35	500	200					100			WG
MXK46																							
MXM46		KLO	10.7	11.7		MEC	ME	C			400		25	250									WG
SAC46		MAG	8.8	9.6	20	MEC	ME	P			2900	1900	1K										CO
BA47F		KLA	5.4	5.9	20	MEC	SP	C	6.3	2800	9000	670	300W			34				515		3E	CO
BA47H		= BWO	43.0	52.0		VT	OK	C	6.3	1000	700	30	150	150	4K					5		IM	WG
		=							6.3	1000	1150	60	600	300	4K								WG
HA47		TWA	4.0	8.0				HU	C	6.3	1100	500	2	2	850	700	25	10					CO
MXK47		KLO	8.5	10.0		MEC	ME	C			200		25	225									WG
MXM47		MAG	9.0	9.3	20	MEC	ME	P			1500	1100	200W			30							CO
SAC47		KLA	5.4	5.9	16	MEC	SP	C	6.3	2000	20K	8500	27K										WG
47V10		KLO	43.0	51.0		MEC	OK	C	6.3	650	2500	30	30	500	200					515		3E	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
47V11		KLO	43.0	51.0	100%	MEC	OK	C	6.3	650	2500	30	80	500	200				120				WG
BA48H	=	BWO	45.0	50.5		VT	OK	C	6.3	1000	1150	60	700	300	300	4K			5		IM		WG
MXK48		KLO	8.4	10.3		MEC	ME	C			350												WG
MXM48		MAG	9.1	9.6	20	FX	ME	P			2400	1300	500W										CO
BA50G	=	BWO	45.0	54.0		VT	OK	C	6.3	1000	700	30	150		150	4K					IM		WG
BA50H	=	BWO	48.0	55.0		VT	OK	C	6.3	1000	1150	60	600		300	4K			5		IM		WG
HA-50		TWA	0.5	1.0				HU	C	7.0	2200	600	60	1000	600	600	30	20			IM		CO
MXK50		KLO	11.0	12.4		MEC	ME	C			550		70	500									WG
MXM50		MAG	8.8	9.5		MEC	ME	P			2200	1300	400W							15			WG
SZ50	=	KLO	9.0	9.6		MEC	FE	C	6.3	1200	350	60	66	500							RI		WG
50BW10		BWO	44.0	54.0		VT	OK	C	6.3	1000	700	40	120		210	4K					IM		WG
50S2-5-3.5		MAG	2.5	3.5		VT	MR	C	3.0	3500	4100	45	50W		800								CO
50S3-4		MAG	3.0	4.0		VT	MR	C	3.0	3500	3800	45	50W		1K								CO
50V10		KLO	46.0	54.0		MEC	OK	C	6.3	650	2700	30	25	500	200					140			WG
50BT/A		KLO	46.0	54.0		MEC	BM	C	6.3	580	2800	45	300	500	120					140		RE	WG
50LV10		KLO	50.0	50.0		FX	OK	C	6.3	1500	2300	150	1000		500				40				WG
HA51		TWA	0.2	0.5				HU	C	6.3	1500	300	10	50	350	50	250	20			IM		CO
MXK51		KLO	10.5	11.5		VT	ME	C			200		20	200									CO
NVF51A		KLO	4.7	5.1		MEC	NC	C	4.8	730	400	60	700	400	350				12			EX	WG
SZ51	=	KLO	8.0	8.8		MEC	FE	C	6.3	1200	350	60	120	500						80		RI	WG
SZ51A	=	KLO	8.0	8.8		MEC	FE	C	6.3	1200	350	60	120	500						80		RI	WG
MXK52		KLO	9.1	9.5		VT	ME	C			175		10	100									WG
MXM52		MAG	8.8	9.5		MEC	ME	P			2700	1400	350W										WG
HA53		TWA	1.0	2.0				HU	C	7.0	1700	600	75	2000	1200	100	1K	30			IM		CO
MXK53		KLO	9.1	11.0		FX	ME	C			1350		5000									2R	WG
MXM53		MAG	8.5	9.1		MEC	ME	P			3200	2500	1K										WG
SZ53	=	KLO	8.5	9.6		MEC	FE	C	6.3	1200	350	60	120	500						20		RI	WG
V533		KLO	10.7	11.7		MEC	VA	C	6.3	1200	400	32	109	250						40		RI	WG
BA54H	=	BWO	51.5	55.0		VT	OK	C	6.3	1000	1150	60	600		300	4K			5		IM		WG
HA54		TWA	2.0	4.0				HU	C	6.3	1000	200	2	10	800	500	30	12				IM	CO
MXK54		KLO	10.7	11.7		VT	ME	C			550		400	400									WG
MXM54		MAG	9.0	9.6		MEC	ME	P			3200	2500	1K										WG
BA55B	=	BWO	50.0	59.0		VT	OK	C	6.3	1000	700	30	120		150	4K					IM		WG
HA-55		TWA	1.0	2.0				HU	C	7.0	1700	800	60	2000	1000		33	20			IM		CO
KC55B		KLO	55.0	55.0		FX	OK	C	7.0		3900	200	5000		300								WG
MXK55		KLO	11.7	12.7		VT	ME	C			550		400	400									WG
MXM55		MAG	9.2	9.4	52	MEC	ME	P			3500	3500	2K										WG
SRU55A/B	=	KLO	15.7	17.0		MEC	SP	C	6.3	550	300	31	45	350						40		RI	WG
TV55		KLO	8.2	11.5		MEC	TV	C	6.3	1200	500	75	250										WG
TV55E		KLO	9.8			FX	TV	C	6.3	1200	500	70	450										WG
TV55F		KLO	8.8			FX	TV	C	6.3	1200	500	70	450										WG
V-55		KLO	8.2	11.5		MEC	VA	C	6.3	1200	500	75	800	1000						60		RI	WG
V55F		KLO	8.8	8.8		MEC	CV	C	6.3	1200	500	70	600	1000						50		RI	WG
VF55		MAG	34.6	35.4	15	FX	FE	P			23K	20A	100K						45		10K		WG
55V10		KLO	52.0	58.0		MEC	OK	C	6.3	650	2700	30	30	500	200					140			WG
55V11		KLO	52.0	58.0		MEC	OK	C	6.3	650	2700	30	70	500	200					190			WG
HA56		TWA	4.0	8.0				HU	C	7.0	1200	450	30	1000	2100	50	2K	33	25			IM	CO
MXM56		MAG	9.3	9.4	12	MEC	ME	P			800	250	10W										WG
HA57		TWA	7.0	12.4				HU	C	7.0	1200	2000	30	2000	2500	50							WG
MXK58		KLO	8.5	9.6		VT	ME	C			300		20	150									WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																				
																								CHZ
TV58		KLO	8.5	10.0	100%	MEC	TV C		6.3	1200	500	70	500	1000						90		RE	WG	
V-58		KLO	8.5	10.0		MEC	VA C		6.3	1200	550	70	880	1000								RI	WG	
HA59		TWA	2.0	4.0			HU C		7.0	1200	450	25	2000	1100		1K	35	20				IM	CO	
MXK59		KLO	9.5	9.6		VT	ME C				300	20	150											
TK59		KLO	8.5	9.6		TH	BE C				300	50								60		RI	CO	
BA60C																								
HA60		TWA	54.0	65.0		VT	OK C		6.3	1000	700	30	100		150	4K			5			IM	WG	
MXK60		KLO	7.0	11.0			HU C		6.3	1500	500	2	10	1300		1K	25	14				IM	CO	
MXK60		KLO	9.8	10.2		VT	ME C				500	300	15W		100		25					31	CO	
SAS60A		KLA	2.7	3.3		MEC	SP C		6.3	2000	900	300	500	360								31	CO	
SAS60B		KLA	2.7	2.9	22	MEC	SP P		6.3	2000	1400	650	30W		100		30			8		31	CO	
SZ60		KLO	8.5	10.0		FX	FE C				5000	15	2									21	WG	
60V10		KLO	57.0	63.0		MEC	OK C		6.3	650	2700	30	30	500	200					140		1000	WG	
HA61		TWA	7.0	14.0			HU C		6.3	1100	500	2	1	1300		1K	25	15					CO	
MXK61		KLO	8.8	9.2		VT	ME C				500	500	360										WG	
SAS61		KLA	2.7	2.9	40	MEC	SP P		6.3	6000	15K	5500	10K				30			17		31	CO	
TK61		KLO	6.5	7.7		MEC	TE C		6.3	400	300	28	180	300								RI	CO	
HA62		TWA	2.0	4.0			HU C		6.3	1000	150	2	5	700		500	25	10				CO	CO	
MXK62		KLO	9.3	10.2		VT	ME C				400	70	300									RI	CO	
TK62		KLO	8.5	9.6		TH	BE C				300	60											WG	
MXK63		KLO	8.5	9.6		VT	ME C				500	500	350										WG	
SRC64D1		KLO	5.4	5.9		MEC	SP C		6.3	800	900	90	1700	550								RI		
MXK65		KLO	8.5	10.0		VT	ME C				400	200	350											
MXK66		KLO	7.1	8.5		MEC	ME C				400	80	350										WG	
MXK67		KLO	8.5	10.0		MEC	ME C				500	500	500											
MXK68		KLO	10.0	11.5		MEC	ME C				500	500	500											
HA-69		TWA	0.5	1.0			HU C		6.3	600	200	10	50	200		200	30	17				IM	CO	
MXK69		KLO	11.5	12.5		MEC	ME C				500	500	500											
TK69		KLO	5.1	5.9		MEC	BE C				300	135								40		RI	CO	
RW70		TWA	7.1	7.8			SH C		6.3	850	300	35	4000	1800	100	2K	38					IM	WG	
70BT		KLO	65.0	75.0		MEC	BM C		6.3	580	3200	45	30	400	120				170			RE	WG	
70BT/A		KLO	65.0	75.0		MEC	BM C		6.3	580	3200	45	60	400	120							RE	WG	
70V10		KLO	65.0	73.0		MEC	OK C		6.3	650	2800	30	25	500	200					170			WG	
70V11A		KLO	65.0	75.0		MEC	OK C		6.3	650	2800	30	70	500	200					140			WG	
HA71		TWA	8.0	12.4			HU C		7.0	1200	800	8	100	2300		2K	25			165			WG	
HA72		TWA	0.5	1.0			HU C		6.3	1200	30	2	2	400		120	25	8				IM	CO	
																							CO	
MXK72		KLO	10.4	10.8		MEC	ME C				500	500	360											
HA73		TWA	1.0	2.0			HU C		6.3	800	150	2	2	500		200	25	8				1000	CO	
TK75		KLO	3.5	4.2		MEC	TE C		6.3	1550	500	46	650	415						60		RI	CO	
CV76		MAG	3.0	3.1	10	FX	GC P		5.0	2500	27K	35A	450K									2300	WG	
TK76		KLO	3.5	4.3		MEC	TE C		6.3	1550	500	46	890	825						16		RI	CO	
HA78		TWA	1.0	2.0			HU C		7.0	1700	800	70	500	200		50	1K	30	25			IM	CO	
HA80		TWA	1.0	2.0			HU C		6.3	800	150	2	3	500		200	25	7				CO	CO	
RW80		TWA	5.8	8.5			SH C		6.3	900	500	50	15W	1500	40	1K	40					800	WG	
TK80		KLO	5.4	5.9		MEC	BE C		6.3	500	300	32	85	185								35	RI	CO
80V10A		KLO	75.0	85.0		MEC	OK C		6.3	650	2700	30	15	500	200					140			WG	
HA78		TWA	1.0	2.0			HU C		7.0	1700	800	70	500	200		50	1K	30	25			IM	CO	
HA80		TWA	1.0	2.0			HU C		6.3	800	150	2	3	500		200	25	7				CO	CO	
RW80		TWA	5.8	8.5			SH C		6.3	900	500	50	15W	1500	40	1K	40					800	WG	
TK80		KLO	5.4	5.9		MEC	BE C		6.3	500	300	32	85	185								35	RI	CO
80V10A		KLO	75.0	85.0		MEC	OK C		6.3	650	2700	30	15	500	200					140			WG	
Rw81		TWA	5.8	8.5			SH C		6.3	800	18K	2900	7K									IM	WG	
V82B		KLA	9.3	9.3	250	FX	VA P		6.3	1500	500	3	10	800		800	30	14				IM	WG	
HA-84		TWA	4.0	8.0			HU C		6.3	1000	150	3	5	400		250	25	14				IM	CO	
HA85		TWA	1.0	2.0			HU C		6.3	1000	150	3	5	400		120	25	7				IM	CO	
HA86		TWA	0.5	1.0			HU C		6.3	1000	30	2	2	430									CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10%	TUNE	MFR	OPERATION	E _f	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
SOC86	=	KLO	5.0	5.0		FX	SP C		6.3	1000	1000	120	10W		60					6		3I	CO
SOC87	=	KLO	5.0	5.0		FX	SP C		6.3	1000	300	80	4500									2I	WG
VA87B	=	KLA	2.7	2.8	10	MEC	VA P		7.5	32A	120K	70A	2M				60			33		4I	WG
VA87C	=	KLA	2.8	2.9	10	MEC	VA P		7.5	32A	120K	70A	2M				60			33		4I	WG
HA89	=	TWA	2.0	4.0			HU C		5.8	1100	150	2	1	400		450	25	8					CO
SAL89	=	KLA	1.0	1.2	12	MEC	SP P		4.2	40A	20K	8500	30K	550			30			10		3I	CO
SRX92		KLO	8.5	10.5		MEC	SP C		6.3	450	330	37	60	500						56		RI	WG
VA92		KLO	14.0	17.5		MEC	VA C		6.3	1200	625	66	125	1000								RI	WG
VA92B		KLO	12.4	14.5		MEC	VA C		6.3	1200	625	70	550	1000						100		RI	WG
VA92C/8467		KLO	12.4	14.5		MEC	VA C		6.3	450	625	66	358	1000						75		RI	WG
VA94	=	KLO	16.2	16.8		MEC	VA C		6.3	1200	350	38	50	500						70		RE	WG
VA97	=	KLO	34.0	35.6		MEC	VA C		6.3	1160	425	40	19	500						100		RE	WG
VA97B	=	KLO	32.6	34.0		MEC	VA C		6.3	1200	425	50	20	500						88		RE	WG
TK98	=	KLO	5.4	6.0		MEC	BE C				425	10					55					RI	CO
VA98E	=	KLO	23.6	24.4		MEC	CV C		6.3	1200	400	40	70	500						80		RE	WG
VA98G		KLO	23.8	23.9		MEC	CV C		6.3	1200	375	45	70	300						50		RI	WG
VA98J	=	KLO	23.6	24.0		MEC	CV C		6.3	1200	375	40	110	330						50		RE	WG
VA98M	=	KLO	23.6	24.4		MEC	VA C		6.3	450	390	40	125	500						84		RI	WG
90V10A		KLO	85.0	95.0		MEC	OK C		6.3	650	2700	30	10	500	200					180			WG
90V11		KLO	85.0	95.0		MEC	OK C		6.3	650	2700	25	30	500	200					300			WG
TV94		KLO	16.0	17.0		MEC	TV C		6.3	1200	350	45	20	500								RI	WG
TV97		KLO	34.0	35.6		MEC	TV C		6.3	1200	400	40	10										
BLM100		MAG	5.4	5.9	20		BL P		5.0	700	2700	1700	1K			1K	35	13	12			CO	CO
HA100B		TWA	2.0	4.0			HU C		7.0	1200	600	25	1000	1000	1	400						IM	CO
10052.5-3		MAG	2.5	3.0		VT	MR C		3.0	3500	3600	80	100W									CO	CO
10053-3.5		MAG	3.0	3.5		VT	MR C		3.0	3500	3500	70	100W			1K						CO	CO
100V10A		KLO	95.0	H1.0		MEC	OK C		6.3	650	2800	25	10	500	200					250		IM	WG
HA101		TWA	1.0	2.0			HU C		7.0	2000	1000	100	10W	1400		1K	30	20				RI	WG
VC101A		KLO	13.9	13.9		MEC	CV C		6.3	1200	400	65	300	300						50			CO
BLM102		MAG	5.8	5.8	15		BL P				5200	4200	5K										CO
HA102		TWA	2.0	4.0			HU C		7.0	1200	1000	100	10W	1500		1K	35	30				IM	CO
VC102		KLO	9.5	11.0		MEC	CV C		6.3	1200	550	65	900	1000						50		RI	WG
HA103		TWA	4.0	8.0			HU C		7.0	1200	2000	80	5W	3000		3K	35	35				IM	CO
ORW103		TWA	1.7	2.7			WT C		6.3	1500	1400	40	7000	1900		2K	33			100		RI	WG
VC103A		KLO	13.3	13.3		MEC	CV C		6.3	1200	550	70	350	320									CO
VC103B		KLO	12.9	12.9		MEC	CV C		6.3	1200	550	70	350	320						100		RI	WG
WL103	=	MAG	9.3	9.3	270	MEC	WH P		6.3	480	850	550	150W						20			IM	WG
HA104		TWA	1.0	2.0			HU C		7.0	1700	800	60	2000	1000		1K	30	15				IM	CO
VC104		KLO	50.0	80.0		MEC	CV C		6.3	2200	2550	25	600	1250					15			RI	WG
BLM105		MAG	5.4	5.9	20		BL P		5.0	700	2700	2000	1K										CO
HA105		TWA	4.0	8.0			HU C		7.0	1000	800	25	1000	1800		2K	33	18				IM	CO
TK105		KLO	8.5	9.6		TH	BE C				300		40							100		RI	CO
HA106		TWA	0.5	1.0			HU C		7.0	2200	600	60	1000	600		600	30	13				IM	CO
RW106		TWA	1.0	2.0			WT C		6.3	1500	550	25	1000	850		850	30			1			CO
TK106		KLO	8.5	9.6		MEC	BE C				300		40							60		RI	CO
HA107		TWA	1.0	2.0			HU C		7.0	1700	800	70	5000	1000		1K	30	20				IM	CO
RW107		TWA	2.0	4.0			WT C		6.3	1500	600	40	1000	1100		1K	33			2			CO
WL107		KLO	7.5	11.0		MEC	WH C		6.3	1200	550	65	300	1000						50		RI	WG
EM108		TWA	2.0	4.0	20		EI P		6.3	3000	8000	1300	1K		200	8K	30					IM	CO
HA108		TWA	7.0	11.0			HU C		7.0	1100	1000	20	1000	2400		2K	30	20				IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E_f	I_f	BEAM OR ANODE VOLTS	I_k	P_o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL V	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
TK108		KLO	5.4	5.9				MEC BE C	6.3	500	300	32	150	185						35		RI	CO
WL108		KLO	12.4	18.0				MEC WH C	6.3	1200	625	70	70	1000						45		RI	WG
HA109		TWA	1.0	2.0				HU C	7.0	2000	800	100	10M	1500		1K	30	15				IM	CO
WL109		KLO	8.5	11.0				FX WH C	6.3	1200	300	35	55		150					40		RI	WG
WL110		KLO	12.4	14.5				MEC WH C	6.3	1200	625	65	200	1000						80		RI	WG
1110H																							
HA111		TWA	0.5	1.0				VT HP C	6.3	500	240	15	100									IM	CO
TK111		KLO	9.6	12.8				MEC BE C	7.0	2200	500	60	1000	700	350	500	30	20				IM	CO
WL111		KLO	14.0	17.5				MEC WH C	6.3	1200	625	70	105	1000						40		RI	WG
111H																				65		RI	WG
BLM112		MAG	8.9	9.4	20			BL P	5.0	700	2800	2000	1K						15				WG
HA112		TWA	1.0	2.0				HU C	7.0	1700	700	60	2000	1100	50	1K	33	20				IM	CO
TK112		KLO	8.5	9.6				TH BE C			300	50								60		RI	CO
112H																						IM	CO
EM113		TWA	2.0	4.0	20			HP C	6.3	3000	8000	1300	1K			8K	30					IM	CO
								EI P															
HA113		TWA	2.0	4.0				HU C	7.0	1200	600	30	1000	1200	50	1K	30	20				IM	CO
TK113		KLO	15.4	15.6				MEC BE C	6.3	500	300	32	15	190					30			RI	WG
VA113		KLO	5.9	6.6				MEC VA C	6.3	800	750	80	200	1000								RI	WG
WL113		KLO	7.5	11.0				MEC WH C	6.3	1200	550	65	300	1000						65		RI	WG
113H																						IM	CO
								HP C	6.3	1200	1000	15	20										
EM114		TWA	2.8	3.5	200			EI P	6.3	3000	8000	2000	2K			36						CO	CO
HA114		TWA	4.0	8.0				HU C	6.3	1200	1550	30	1000	2350	50	2K	33	25				IM	CO
VA114		KLO	6.6	7.2				MEC VA C	6.3	800	750	80	180	1000								RI	WG
WL114		KLO	8.1	12.4				MEC WH C	6.3	1200	550	65	250	1000						75		RI	WG
HA115		TWA	7.0	12.4				HU C	6.3	1500	1800	20	1000	2500	50	2K	30	30				IM	CO
TK115		KLO	8.5	9.6				TH BE C	6.3	1300	300	32	20	145					45			RI	CO
VA115		KLO	7.2	7.7				MEC VA C	6.3	800	750	80	120	1000								RI	WG
WL115		KLO	8.5	10.0				MEC WH C	6.3	1200	500	55	650		260					50		RI	WG
BLM116		MAG	5.4	5.9	15			BL P	5.0	700	3050	1900	1K					12				CO	CO
EM116		TWA	2.9	3.1	200			EI P	6.3	3000	7500	2000	2K			36						IM	CO
HA117		TWA	2.0	4.0				HU C	6.3	1200	600	30	2000	1200	50	1K	35	20				IM	CO
TK117		KLO	12.8	17.0				MEC BE C	6.3	1200	625	70	210	1000					40			RI	WG
WL117		KLO	12.4	18.0				MEC WH C	6.3	1200	625	70	210	1000					65			RI	WG
EM118		TWA	2.7	2.9	20			EI P	6.3	3000	5000	800	500W	200	5K	46						IM	CO
HA118		TWA	4.0	8.0				HU C	6.3	1200	1550	30	2000	2350	50	2K	30	25				IM	CO
TK118		KLO	12.8	17.0				MEC BE C			300	30								40		RE	WG
TK119		KLO	12.8	17.0				MEC BE C			300	30								30		RI	WG
VA118A		KLO	5.4	5.9				MEC VA C	6.3	800	775	50	100	1000						28		RI	WG
WL118		KLO	14.0	17.5				MEC WH C	6.3	1200	625	70	105	1000						65		RI	WG
WL119		KLO	11.0	14.0				FX WH C	6.3	1200	500	55	450		295					50		RI	WG
TK120		KLO	8.5	9.6				MEC BE C			400	150								40		RI	CO
120V10																							
WL121		KLO	H1.1	H1.2				MEC OK C	6.3	650	2700	25	5	500	200					350		RI	WG
WL122		KLO	7.5	11.0				MEC WH C	6.3	1200	550	65	300	1000						50		RI	WG
STC124									6.3	1200	550	65	250	1000						75		RI	WG
									6.3	3000	13K	3700	1K									1500	CO
WL124		KLO	12.4	18.0				MEC WH C	6.3	1200	625	70	210	1000						65		RI	WG
HA125		TWA	8.0	11.0				HU C	6.3	1500	1800	20	2000	2500	50	2K	30	35				IM	CO
RW125		TWA	1.0	2.0				WT C	6.3	1500	1400	80	10M	2000		2K	30			1		CO	CO
VA125A								VA P	7.5	33A	125K	75A	2M							300		WG	WG
VA125D								VA P			120K	75A	2M							260			WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTAGE	HELIX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
RW126	TWA	2.0	4.0					WT	C	6.3	1500	1200	60	10W	2000	2K	33		2			CO
VA126	TWA	5.4	5.9		20			VA	P	7.5	33A	135K	94A	4M			32			500		WG
WL126	KLO	14.0	17.5					MEC	WH	C	6.3	1200	625	70	105	1000		12	65		RI	WG
BLM127	MAG	5.4	5.9		10			BL	P	5.0	1150	5000	3200	4K								CO
VA128G	TWA	2.8	3.5		20			VA	P	7.5	2000	14K	3000	5K	150		33			IM		CO
WL128	KLO	8.1	12.4					MEC	WH	C	6.3	1200	550	65	250	1000			75		RI	WG
RW129	TWA	1.7	2.7					WT	C	6.3	1500	2000	80	20W	2000	2K	30		1			CO
RW130	TWA	1.0	2.0					WT	C	6.3	1500	1000	45	1000	1000	1K	30		1			CO
WL130	TWA	7.2	7.8					WJ	C				2500			36				IM		CO
WJ130-1	TWA	7.2	7.8					WJ	C	3.0	330	1800	14	2500	650	2K	36			IM		CO
WL130	KLO	10.0	11.5					MEC	WH	C	6.3	1200	500	45	500	100			40		RI	WG
VA131G	TWA	1.2	1.7		40			VA	P	11.0	4200	28K	10A	30K	500		43		500		IM	CO
VA132	= TWA	0.5	1.0					VA	C	12.6	2750	2300	750	400W			31		500		IM	CO
VA133S	= TWA	1.2	1.4		600			VA	P	12.6	3800	15K	3000	5K	500		47		150		IM	CO
STC134	= TWA	3.9	6.0					SP	C	6.3	1100	1850	50	5000	60		40	35		IM		CO
VA134B	TWA	0.5	0.6		700			VA	P	9.0	3900	15K	3000	5K	500		40		100		IM	CO
WL135	= KLO	10.5	10.5					FX	WH	C			400	100						RI		WG
BLM136	MAG	8.8	9.5		15			BL	P	5.0	700	2800	2000	1K				15				CO
VA136	TWA	2.6	3.9		500			VA	P	10.2	23A	42K	17A	100K	100		30		500			WG
WL136	KLO	10.6	12.4					MEC	WH	C	6.3	1200	500	45	200				50		RI	WG
VA137C/D	TWA	0.9	1.0		700			VA	P	19.0	2500	15K	3000	7K	250		47		130		IM	CO
WL137	KLO	9.5	10.9					MEC	WH	C	6.3	1200	350	35	125	170			35		RI	WG
BLM138	MAG	8.8	9.5		20			BL	P	5.0	700	2150	1100	400W				15				CO
VA138B	= TWA	0.4	0.7					VA	C	12.6	2750	2100	1000	400W			33		350		IM	CO
VA138G	TWA	0.4	0.7					VA	C	6.3	6200	2000	1000	250W			40			IM		CO
WL138	KLO	8.5	10.0					MEC	WH	C	6.3	1200	350	30	200	60			50		RI	WG
VA139A	TWA	5.2	5.9		200			VA	P	8.0	4200	15K	2500	5K			50			1000		WG
WL139	KLO	7.5	8.5					MEC	WH	C	6.3	1200	500	55	400	100			40		RI	WG
VA141A	TWA	0.5	1.0					VA	C			2100	700	200W			26		500		IM	CO
WL141	= KLO	13.5	13.5					MEC	WH	C	6.3	450	625	70	450	1000			70		RI	WG
WL142	= MAG	9.3	9.4		270			MEC	WH	P	6.3	480	850	550	150W			20		IM		WG
BLM143	MAG	16.0	16.2		10			MEC	BL	P	4.7	700		800				20				WG
BLM143A	MAG	16.0	16.5		10			MEC	BL	P	4.7	700		1000				20				WG
VA143	TWA	2.8	3.2		20			VA	P	7.5	33A	180K	165A	11M			38		4K			WG
WL143	= MAG	9.4	9.4		270			MEC	WH	P	6.3	480	850	550	150W			20		IM		WG
VA145A	TWA	2.6	4.0		14			VA	P	7.5	33A	150K	112A	7M			40		3K			WG
VA146	TWA	5.4	5.9		20			VA	P	7.5	33A	145K	88A	4M			34		500			WG
WL146	= KLO	10.5	10.5					FX	WH	C	5.7	450	350	45	32	1000			52		RI	WG
WL147	= KLO	10.5	10.5					FX	WH	C	6.3	450	350	45	100	1000			37		RI	WG
BLM148	MAG	16.5			5			FX	BL	P	12.6	670		5000				25				WG
WL148	= KLO	10.5	10.5					FX	WH	C	6.3	450	350	45	100	1000			37		RI	WG
WL149	KLO	7.1	8.5					MEC	WH	C	6.3	450	550	65	180	1000			40		RI	WG
DX151	KLO	67.0	73.0					MEC	AM	C	3.8	1750	2700	22	125	300	25		100		RI	WG
STC152	= TWA	5.4	5.9		20			SP	P	6.6	3000	15K	4500	2K			28			1850		CO
TV152C	KLO	9.2	9.2					FX	TV	C	6.3	1200	350	60	4	300					RI	
BLM153	= MAG	5.7	5.8		10			MEC	BL	P	5.0	1250	5800	6000	5K			2				CO
BLM154	MAG	16.2			3			MEC	BL	P	12.6	3300		33W				12				WG
TV154	KLO	10.5	12.2					MEC	TV	C	6.3	1200	400	50	50							WG
V154	= KLO	10.0	12.0					MEC	VA	C	6.3	1200	450	70	460	1000			60		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
BLM155	MAG		5.4	5.9	20	MEC	BL P	VA C	5.0	700	250K	250A	840	840					12	20	1000	5E	CO
SAS159	KLA		2.8	2.8	9	FX	SP P	VA C	18.0	13A	1500	38	20	20		1K					IM	CO	CO
VA160E	BWO		3.6	7.2			VA C	VA C	6.3	1250	1500	35	50	340		340					IM	CO	CO
VA160F	BWO		5.0	6.0			VA C	VA C	6.3	1250		41	50			1K					IM	CO	CO
VA160M	BWO		4.0	8.0			VA C	VA C	6.3	1250											IM	CO	CO
VA160N	BWO		5.4	5.9			VA C	VA C	6.3	1250		45	400			800					IM	CO	CO
STL161	TWA		1.2	1.4	61		SP P	VA C	6.3	2300	14K	5500	6K			650					700	IM	CO
VA161F	BWO		8.0	12.4		VT	VA C	VA C	6.3	2000	80	10	30			650					IM	WG	WG
VA161M	BWO		8.2	12.4		VT	VA C	VA C	6.3	1250		40	20			650					IM	WG	WG
VA162F	BWO		10.0	20.0		VT	VA C	VA C	6.3	1250	60	17	55			1K					IM	WG	WG
VA162M	BWO		12.4	18.0			VA C	VA C	6.3	1250		25	50			1K					IM	WG	WG
VA163G	BWO		18.0	26.5		VT	VA C	VA C	6.3	1250	100	17	40		100	1K					IM	WG	WG
VA163M	BWO		18.0	26.5			VA C	VA C	6.3	1250		17	25			1K					IM	WG	WG
DX164	KLO		73.7	73.7	2	FX	AM P	VA C	4.8	4120	13K	10A	15K					6			18K	IM	WG
VA164M	BWO		26.5	40.0			VA C	VA C	6.3	1250		19	10			1K					IM	WG	WG
SAL166	KLA		1.2	1.3	48	FX	SP P	VA C	5.0	35A	195K	240A	12M			34			100		100	5E	WG
SAC167	KLA		5.4	5.9	75	MEC	SP P	VA C			95K	59A	1M			47			100		1800	5E	WG
WL17H	BWO		8.3	9.3			HP C	VA C	6.3	1250	490	15	60								IM	CO	CO
VA173M	BWO		7.0	12.4			VA C	VA C	6.3	1250		38	40			1K					IM	CO	CO
VA173T	BWO		8.0	12.4			VA C	VA C	6.3	1250		38	100			1K					IM	CO	CO
173H																							
VA174G	BWO		1.0	2.0		FX	HP C	VA C	4.2	2000	2800	133	100W			30					IM	WG	WG
174H	BWO		8.2	12.4		VT	VA C	VA C	6.3	1250	100	30	800			1K					IM	CO	CO
VA175G	BWO		8.0	12.4		VT	HP C	VA C	6.3	820	1650	20	150								IM	CO	CO
VA175M	BWO		8.0	12.4		VT	VA C	VA C	6.3	1250	100	40	500		100	1K					IM	WG	WG
VA175T	BWO		8.0	12.4			VA C	VA C	6.3	1250		38	80			1K					IM	WG	WG
VA177M	BWO		10.0	15.0		VT	VA C	VA C	6.3	1250	100	7	50			1K					IM	WG	WG
WL177	KLO		8.5	11.0		FX	WH C	VA C	6.3	1200	500	55	25		315				45		IM	RI	WG
181H	BWO		54.0	56.0			HP C	VA C			12K	50	15W								IM	WG	WG
182H	BWO		90.0	99.0			HP C	VA C			14K	35	1000								IM	WG	WG
VA183G	BWO		1.0	2.0		VT	VA C	VA C	6.3	1500	100	10	50			1K					IM	CO	CO
183H	BWO		94.0	99.0			HP C	VA C	6.3	1250	100	7	50			1K					IM	WG	WG
DX184	KLO		31.0	36.0		MEC	AM C	VA C	6.3	800	2500	18	100		500	100			60		IM	WG	WG
VA184M	BWO		2.0	4.0			VA C	VA C	6.3	1250		42	100			1K					IM	WG	WG
184H	BWO		H1.3	H1.5			HP C	VA C			20K	35	2000										
VA185M	BWO		4.0	8.0		VT	VA C	VA C	6.3	1500	100	10	100			1K					IM	CO	CO
WL186	KLO		8.5	11.0		FX	WH C	VA C	6.3	1200	300	30	80		320				25		RI	WG	WG
WL187	KLO		8.5	10.0		MEC	WH C	VA C	6.3	1200	350	48	112		155				50		RI	WG	WG
WL189	KLO		8.5	10.0		MEC	WH C	VA C	6.3	1200	500	50	300		330				40		RI	WG	WG
V190C/1M	KLO		0.5	1.2		ST C	VA C	VA C	6.3	1000	400	70	2000	400	20						1200	CO	CO
190H	BWO		4.0	8.0			HP C	VA C			2000	25	30								IM	CO	CO
SAX191	KLA		8.8	9.2	52	FX	SP P	VA C	5.0	30A	85K	50A	1M						370		71	WG	WG
WL191	KLO		8.5	10.0		MEC	WH C	VA C	6.3	1200	500	55	750		260				50		RI	WG	WG
191H	BWO		8.0	12.4			HP C	VA C			2000	25	50								IM	CO	CO
VA192G	BWO		4.0	8.0		VT	VA C	VA C	6.3	1500	100	10	35			1K					IM	CO	CO
192H	BWO		12.4	18.0			HP C	VA C			1950	14	40								IM	CO	CO
VA193F	BWO		8.0	12.4			VA C	VA C	6.3	1250			50			1K					IM	CO	CO
VA193G	BWO		7.0	12.4			VA C	VA C	6.3	1250			30			1K					IM	CO	CO
WL193	BWO		8.6	9.6	13	MEC	WH P	VA C	9.0	14A	29K	32A	250K						15	8	IM	WG	WG
VA194G	BWO		8.2	12.4			VA C	VA C	6.3	1250			20			650					IM	WG	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA195G		BWO	10.0	15.5				VA C	6.3	1250			40			1K						IM	WG
VA196G		BWO	12.4	18.0				VA C	6.3	1250			40			1K						IM	WG
VA196N		BWO	14.0	17.0				VA C	6.3	1500	100	7	70			900						IM	WG
196H		KLO	92.8	94.8	3			HP P			30K	2400	3K									IM	WG
VA198G		BWO	18.0	26.5				VA C	6.3	1250			20			1K						IM	WG
STL199		= TWA	1.1	1.6	45			SP P	6.3	2300	14K	5500	5K				40				700	CO	CO
VA199G		BWO	26.5	40.0				VA C	6.3	1250			10			1K					IM	WG	
BLM200		MAG	5.4	5.9	20			MEC BL P	5.0	700			585						9			CO	CO
BLM201		= MAG	5.4	5.9	20			BL P	5.0	700	2700	1700	1K						12			CO	CO
VAZ01B		KLO	8.5	9.6				MEC CV C	6.3	1200	350	45	65	500						30		RI	WG
BLM203		MAG	8.9	9.5	13			MEC BL P	5.0	700			520						15			CO	CO
TV203H		KLO	9.2	9.6				TV C	6.3	450	350	52	12	500								RI	WG
VAZ03B		KLO	8.5	9.6				MEC CV C	6.3	500	300	37	20	150						30		RI	WG
VAZ03K		KLO	10.1	10.4				MEC VA C	6.3	425	350	37	100							25		RI	WG
WJ205		BWO	14.0	18.0				VT WJ C	7.5	3000	5000	350	90W	6000							IM	WG	
DX206		MAG	2.4	2.5				FX PH C	4.0	30A	5800	410	1K								IM	WG	
MAZ06		= MAG	34.7	35.0	3			FX MA P	12.6	3000	13K	10A	16K						40			WG	WG
SEZ09A		BWO	8.2	12.4				VT WJ C	6.3	900	200	12	20	100	20	2K					IM	WG	
SRU210		= KLO	15.8	16.2				MEC SP C	6.3	550	300	35	20	110						50		RI	WG
TV210B		KLO	9.6	10.8				MEC TV C	6.3	1200	400	35	30									RI	WG
TV210C		KLO	10.0	10.3				MEC TV C	6.3	1200	350	50	30	500								RI	WG
VAZ10B		KLO	9.6	10.8				MEC VA C	6.3	1200	400	35	125						65			RE	WG
VAZ10F		KLO	10.1	10.4				MEC VA C	6.3	350			60						40			R5	WG
210H		TWA	1.8	2.6				HP C	5.2	300	1525	67	20W	950			26				IM	CO	CO
KZ11		KLA	3.0	3.0	15			EE P	3.8	86A	210K	105A	7M	210K			32				IM	31	WG
SE211A		BWO	4.0	8.0				VT WJ C	6.3	900	200	12	20	100	20	2K					IM	CO	CO
SE211B		BWO	3.7	8.3				VT WJ C	6.3	900	200	12	20	100	20	2K					IM	CO	CO
Z211/1G		KLA	1.0	1.2	300			ST C	12.6	1800	5000	2500	7K	15K			33				600	3E	CO
BL212		MAG	5.4	5.9	20			MEC BL P	5.0	500	1350	800	100W						12			CO	CO
MAZ12A		MAG	8.8	10.0	100			MA P	6.3	550	520	150	20W						15			WG	WG
MAZ12B		= MAG	8.8	10.0				MA C	6.3	550	460	20	2000						16			WG	WG
MAZ12C		MAG	8.8	10.0	100			MA P	6.3	550	520	150	20W						15			WG	WG
MAZ12D		MAG	8.8	10.0	50			MA P	6.3	550	560	300	35W						15			WG	WG
SFD212		CFA	L					SD P			9K	40A	150K				15			100		CO	CO
Z12H		= TWA	2.2	2.4				HP C	6.3	900	200	18	30				30				IM	CO	CO
CV214		MAG	9.6	9.7	5			GC P	3.0	2500	16K	10A	45K						13			3250	WG
MA214A		MAG	9.0	10.0				MEC MA C			500	15	150									WG	WG
MA214D		MAG	9.0	10.0	50			MEC MA P			570	300	16W									WG	WG
MA214F		MAG	9.0	9.6				MEC MA P			570	15	5000									WG	WG
SE214		BWO	1.0	2.6				VT WJ C	6.3	900	200	18	30	100	30	2K					IM	CO	CO
SE214A		BWO	1.0	2.0				VT WJ C	6.3	900	150	17	100	100	20	1K					IM	CO	CO
214H		= TWA	2.2	2.4				HP C			900	40	8000				27				IM	CO	CO
MA215		MAG	8.8	9.6	500			MA P	6.3	900	200	15	30	100	20	2K					IM	CO	CO
SE215		BWO	1.7	4.2				VT WJ C	6.3	900	200	15	75	100	20	2K					IM	CO	CO
SE215A		BWO	2.0	4.0				VT WJ C	6.3	900	200	15	75	100	20	2K					IM	CO	CO
VA215H		= KLO	7.5	8.5				MEC VA C	6.3	1200	575	80	1250	500						90		RE	WG
215H		= TWA	3.0	5.0				HP C	4.5		1660	26	6000	640			40				IM	CO	CO
SE216		BWO	12.4	18.0				VT WJ C	6.3	900	200	12	10	100	20	2K					IM	CO	CO
SRU216		= KLO	15.0	17.0				MEC SP C	6.3	550	350	31	45	500							100	RI	WG
MAZ17B		MAG	7.5	8.5				MEC MA C			470	20	1000									WG	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HEX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
MA217C		MAG	7.5	8.5	50	MEC	MA	P			560	300	20W		100	20	800		700		IM		WG
SE217		BWO	5.3	6.0		VT	WJ	C	6.3	1000	200	20	200		100	20	800		300		IM		CO
SFD217		CFA	9.2	9.6	3		SD	P			35K	55A	750K		500		18				IM		WG
TV217C		KLO	8.5	9.6		MEC	TV	C	6.3	1200	350	45	20	500							RI	WG	
VA217C		= KLO	8.5	9.6		MEC	VA	C	6.3	1200	350	30	60	500					65		RE	WG	
WJ217		= TWA	2.0	4.0			WJ	C	6.3	750	2600	70	20W	1900		2K	30				IM		CO
217H		= TWA	6.0	8.0			HP	C	3.5	400	1600	25	5000	800			40				IM		CO
SE218		BWO	18.0	26.5		VT	WJ	C	6.3	700	250	8	20	100	20	2K				8K	IM		WG
MA218		= MAG	9.3	10.0	20	MEC	MA	P	6.3	500	5800	4500	10K				16		20	200	IM		WG
SFD218		CFA	9.2	9.6	25		SD	P	6.3	500	31K	40A	500K										
VA218		KLO	10.5	10.5		FX	VA	C	6.3	400	350	37	75	500							RE	WG	
VA218B		= KLO	10.5	10.5		FX	VA	C	6.3	400	350	37	62	500							RE	WG	
218H		= TWA	1.5	2.0			HP	C	5.2	380	1550	73	20W	1220			26				IM		CO
SE219		BWO	1.4	2.5		VT	WJ	C	6.3	900	150	17	100	100	20	1K				1K	IM		CO
MA219B		MAG	8.5	9.6		MEC	MA	C	6.3	800	750	80	700										WG
MA219D		MAG	8.5	9.6		MEC	MA	C	6.3	800	750	80	700										WG
MA219E		MAG	8.5	9.6	50	MEC	MA	P			560	300	20W										WG
SAL219		= KLA	1.0	1.2	250	MEC	SP	P	4.2	35A	23K	8000	37K		230	21					3I	CO	
SE220		BWO	10.0	15.5		VT	WJ	C	6.3	900	200	12	10	100	20	2K				5K	IM		WG
SFD220		CFA	1.6	1.7	10		SD	P	6.3	900	15K	20A	100K				20				1K	IM	
TV220A		KLO	7.4	7.8		MEC	TV	C	6.3	800	750	80	700										WG
TV220B		KLO	7.1	7.4		MEC	TV	C	6.3	800	750	80	700										WG
TV220C		KLO	6.9	7.1		MEC	TV	C	6.3	800	750	80	700										WG
TV220D		KLO	6.6	6.9		MEC	TV	C	6.3	800	750	80	700										WG
TV220E		KLO	6.1	6.4		MEC	TV	C	6.3	800	750	80	700										WG
TV220F		KLO	5.9	6.2		MEC	TV	C	6.3	800	750	80	700								RI	WG	
TV220G		KLO	6.4	6.6		MEC	TV	C	6.3	800	750	80	700								RI	WG	
TV220J		KLO	4.9	5.2		MEC	TV	C	6.3	800	775	80	700	1000							RI	WG	
VA220A		KLO	7.4	7.8		MEC	VA	C	6.3	800	775	80	700	1000							RE	WG	
VA220B		KLO	7.1	7.4		MEC	VA	C	6.3	800	775	80	1000	1000					25		RE	WG	
VA220C		KLO	6.9	7.1		MEC	VA	C	6.3	800	775	80	1000	1000					25		RE	WG	
VA220F		KLO	5.9	6.2		MEC	VA	C	6.3	800	775	80	1000	1000					28		RE	WG	
VA220G		KLO	6.4	6.6		MEC	VA	C	6.3	800	775	80	1000	1000					28		RE	WG	
VA220H		KLO	7.8	8.1		MEC	VA	C	6.3	800	775	80	500	1000					28		RE	WG	
VA220I		KLO	1.7	2.1		ST	C		6.3	750	400	55	250	350	150				21		RE	WG	
220J/1G		KLO	1.7	2.1					6.3	750	400	55	250	350	150				8		RE	CO	
220H		= TWA	2.2	2.4			HP	C	5.2	270	1300	50	13W	770			27				IM		CO
BL221		MAG	69.0	70.5	5	FX	BL	P	6.3	2800	9000	10K							75			WG	
MA221A		= MAG	7.5	8.8	100	FX	MA	P	6.3	550	500	150	20W						13			WG	
MA221B		= MAG	7.5	8.8	100	FX	MA	P	6.3	550	450	20	2200						16			WG	
MA221C		= MAG	7.5	8.8	100	FX	MA	P	6.3	550	500	150	20W						13			WG	
MA221D		= MAG	7.5	8.8	50	FX	MA	P	6.3	550	530	300	35W						13			WG	
SE221		BWO	3.5	6.8		VT	WJ	C	6.3	900	200	13	40	100	20	2K				325	IM		CO
TV221A		KLO	7.6	7.8		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221B		KLO	7.2	7.6		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221C		KLO	6.9	7.2		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221D		KLO	6.7	7.0		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221E		KLO	6.3	6.6		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221F		KLO	5.9	6.2		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221G		KLO	6.5	6.7		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV221H		KLO	5.2	5.6		MEC	TV	C	6.3	450	330	35	20	1000							RI	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX					V	mA	V	mA	mW	V	V	V	dB	dB	MHz	MHz	Oersted		
TV221K	KLO	5.8 6.2							6.3	400	330	35	25									RI	WG
VA221C	= KLO	7.0 7.2							6.3	440	330	35	40	500								RE	WG
VA221H	= KLO	5.2 5.6							6.3	450	330	35	42	1000								RE	WG
VA221K	= KLO	5.8 6.2							6.3	440	330	35	40	500								RE	WG
SE222	BWO	26.5 40.0							6.3	700	250	8	10	100	20	2K						14K	IM
TV222A	KLO	7.4 7.8							6.3	800	775	80	700	1000								RI	WG
TV222B	KLO	7.1 7.4							6.3	800	775	80	700	1000								RI	WG
TV222C	KLO	6.9 7.1							6.3	800	775	80	700	1000								RI	WG
TV222E	KLO	6.1 6.4							6.3	800	775	80	700	1000								RI	WG
TV222F	KLO	5.9 6.2							6.3	800	775	80	700	1000								RI	WG
TV222G	KLO	6.4 6.6							6.3	800	775	80	700	1000								RI	WG
VA222A	KLO	7.4 7.8							6.3	800	775	80	1000	1000								RI	WG
VA222B	KLO	7.1 7.4							6.3	800	775	80	1000	1000								RI	WG
VA222C	KLO	6.9 7.1							6.3	800	775	80	1000	1000								RI	WG
VA222D	KLO	6.6 6.9							6.3	800	775	80	1000	1000								RI	WG
VA222E	KLO	6.1 6.4							6.3	800	775	80	1000	1000								RI	WG
VA222F	KLO	5.9 6.2							6.3	800	775	80	1000	1000								RI	WG
VA222G	KLO	6.4 6.6							6.3	800	775	80	1000	1000								RI	WG
VA222H	KLO	7.8 8.1							6.3	800	775	80	1000	1000								RI	WG
BL223	MAG	5.4 5.9			20				5.0	700	2100	1100	400W						15			CO	CO
SE223	BWO	0.5 1.0							6.3	900	150	18	20	100	20	2K						IM	CO
224H	TWA	3.0 5.0								650	4	200										IM	CO
SAC225	= KLA	4.2 6.8							4.8	56A	130K	98A	3M									3I	WG
VA225A	KLO	7.5 8.5							6.3	800	785	80	700	1000								RE	WG
VA225B/C	KLO	7.0 8.0							6.3	800	785	80	700	1000								RE	WG
226H	TWA	3.0 5.0								450	2	50										IM	CO
WJ227-5	= TWA	2.0 4.0							5.0	800	1800	47	13W	1100								IM	CO
WJ227-6	TWA	1.4 1.6							5.0	800	1700	45	12W	1000								IM	CO
WJ228	= TWA	5.4 5.9 280							12.5	2500	23K	4600	10K									IM	CO
SE229	BWO	7.0 12.4							6.3	900	200	12	10	100	20	2K						IM	CO
MA230	= MAG	8.0 8.3							6.3	750	550	12	1500									IM	WG
MA231A	= MAG	7.5 8.8			500				6.3	700	1000	750	200W									IM	WG
MA231B	= MAG	7.5 9.8							6.3	700	930	55	20W									IM	WG
V231C/1K	KLO	3.0 3.3							6.3	250	400	65	200	400	36							16	EX
WJ231	TWA	7.0 8.5							5.0	600	4800	65	35W	1900								IM	CO
WJ231-5	= TWA	5.0 8.5							5.5	800	4750	62	38W	2000								IM	CO
MA232A	= MAG	8.8 10.0			500				6.3	700	1000	750	150W									IM	WG
MA232B	= MAG	8.8 10.0							6.3	700	930	55	15W									IM	WG
TV232	KLO	9.2 10.0							6.3	1200	375	45	155									RI	WG
VA232	KLO	9.2 10.0							6.3	1200	375	45	335	500								RE	WG
BL233	MAG	9.4 9.4			15				5.0	700	2850	1500	800W									IM	WG
V233A/1K	KLO	2.7 4.2							6.3	300	400	65	300	400	40							2	EX
VA233G	TWA	1.2 1.4 600							12.6	3800	15K	3000	5K									IM	CO
STP234	TWA	0.2 0.5							12.6	2500	590	85	2000									IM	CO
BL235	MAG	51.0 54.0			12				6.3	3100	15K	8000	10K									IM	WG
V235A/1K	KLO	2.7 4.0							6.3	300	400	65	550	400	40							2	EX
BL236	MAG	54.0 57.0			12				6.3	3100	15K	8000	10K									IM	WG
MA236	MAG	8.0 8.4							6.3	750	550	12	1000									IM	WG
BL237	MAG	57.0 60.0			12				6.3	3100	15K	8000	10K									IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E_f	I_f	BEAM OR ANODE VOLTS	I_k	P_o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX					V	mA	V	mA	mW	V	V	V	dB	dB	MHz	MHz	O.1 mT		
DX237		KLO	11.0	12.0				MEC AM C	3.5	1800	2600	17	50	600	150				200		RI	WG	
MA237		MAG	7.5	8.5				MEC MA C			450	25	500									WG	
V237C/1K		KLO	3.6	3.8				ST C	6.3	250	300	50	350	300	40					7	1200 EX	WG	
V237C/2K		KLO	3.6	3.8				ST C	6.3	260	300	50	250	300	40					11	1200 EX	WG	
VA237A		KLO	11.7	12.7				MEC VA C	6.3	1200	1300	70	1700	1000						50		RE WG	
VA237B		KLO	10.7	11.7				MEC VA C	6.3	1200	1300	70	1500	1000						50		RE WG	
VA237C		KLO	12.7	13.7				MEC VA C	6.3	1200	1300	70	2200	1000							45	RE WG	
VA237D		KLO	11.7	12.7				MEC VA C	6.3	1200	800	40	420	1000						53		RE WG	
VA237E		KLO	10.7	11.7				MEC VA C	6.3	1200	800	40	420	1000						56		RE WG	
VA237F		KLO	12.7	13.7				MEC VA C	6.3	1200	800	40	420	1000						39		RE WG	
VA237G		KLO	14.0	15.0				MEC VA C	6.3	1200	900	36	400	1000						65		RE WG	
WJ237		TWA	1.7	2.0				WJ C	3.0	750	900	20	2700	460							IM	CO	
WJ237-1		TWA	1.2	1.8				WJ C	4.5	1000	800	20	2000	450							IM	CO	
Z237/1KW		KLO	3.5	3.5				ST C	6.3	650	300	50	125	150	40						1200 RE	WG	
CV238		KLO	2.9	3.1				MEC EM C	4.0	1300	300	40	150	500						30		RI WG	
V238A/1K		KLO	3.5	4.3				ST C	6.3	250	400	50	1000	400	40					2	1200 EX	CO	
WJ238		TWA	3.8	4.1				WJ C	6.3	750	2750	96	20W	1900							IM	CO	
WJ238-1		TWA	3.8	4.3				WJ C	6.3	750	2200	56	10W	1900							IM	CO	
MA239		= MAG	13.3	13.4	*22	FX	MA P	ST C	6.3	900	850	220	40W						20			WG	
MA239A		= MAG	13.0	13.6	12	FX	MA P	MA P	6.3	900	900	550	100W						20			WG	
MA239B		= MAG	13.3	13.4				FX	6.3	900	950	60	17W						20			WG	
SOX239		KLO	10.0	11.0				MEC SP C	6.3	600	3100	17	500							2		21	
V239C/1K		KLO	3.8	4.0				ST C	6.3	250	300	50	350	300	40					7	1200 EX	WG	
V239C/2K		KLO	3.8	4.0				ST C	6.3	250	300	50	250	300	40					11	1200 EX	WG	
VA239		= KLO	34.0	36.0				FX	6.3	1250	2750	40	750	1000						125		WG	
WJ239		TWA	4.5	5.5				WJ C	6.3	800	2800	67	25W	1550							IM	CO	
Z239/1G		KLO	3.6	4.2				ST C	6.3	1000	1100	60	1200	250						36		SP	
Z239/1GW		KLO	3.6	4.2				ST C	6.3	1000	1100	60	1200	250								SP	
MA240		= MAG	13.7	14.6	130	FX	MA P	MA P	6.3	900	1750	1800	700W						22			WG	
MA240A		= MAG	13.7	14.6	130	FX	MA P	MA P	6.3	900	1750	1800	700W						22			WG	
MA240B		= MAG	13.7	14.6	130	FX	MA P	MA P	6.3	900	1750	1800	1K						20			WG	
SAX240		= KLA	X					SP C	6.3	2800	6250	195	200W							10	IM	31	WG
VA240A		KLO	17.0	18.5				MEC VA C	6.3	600	900	24	300	800						50		RI WG	
VA240B		KLO	15.0	17.0				MEC VA C	6.3	600	900	24	350	800						50		RI WG	
VA240C		KLO	12.4	15.0				MEC VA C	6.3	600	900	24	450	800						50		RI WG	
MA241		MAG	9.1	9.4	10			MEC MA P	6.3	1150	750	35	200	800						80		RI WG	
VA241A		KLO	18.0	19.0				FX	6.3	1150	750	35	175	800						80		RI WG	
VA241B		KLO	19.0	20.0				FX	6.3	1150	750	35	175	800						80		RI WG	
VA241C		KLO	20.0	22.0				FX	6.3	1150	750	35	150	800						80		RI WG	
VA241D		KLO	22.0	24.0				FX	6.3	1150	800	35	150	800						80		RI WG	
VA241E		KLO	24.0	26.5				FX	6.3	1150	850	35	150	800						80		RI WG	
V241C/1K		KLO	4.0	4.2				ST C	6.3	250	300	50	350	300	40						7	1200 EX	WG
V241C/2K		KLO	4.0	4.2				ST C	6.3	250	300	50	250	300	40					11	1200 EX	WG	
DX242		KLO	90.0	H1.0				MEC AM C	3.5	1800	2600	18	70	200	150					150		RI WG	
TV242		KLO	8.6	11.3				FX TV C	6.3	1200	525	66	500	1000								RI WG	
VA242		KLO	8.5	11.3				FX	6.3	1200	525	66	915	1000						55		RI WG	
V243A/2FS		KLO	4.1	4.6				ST C	6.3	250	250	65	750	275	40						1200 EX	CO	
TV244A		KLO	5.8	6.6				MEC TV C	6.3	800	750	80	700	1000								RI WG	
TV244B		KLO	6.5	7.3				MEC TV C	6.3	800	750	80	700	1000								RI WG	
TV244C		KLO	7.1	7.8				MEC TV C	6.3	800	750	80	700	1000								RI WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTAGE	I _k	P _o	COLLECTOR, REFLECTOR, VOLTAGE	CONTROL VOLTAGE	HELIX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING		
			MIN	MAX																					
TV244E		KLO	7.7	8.4		MEC	TV C	6.3	800	750	80	700	1000									RI	WG		
TV244F		KLO	7.8	8.5		MEC	TV C	6.3	750	800	80	700										RI	WG		
TV244H		KLO	5.1	5.8		MEC	TV C	6.3	750	800	80	700										RI	WG		
TV244K		KLO	5.4	5.9		MEC	TV C	6.3	750	800	80	1000								65		RI	WG		
VA244A		KLO	5.8	6.6		MEC	VA C	6.3	750	800	80	1100	475									RI	WG		
VA244B		KLO	6.5	7.3		MEC	VA C	6.3	750	800	80	1400	475							50		RI	WG		
VA244C		KLO	7.1	7.9		MEC	VA C	6.3	750	800	80	1450	475							40		RI	WG		
VA244E		KLO	7.7	8.4		MEC	VA C	6.3	750	800	80	1600	475							50		RI	WG		
VA244G		KLO	4.8	5.1		MEC	VA C	6.3	750	800	80	1930	1000							64		RI	WG		
VA244H		KLO	5.1	5.8		MEC	VA C	6.3	750	800	80	1930	1000							64		RI	WG		
VA244J		KLO	4.4	4.8		MEC	VA C	6.3	750	800	80	1930	1000							64		RI	WG		
VA244K		KLO	5.4	5.9		MEC	VA C	6.3	750	800	80	1930	1000							64		RI	WG		
WJ244		TWA	7.0	8.2		WJ	C	3.1	900	1180	27	5000	540									IM	CO		
BL245		MAG	5.4	5.9	20	BL	P	5.0	700	2650	1500	900W								15		CO	CO		
MA245		= MAG	15.0	16.0	500	FX	MA	P	6.3	900	1100	140	20W							30		WG	WG		
V245C/1K		KLO	4.4	4.6		ST	C	6.3	300	300	65	200	300	40						8		1200	EX	WG	
BL246		MAG	68.0	71.5	5	FX	BL	P	6.3	2800	9000	8K								75		WG	WG		
MA246A		= MAG	16.5	16.8	50	FX	MA	P	6.3	900	1100	450	150W							30		31	CO	WG	
SAC246		KLA	C		20	MEC	SP	P	6.3	2800	9000	950	450W									RI	WG	WG	
TV246		KLO	11.0	14.0		FX	TV	C	6.3	1200	550	66	400	1000											
V246A/2K		KLO	4.4	4.8		ST	C	6.3	300	230	40	250	250	40								1300	EX	CO	
VA246		KLO	11.0	14.0		FX	VA	C	6.3	1200	550	66	440	1000								57	RI	WG	
DX247		KLO	4.6	4.8		MEC	PH	C	3.5	1850	2600	16	20	600	150							300	RI	WG	
V247C/1K		KLO	4.6	4.8		ST	C	6.3	300	300	65	200	300	40								8	1200	EX	WG
MA248		MAG	8.0	8.3		VT	MA	C			1000	60	10W										WG	WG	
VA248		KLO	5.9	7.1		FX	VA	C	6.3	1200	385	53	50	500						50		RI	WG	WG	
WJ248		TWA	5.4	5.9	20	WJ	P	12.0	2000	24K	4600	5000										IM		WG	
MA249		MAG	9.2	9.4		MEC	MA	C			1000	50	17W										WG	WG	
V249C/1K		KLO	4.8	5.0		ST	C	6.3	300	300	65	200	315	40								8	1200	EX	WG
VA249		KLO	8.5	11.0		FX	VA	C	6.3	450	350	50	110	500								38	RI	WG	WG
WJ249		TWA	5.4	5.9	20	WJ	P	12.0	2400	22K	3300	5000										IM		WG	
MA250		= MAG	8.5	10.0	50	FX	MA	P	6.3	650	3750	4000	5K									16		WG	
VA250		= KLO	50.0	80.0		MEC	CV	C	6.3	2200	2550	25	250	1250								200	RI	WG	
WJ250		TWA	3.7	4.4		WJ	C	3.0	580	860	16	2500	575									IM	CO	CO	
WJ251		TWA	7.2	7.8		WJ	C	3.0	330	1800	14	2500	650									IM	CO	CO	
MA252		= MAG	8.0	10.0	50	MEC	MA	P	6.3	600	1150	650	250W									10	15	WG	
MA253		MAG	8.0	8.4		VT	MA	C			800	60	2000											WG	
VA253		= KLO	15.0	22.0		MEC	CV	C	6.3	1150	900	28	245	800								50	RI	WG	
VA254		= KLO	18.0	26.5		MEC	VA	C	6.3	1250	925	35	260	800								50	RI	WG	
MA256		MAG	16.0	16.5	10	FX	MA	P	12.6	620	9000	5250	10K											WG	
VA256A		KLO	7.1	8.4		MEC	VA	C	6.3	750	800	80	1000	1000								30	RE	WG	
MA257		= MAG	16.0	16.5	20	FX	MA	P	5.0	700	2200	1800	1K									25		WG	
STL257		TWA	0.5	1.0		SP	C	6.3	2500	750	80	2000											IM	CO	CO
VA257		KLO	26.5	40.0		MEC	VA	C	6.3	1150	1000	30	400	800								90	RI	WG	
Y257/4E		BWO	4.0	7.5		ST	C	6.3	900	300	15	120	1500	200	1K							10	IM	CO	CO
SOC258		KLO	5.2	6.2		MEC	SP	C	6.3	750	3100	20	1000										21		WG
MA259		MAG	7.0	7.3	50	FX	MA	P	6.3	1200	2000	2000	1100											WG	
SAC259		= KLA	4.0	8.2	280	MEC	SP	P	6.3	750	7500	250	500W									30		WG	
TV259A		KLO	5.9	6.5		MEC	TV	C	6.3	700	750	77	1000										IM	31	WG
TV259B		KLO	6.5	7.1		MEC	TV	C	6.3	700	750	77	1000											RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, ecc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
TV259C		KLO	7.1	7.8		MEC	TV	C	6.3	700	750	77	1000									RI WG	
TV259E		KLO	7.7	8.4		MEC	TV	C	6.3	700	750	77	1000									RI WG	
VA259A		KLO	5.9	6.5		MEC	VA	C	6.3	750	800	80	1700	1000								RI WG	
VA259B		KLO	6.5	7.1		MEC	VA	C	6.3	750	800	80	1700	1000								RI WG	
VA259C		KLO	7.1	7.8		MEC	VA	C	6.3	750	800	80	1700	1000								RI WG	
VA259E		KLO	7.7	8.4		MEC	VA	C	6.3	750	800	80	1700	1000								RI WG	
STL260		TWA	1.2	1.4	75			SP P	4.6	2500	2000	200			48		60					IM CO	
V261C/1M		KLO	4.4	5.0		HP	C		4.6	260	2600	45	12W	1100			33					IM CO	
TV262		KLO	5.8	6.4		MEC	TV	C	6.3	250	600	65	750	550	50							IM EX WG	
V262		KLO	8.4	10.0		MEC	TV	C	6.3	1200	400	50	30	500								RI WG	
DX264		KLO	8.4	10.0		MEC	VA	C	6.3	1200	400	42	220	1000								RE WG	
VA264		KLO	1.0	1.1		MEC	AM	C	4.0	1750	2700	22	50	800	150							RI WG	
V265A/1M		KLO	7.1	8.5		MEC	VA	C	6.3	420	500	50	400	500								RI WG	
VA265		KLO	5.8	7.5		ST	C		6.3	250	500	60	200	420	50							IM EX WG	
		KLO	8.5	9.6		MEC	VA	C	6.3	1200	550	70	850	1000								RI WG	
SRU266		=	KLO	15.0	17.0		MEC	SP	C	6.3	550	300	35	20	100							RI WG	
V266C/1M		KLO	6.4	6.8		ST	C		6.3	250	600	65	800	550	50							IM EX WG	
VA266A		KLO	9.5	11.2		MEC	VA	C	6.3	1150	550	75	460	1000								RI WG	
WJ268		TWA	1.0	2.0				WJ C									25	5				IM CO	
WJ268-2		TWA	1.0	2.6				WJ C									25	6				IM CO	
WJ269		TWA	2.0	4.0				WJ C					1200									IM CO	
WJ269-1		TWA	2.3	4.5				WJ C									25	6				IM CO	
STP271		TWA	0.4	0.7				SP C					900	250W			45					500 CO	
V271C/3M		KLO	6.8	7.4		ST	C		6.3	250	600	65	800	550	50							IM EX WG	
WJ271		TWA	4.0	8.0				WJ C					2400				25	6				IM CO	
VA272		=	KLO	8.1	11.1		MEC	VA	C	6.3	750	600	66	500	1000							RI WG	
VA273B		=	KLO	10.0	10.5		FX	VA	C	6.3	750	800	80	1390	1000							21 WG	
VA274A		KLO	12.9	12.9		FX	VA	C	3.0	920	1680	52	20W	1120								WG	
WJ274-2		TWA	2.2	2.4				WJ C														CO	
V275C/3M		KLO	7.2	7.8		ST	C		6.3	250	600	65	750	550	50							IM EX WG	
VA275A		=	KLO	17.0	18.0		MEC	VA	C	6.3	1150	900	35	350	600							RE WG	
VA275D		KLO	16.0	17.0		MEC	VA	C	6.3	1150	300	15	40	600								RE WG	
STS276		TWA	3.4	3.6				SP C	6.3	650	1100	33	1500		37		53	35				IM CO	
VA276		=	KLO	15.0	17.0		FX	VA	C	6.3	1200	350	45	30	500							RI WG	
WJ276		TWA	8.0	12.0				WJ C					2400				25	6				IM CO	
STC278		TWA	5.4	5.9	100			SP P	6.3	750	5400	200	50W		200		37	50				IM CO	
WJ278		TWA	0.5	1.0				WJ C					1200		150		25	5				IM CO	
STC279		TWA	5.4	5.9				SP C	11.0	1000	1175	7	250		150		33	35				IM CO	
WJ280		TWA	1.0	2.6				WJ C									35	8				IM CO	
VA281		KLO	13.3	13.3		FX	VA	C			1000	40	1000	600								RI SP	
WJ281		TWA	2.0	4.5				WJ C														IM CO	
VA282		KLO	18.0	26.5		FX	VA	C	6.3	1250	800	35	300	600								RI WG	
WJ282		BWO	34.5	36.5				WJ C	6.3	5000	24K	400	1K									IM CO	
X282		TWA	4.0	8.0				IT C	6.3	1500	3000	55	10W									1200 CO	
VA283		KLO	26.5	40.0		FX	VA	C	6.3	1250	800	35	220	300								RI WG	
ST5284		TWA	2.0	4.0				SP C	6.3	650	950	33	1000		37		53	35				IM CO	
VA284		=	KLO	26.5	40.0		MEC	VA	C	6.3	600	1050	40	300	800							RI WG	
WJ284		TWA	8.0	12.0				WJ C	6.3	2600	7150	210	142W	4500			7K	36				IM CO	
WJ284-1		TWA	6.8	9.5				WJ C	7.0	2000	6500	252	142W	5000			6K	30				IM CO	
SAC285A		KLA	5.4	5.9	12			SP P	6.3	4000	33K	2400	20K									IM CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO X10 ⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD O.1mT	CAVITY	COUPLING
			MIN	MAX																			
VA286	KLO	12.4	14.4			MEC	VA	C	6.3	1200	575	66	300	1000				35	8	40	RI	WG	
WJ286	TWA	4.0	8.0				WJ	C				90	1000	800						30	RE	SP	CO
VA287	KLO	10.7	13.3			MEC	VA	C	6.3	750	800	74	1200	600						44	RE	WG	WG
VA287A	KLO	10.7	11.7			MEC	VA	C	6.3	750	750	74	1200	600						44	RE	WG	WG
VA287B	KLO	11.7	12.2			MEC	VA	C	6.3	750	750	74	1200	600						44	RE	WG	WG
VA287C	KLO	12.2	12.7			MEC	VA	C	6.3	750	750	74	1200	600						44	RE	WG	WG
WJ287	TWA	8.0	12.0				WJ	C				45	1000	2400				35	10		IM	CO	CO
ST5288	TWA	2.7	2.9			SP	C		6.3	650	950	40	1000					53	35		IM	CO	CO
VA288A	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288B	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288C	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288D	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288E	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288F	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288G	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288H	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288I	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288J	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288K	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288L	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288M	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288N	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288O	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288P	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288Q	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288R	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288S	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288T	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288U	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288V	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288W	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288X	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288Y	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA288Z	KLO	10.6	10.6			MEC	VA	C	6.3	800	400	70	150	500							RI	WG	WG
VA289	KLO	17.5	17.5			FX	SP	C	6.3	400	1080	80	1000							15	21		
VA290	KLO	18.0	26.5			MEC	VA	C	6.3	600	600	33	200	600						65	RI	WG	WG
VA291	KLO	41.7	50.0			MEC	VA	C	6.3	580	3600	20	5	450	200					50	RE	WG	WG
VA292	KLO	26.5	40.0			MEC	VA	C	6.3	800	650	50	150	800							IM	CO	CO
VA293	TWA	1.0	2.0			WJ	C		5.0			5						25	8		IM	CO	CO
VA294	KLO	50.0	60.0			MEC	VA	C	6.3	580	3600	20	2	450	200						RI	WG	WG
VA295	KLO	8.2	11.1			FX	VA	C	6.3	750	550	66	500	1000						40	WG		
VA296	TWA	2.0	4.0				WJ	C	5.0			1200						27	8		IM	CO	CO
VA297	KLO	7.5	10.7			MEC	VA	C	6.3	750	750	80	1000	1000				25	9		IM	CO	CO
VA298	KLO	8.0	12.0			WJ	C		5.0			5						27	10		IM	CO	CO
VA299	KLO	2.5	8.4			MEC	VA	C	6.3	750	800	85	2000	1000						25	RE	WG	WG
VA300	KLO	2.5	8.4			MEC	VA	C	6.3	750	800	85	2000	1000						25	RE	WG	WG
VA301	KLO	5.9	6.5			MEC	VA	C	6.3	750	750	81	2900	400						40	WG		
VA302	KLO	6.5	7.1			MEC	VA	C	6.3	750	750	81	2900	400						40	WG		
VA303	KLO	7.1	7.8			MEC	VA	C	6.3	750	750	81	2900	400						40	WG		
VA304	KLO	9.3	9.5			MEC	EE	C	6.3	600	400	50	30	150						30	RI	WG	WG
VA305	KLO	5.9	7.9			MEC	VA	C	6.3	500	150	35	10	500						20	RE	CO	CO
VA306	MAG	34.5	35.2			5	FX	SD	P	16.0	4000	23K	22A	100K					20	5	IM	WG	WG
VA307	BWO	7.0	9.1			VT	WJ	C	6.3	900	200	25	100	100	20	2K				30	IM	CO	CO
VA308	KLO	9.3	9.5			MEC	EE	C	6.3	600	400	50	30	165						30	RI	WG	WG
VA309	BWO	8.5	9.6			VT	SE	C	6.3	900	100	25	100	100	20	2K				1K	IM	WG	WG
VA310	KLO	35.0	42.0			FX	VA	C	6.3	1250	1000	40	300	600						150	RI	WG	WG
VA311	BWO	8.2	12.4			VT	SE	C	6.3	600	200	12	20	100	20	2K			6	4K	IM	WG	WG
VA312	MAG	9.3	9.4			10	FX	SD	P	26.0	8000	33K	60A	1M							IM	WG	WG
VA313	MAG	9.3	9.4			10	FX	TV	P	26.0	8000	33K	60A	1M							IM	WG	WG
VA314	BWO	4.0	8.0			VT	SE	C	6.3	600	200	12	20	100	20	2K				4K	IM	WG	WG
VA315	MAG	8.5	9.6			10	MEC	SD	P	9.0	14A	27K	25A	250K					4		IM	WG	WG
VA316	KLO	9.2	9.5			MEC	EE	C	6.3	600	400	50	25	170	20	2K				35	RI	WG	WG
VA317	BWO	2.0	4.0			VT	SE	C	6.3	900	200	15	75	100	20	2K				2K	IM	WG	WG
VA318	KLO	5.4	5.9			MEC	VA	C	6.3	800	900	900	1200	550						35	RI	WG	WG
VA319	KLO	18.0	22.0			MEC	RA	C	6.3	580	2300	9	40	500	100					40	RI	WG	WG
VA320	BWO	1.0	2.0			VT	SE	C	6.3	900	150	17	100	100	20	1K				50	IM	CO	CO
VA321	KLO	14.5	18.0			MEC	VA	C	6.3	1200	600	55	400	600						50	RI	WG	WG
VA322	TWA	5.4	5.9			200	HP	P		27K	7000	20K								43	IM	WG	WG
VA323	BWO	12.4	18.0			VT	SE	C	6.3	600	200	12	10	100	20	2K				5K	IM	WG	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
WJ307		TWA	12.0	18.0				WJ C	9.5	5200	37K	10A	240U				25	10				IM	CO
307H		TWA	8.5	9.5	100			HP P	6.3	600	400	50	40	220			50					IM	WG
K308		KLO	8.8	8.9				MEC EE C	6.3	600	400	50	40									RI	WG
SE308		BWO	14.0	17.0				VT SE C	6.3	600	200	8	10	100	20	800						IM	WG
VA308		= KLD	14.0	18.0				MEC VA C	6.3	650	800	43	900	350								RE	WG
308H		TWA	8.7	9.7	100			HP P	11.0	3800	25K	6400	15K				50					IM	WG
VA309		= KLO	14.0	18.0				MEC VA C	6.3	650	550	35	300	250								RE	WG
VA310		= KLO	10.0	15.0				MEC VA C	6.3	1000	800	90	1200	300								RE	WG
310H		= TWA	8.0	11.0	200			HP P	5.5	2800	11K	2200	1K	150			40					IM	WG
K311		KLO	8.5	9.5				MEC EE C	6.3	600	400	50	45	365								RI	WG
SE311		= BWD	18.0	26.5				WJ C				12	5										
SFD311		MAG	16.4	16.6				10 FX SD P	12.6	2400	16K	16A	60K									IM	WG
TV311		MAG	16.4	16.6				10 FX TV P	12.6	2400	17K	18A	100K									IM	WG
VA311		KLO	13.5	18.0				MEC VA C	6.3	650	300	30	20	600								RI	WG
SE312		= BWD	26.5	40.0				WJ C				10	5										
VA312		= KLO	26.5	35.0				MEC VA C	6.3	650	550	35	150	300								RE	WG
312H		= TWA	2.0	4.0	50			HP P	6.3	2200	7100	1200	1K				30					IM	CO
SE313		BWO	8.2	12.4				VT WJ C	6.3	600	200	12	50	100	20	2K						IM	WG
SFD313		MAG	5.4	5.8				10 MEC SD P	5.0	19A	37K	60A	1M									IM	WG
SFD313A		MAG	5.4	5.9				10 FX SD P			36K	60A	1M									IM	WG
VA313		= KLO	26.5	35.0				MEC VA C	6.3	650	800	40	550	350								RE	WG
313H/7640		TWA	2.0	4.0	60			HP P	6.3	3500	7100	1200	1K				30					IM	CO
314H		= TWA	1.5	2.5				HP C	4.5	250	725	25	2000	400			33					IM	CO
SFD315		MAG	23.8	24.3	5			5 FX SD P	16.0	5000	14K	12A	40K									IM	WG
315H		BWD	12.5	17.5				VT HP C	6.3	800	180	11	20									IM	WG
SFD320		MAG	34.5	35.2	5			5 FX SD P	16.0	4000	14K	14A	40K									IM	WG
X320		TWA	5.0	6.0	50			IT P			11K	2000	2K										
SAL321		KLA	1.3	1.3	26			SP P	13.5	48A	209A	272A	20M									4I	WG
WJ321		TWA	5.8	7.2				WJ C	6.3	700	2300	57	13W	2000									
321H		TWA	2.9	3.2	60			HP P			57K	28A	250K									IM	WG
SFD322		MAG	16.0	17.0	10			MEC SD P	12.6	2400	16K	16A	60K									IM	WG
TV322		MAG	16.0	16.4				FX TV P	12.6	2400	16K	16A	75K									IM	WG
Y322/1E		BWD	18.0	26.5				ST C	6.3	500	450	20	200	2800	450							950	WG
WJ323		TWA	0.4	0.5				WJ C	12.5	2200	2000	550	150W									IM	CO
K324		KLD	9.0	10.0				MEC EE C	6.3	600	400	50	45	400								RI	WG
WJ324		TWA	0.6	0.8	100			WJ P	12.0	5000	9500	5200	10K	9500								IM	CO
SFD325		MAG	1.6	1.7	10			MEC SD P	12.6	2400	16K	16A	60K									IM	WG
TV325		MAG	16.0	17.0				FX TV P	12.6	2400	16K	16A	75K									IM	WG
SFD326		MAG	23.8	24.3	5			5 MEC SD P	15.5	5000	15K	30A	120K									IM	WG
326H		= BWO	12.4	18.0				VT HP C	6.3	800	120	7	20									IM	WG
SFD327		MAG	34.5	35.2	5			MEC SD P	16.0	4000	23K	25A	150K									IM	WG
WJ328-1		TWA	1.0	2.4				WJ C	10.0													IM	CO
SFD329		MAG	9.3	9.4	40			FX SD P	26.0	8000	25K	24A	250K									IM	WG
SFD330		MAG	34.5	35.2	5			5 MEC SD P			14K	14A	40K									IM	WG
WJ331-1		TWA	4.0	8.0				WJ C	10.0													IM	CO
SFD332		MAG	32.9	33.5	8			MEC SD P	10.0		18K	16A	50K									IM	WG
WJ332-2		TWA	8.0	12.0				WJ C														IM	CO
WJ333		TWA	3.7	4.2				WJ C	5.0	500	1500	23A	4000	650								IM	CO
Y333/1E		BWO	26.5	40.0				ST C	6.3	500	450	15	50	3000	450							900	WG
333H		= BWO	3.7	5.5				VT HP C	6.3	1100	95	16	80									IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY
			MIN	MAX																		
334H	TWA	2.9	3.1	60	HP P	6.3	2200	7100	1200	1K	33	180	45	30	IM	CO						
K335	KLO	9.6	9.7	5	FX SD P	6.3	600	400	50	25	8	350	45	30	IM	WG						
SFD335	MAG	34.5	35.2	5	FX SD P	6.3	600	400	50	25	8	350	45	30	IM	WG						
WJ335	TWA	3.7	4.2	VT	HP C	3.0	500	550	3	100	45	350	45	30	IM	CO						
335H	= BWO	5.3	7.6	VT	HP C	6.3	1100	85	15	80	45	350	45	30	IM	CO						
SFD336	MAG	34.5	35.2	5	FX SD P	6.3	600	400	50	25	8	350	45	30	IM	WG						
336H	= BWO	7.3	10.0	VT	HP C	6.3	800	110	15	40	45	400	45	30	IM	CO						
K337	= KLO	9.0	10.0	MEC	EE C	6.3	600	400	50	45	400	45	30	IM	WG							
SFD339	MAG	34.5	35.2	5	MEC SD P	6.3	640	145	15	40	45	400	45	30	IM	WG						
339H	= BWO	9.9	14.2	VT	HP C	6.3	640	145	15	40	45	400	45	30	IM	WG						
K340	KLO	9.3	9.5	MEC	EE C	6.3	600	350	35	35	175	40	30	IM	WG							
SFD340	MAG	34.5	35.2	5	MEC SD P	6.3	600	350	35	35	175	40	30	IM	WG							
WJ340	= TWA	1.0	2.0	100	WJ P	7.5	2200	5200	2000	1K	30	200	30	35	IM	CO						
340H	= TWA	2.0	4.0	100	HP P	6.3	2800	7100	1200	1K	30	200	30	35	IM	WG						
SFD341	MAG	5.4	5.8	10	MEC SD P	6.3	2800	7100	1200	1K	30	200	30	35	IM	WG						
WJ341	TWA	5.3	6.0	WJ C	12.0	3000	14K	1000	1000	14K	10	14K	10	14K	10	14K						
341H	= TWA	2.5	4.0	100	HP P	6.3	2200	7100	1200	1K	30	200	30	35	IM	WG						
K342	= KLO	8.5	9.0	MEC	EE C	6.3	600	400	50	45	275	40	30	35	IM	WG						
SFD342	MAG	16.5	16.5	7	FX SD P	6.3	600	400	50	45	275	40	30	35	IM	WG						
WJ342	TWA	12.0	18.0	WJ C	5.0	5.0	330	1310	50	10W	940	40	30	35	IM	WG						
K343	KLO	12.0	14.5	MEC	EE C	6.3	600	400	40	80	350	40	30	35	IM	WG						
WJ343	= TWA	2.0	8.0	WJ C	6.3	600	400	40	40	80	350	40	30	35	IM	WG						
SFD344	MAG	5.6	5.6	10	FX SD P	6.3	600	400	40	80	350	40	30	35	IM	WG						
SFD345	MAG	16.0	17.0	10	MEC SD P	6.3	600	400	40	80	350	40	30	35	IM	WG						
WJ345	TWA	8.0	12.0	WJ C	5.0	5.0	330	1310	50	10W	940	40	30	35	IM	WG						
WJ345-1	TWA	8.0	12.0	WJ C	5.0	5.0	330	1310	50	10W	940	40	30	35	IM	WG						
WJ345-2	TWA	8.5	9.6	WJ C	6.3	600	400	40	40	80	350	40	30	35	IM	WG						
K346	KLO	14.5	17.0	MEC	EE C	6.3	600	400	40	45	350	40	30	35	IM	WG						
K347A	KLA	0.6	0.6	24	MEC EE P	7.0	35A	80K	20A	600K	33	350	30	35	IM	WG						
SFD347	MAG	5.4	5.8	50	MEC SD P	6.3	600	400	40	80	350	40	30	35	IM	WG						
SFD349	MAG	8.5	9.6	10	MEC SD P	6.3	600	400	40	80	350	40	30	35	IM	WG						
WJ349	TWA	4.5	6.5	WJ C	6.3	600	400	40	40	80	350	40	30	35	IM	WG						
WJ349-2	TWA	4.5	5.0	WJ C	6.3	600	400	40	40	80	350	40	30	35	IM	WG						
WJ349-3	TWA	5.4	5.9	WJ C	6.3	600	400	40	40	80	350	40	30	35	IM	WG						
349H	= TWA	1.8	3.2	HP C	5.4	330	1310	50	10W	940	40	30	35	IM	WG							
K350	KLO	8.5	10.0	MEC	EE C	6.3	1600	1100	130	1200	40	50	30	35	IM	WG						
WJ350	TWA	10.5	12.5	WJ C	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG						
350H	= TWA	2.0	4.0	100	HP P	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG					
K351	= KLO	8.5	9.7	MEC	EE C	6.3	1200	350	55	65	190	32	30	35	IM	WG						
K352	KLA	3.0	3.0	15	FX EE P	3.6	86A	210K	100A	6M	210K	32	30	35	IM	WG						
K352B	KLA	3.0	3.0	15	FX EE P	3.6	86A	210K	100A	6M	210K	32	30	35	IM	WG						
SFD352	MAG	8.5	9.6	10	MEC SD P	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG					
WJ352	TWA	0.7	1.7	WJ C	10.0	2000	2000	600	150W	2000	28	8	4	60	IM	WG						
K353	KLO	10.5	12.2	MEC	EE C	6.3	1200	450	70	250	400	28	8	4	60	IM	WG					
WJ353	= TWA	2.0	4.0	WJ C	6.3	1200	450	70	250	400	28	8	4	60	IM	WG						
SFD354	MAG	8.5	9.6	10	MEC SD P	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG					
WJ354	= TWA	5.5	9.0	HP P	7.0	2000	6900	185	100W	4500	7K	33	33	33	IM	WG						
354H	= TWA	2.9	3.1	200	HP P	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG					
WJ355	TWA	2.2	2.3	WJ C	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG						
WJ356	TWA	5.8	6.2	WJ C	6.3	2200	7100	1200	1K	350	30	200	30	35	IM	WG						

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR % VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
357H		BWO	8.4	9.3		VT	HP C		6.3	800	220	35	200		45						IM		WG
K358		KLO	10.5	12.2		MEC EE C			6.3	1200	450	70	250	400						60		RI WG	
K359		= KLO	8.1	8.8		MEC EE C			6.3	1200	380	60	90	185								RI WG	
K361		KLO	10.7	10.7		MEC EE C			6.3	600	350	40	27	250						20		RI WG	
K361B		KLO	10.7	10.7		MEC EE C			6.3	600	350	40	27	250						20		RI WG	
SFD361		MAG	34.5	35.2	8	MEC SD P													8		IM		WG
SFD362		MAG	5.4	5.8	40	MEC SD P													3		IM		WG
WJ362		TWA	2.0	4.0	50	WJ P																IM	CO
362H		= TWA	2.7	2.9	60	HP P			6.3	2200	4400	550	500W		35							IM	CO
WJ363		= TWA	8.0	12.0		WJ C							20						30	10			
K364		KLO	9.3	9.4		MEC EE C			6.3	600	365	45	40	250						40		RI WG	
WJ364		TWA	4.0	8.5		WJ C							35W	1900								IM	WG
WJ364-1		TWA	4.5	9.0		WJ C							10W									IM	CO
WJ364-2		TWA	4.5	9.0		WJ C							20W									IM	CO
WJ364-3		TWA	4.0	8.0		WJ C							50W									IM	CO
K365		KLA	0.4	0.6		MEC EE C			7.5	40A	20K	2500	11K		500					6		4E CO	
K366A		KLO	7.4	7.8		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
K366B		KLO	7.1	7.4		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
K366C		KLO	6.9	7.1		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
K366D		KLO	6.6	6.9		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
K366E		KLO	6.1	6.4		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
K366G		KLO	6.4	6.6		MEC EE C			6.3	800	750	80	1200	400						35		RI WG	
KY366A		KLO	7.4	7.8		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366B		KLO	7.1	7.4		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366C		KLO	6.9	7.1		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366D		KLO	6.6	6.9		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366E		KLO	6.1	6.4		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366G		KLO	6.4	6.6		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY366H		KLO	6.1	6.4		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
K367A		KLO	7.4	7.8		MEC EE C			6.3	800	750	75	1200	350						30		RI WG	
K367B		KLO	7.1	7.4		MEC EE C			6.3	800	750	75	1200	350						30		RI WG	
K367C		KLO	6.9	7.1		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
K367D		KLO	6.6	6.9		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
K367E		KLO	6.1	6.4		MEC EE C			6.3	800	750	75	1200	350						30		RI WG	
K367F		KLO	6.4	6.6		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367A		KLO	7.4	7.8		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367B		KLO	7.1	7.4		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367C		KLO	6.9	7.1		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367D		KLO	6.6	6.9		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367E		KLO	6.1	6.4		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367F		KLO	6.4	6.6		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
KY367G		KLO	6.4	6.6		MEC EE C			6.3	800	750	80	1200	1000						35		RI WG	
K370		KLA	0.5	0.6		MEC EE C			5.5	42A	14K	3000	12K	12K						40		4E CO	
WJ370		= TWA	1.4	2.3		WJ C							100U						20	4		CO	
K371		KLA	0.6	0.7		MEC EE C			5.5	42A	14K	3000	12K	12K						40		4E CO	
K372		KLA	0.7	0.9		MEC EE C			5.5	42A	14K	3000	12K	12K						40		4E CO	
372H		BWO	9.2	10.0		VT	HP C		6.3	800	220	35	350		45							IM	WG
K376		KLA	0.5	0.6		MEC EE C			26.0	12A	20K	6000	30K							42		4E CO	
K377		KLA	0.6	0.7		MEC EE C			26.0	12A	20K	6000	25K							44		4E CO	
379H		= TWA	3.0	3.5		HP C			3.5	720	1610	77	20W	1000						1K		IM	CO
QKK381		KLO	3.8	4.5		MEC RA C							50									RI SP	
WJ381		= TWA	2.6	5.2		WJ C							5							25	10		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
381H		BWO	51.0	55.0				HP C			45	5000								IM		WG
382H		TWA	4.0	8.0	200			HP P			10K	1700	1K			30				IM		CO
K383		KLA	0.5	0.6				MEC EE C	5.5	42A	12K	2000	6K	9000		36					4E	CO
K384		KLA	0.6	0.7				MEC EE C	5.5	42A	12K	2000	6K	9000		36					4E	CO
WJ384		= TWA	8.0	12.0				WJ C				10				25	8					
384H		= TWA	3.0	5.0				HP C	4.5	260	1320	23	4000	610		40				IM		CO
K385		KLA	0.7	0.9				MEC EE C	5.5	42A	12K	2000	6K	9000		36					4E	CO
K386		KLA	0.8	1.0				MEC EE C	5.5	42A	14K	3000	12K	12K		40					4E	CO
K390		KLA	3.0	3.0	15			FX EE P	3.6	86A	205K	105A	8M	205K		42					4I	WG
390H		TWA	2.5	4.0	240			HP P			7100	1200	1K			31				IM		CO
K391		KLO	9.2	9.3				MEC EE C	6.3	600	325	45	40	500				30			RI	WG
K391A		KLO	8.8	8.9				MEC EE C	6.3	600	400	50	60	500				40			4I	WG
391H		= TWA	1.3	2.3				HP C			550	220	500			30				IM		CO
392H		= TWA	1.2	2.4				HP P	6.3	2200	2800	400	80W	45		33				IM		CO
WJ393		= TWA	18.0	26.5				WJ C				1				28	13			IM		WG
394H		= TWA	1.8	2.6				HP C	5.2	300	1425	26	5000	950		20				IM		CO
K397		KLO	8.8	8.8				FX EE C	6.3	1600	1100	70	1200			25	6		10		2I	WG
WJ397		= TWA	0.5	2.1				WJ C				2								CO		
K398A		KLO	10.7	11.7				MEC EE C	6.3	800	450	65	200	200					70		RI	WG
WJ399		= TWA	8.0	12.0				WJ C				40				28	11			IM		CO
VA401		= KLA	8.2	12.4				FX VA C	6.3	2000	2000	350	60W			30			18		3I	WG
SOU403		KLO	16.4	16.4				FX SP C	6.3	500	1100	80	1000			25			15		2I	
VA403B		= KLA	13.3	13.3				FX VA C	6.3	2000	1500	250	5000			25			30		4I	WG
WJ403		= TWA	8.0	12.0				WJ C				20				25	9					
QKK404		KLO	5.8	6.5				MEC RA C			300	100										
STL405		TWA	0.4	1.0				SP C	12.6	2500	1800	700	200W			33				500		CO
SAC406		KLA	4.4	6.0				MEC SP C	6.3	13A	20K	2870	20K			50			20		4I	WG
SOU407		KLO	17.5	17.5				FX SP C	6.3	400	1080	80	1000						15		2I	
SOU408		KLO	15.6	15.6				FX SP C	6.3	400	900	60	200						8		2I	
VA408A		KLA	13.5	13.5				FX VA C	13.0	900	4300	50W				45				IM	4I	WG
SRU410		KLO	15.5	17.1				MEC SP C	6.3	600	205	25	8					15			RI	
TP0410		TWA	6.0	7.5				CS C			2600	40	10W			24				IM		CO
410H		TWA	1.2	1.8				HP C	4.5	1000	650	28	2000			36				IM		CO
411H		TWA	1.2	1.4				HP C			550	28	1000			43				IM		CO
QKK412		KLO	5.1	5.9				MEC RA C	6.3		300	25	90	205				35			RI	WC
SOV413		= KLO	26.5	31.0				SP C	6.3	550	1500	60	1000					20			RI	WG
SOU414		KLO	13.3					SP C	6.3	500	950	65	1500							2I		WG
SAL415		KLA	0.9	1.2	250			SP P	4.2	36A	12K	2000	6K			24						
SAC417		KLA	6.0	8.0				MEC SP C	6.3	13A	17K	2200	10K			50			18		4I	WG
SAX418		KLA	8.0	10.5				MEC SP C	5.0	10A	18K	2400	10K			50			10		4I	WG
SRU419		KLO	15.5	17.5				MEC SP C	6.3	550	475	60	200	400				30			RI	WG
QKK422		KLO	7.1	8.1				MEC RA C			300	85										WG
SRX424		KLO	8.8	10.2				MEC SP C	6.3	600	380	37	40								RI	WG
QKH427		MAG	1.0	1.0				FX RA C				10W										WG
SOU428		KLO	16.0	16.0				FX SP C	6.3	400	800	55	250					10			2I	
TP0430		TWA	3.8	4.2				CS C			2000	40	6000			25						WG
QKH447		MAG	5.5	5.8	10			MEC RA P	6.3		300	40	25	275					60		RI	WG
QKK448		KLO	12.0	13.8				MEC RA C				28	40								IM	CO
VA450C		BWO	8.0	12.4				VA C	6.3	1250		28	40								IM	CO
VA450M		BWO	7.0	12.4				VA C	6.3	1250		28	20								IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BIAM OR VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA450N		BWO	8.5	9.6				VA C	6.3	1250			50			600					IM	CO	
VA451M		BWO	8.0	12.4				VA C	6.3	1250		28	15			650					IM	CO	
VA451N		BWO	8.5	9.6				VA C	6.3	1250		30				280					IM	CO	
QK456		MAG	5.4	5.4	10 FX			RA P	6.3	1500	16K	20A	75K								IM	WG	
VA460M		BWO	8.0	12.4				VA C	6.3	1250		28	50			1K					IM	WG	
QKK461		KLO	5.9	6.4				MEC RA C			300	25	125	210						40	RI	WG	
VA461M		BWO	8.2	12.4				VA C	6.3	1250		28	20			650					IM	WG	
VA462N		BWO	8.5	9.6				VA C	6.3	1250		25	40			310					IM	WG	
QK463A		KLO	24.5	27.5				MEC RA C	6.3		1800	9	25	300						30	RI	WG	
VA470M		BWO	12.4	18.0				VA C	6.3	1250		18	20			1K					IM	WG	
VA470N		BWO	14.0	17.0				VA C	6.3	1250			50			900					IM	WG	
VA472M		BWO	10.0	15.5				VA C	6.3	1250		18	20			1K					IM	WG	
VA480M		BWO	18.0	26.5				VA C	6.3	1250			10			1K					IM	WG	
QKH488		MAG	5.4	5.9				MEC RA P					400W										
VA490M		BWO	26.5	40.0				VA C	6.3	1250			5			1K							
VA490N		BWO	34.0	36.0				VA C	6.3	1250			20			1K							
M503A		MAG	9.3	9.4	25 FX			EE P	6.3	500	6200	5500	8K						15		IM	WG	
VA503B		KLO	13.5	13.5				FX VA C	6.3	1000	1650	32	1500								21	WG	
VA503C		KLO	13.3	13.3				FX VA C	6.3	1000	1650	32	1500								21	WG	
VA504B		KLO	13.3	13.3				FX VA C	6.3	1000	3100	77	21W								21	WG	
VA504D		KLO	13.5	13.5				FX VA C	6.3	1000	3100	77	21W								21	WG	
QKS506		AMA	X		10 FX			RA P			40K	45A	1M							700	IM	WG	
M507		MAG	3.2	3.4	10 FX			EE P	5.0	2600	30K	40A	425K								2100	CO	
LD-508B		TWA	3.6	4.2				NE C	6.3	700	3200	45	20W	2000	50	3K	40	25	15		IM	WG	
M508		MAG	9.2	9.3	25 FX			EE P	6.3	500	6000	5500	8K										
VA508		KLO	8.0	9.5				FX VA C	6.3	950	1350	125	7000								21	WG	
VA510B		KLO	13.3	13.3				FX VA C	6.3	1000	2500	24	2300								21	WG	
VA510D		KLO	13.3	13.3				FX VA C	6.3	1000	2500	24	2300								21	WG	
SFD511		CFA	2.8	3.2				SD C			6000	100	150W					10			CO		
VA511		KLO	9.5	10.6				FX VA C	3.7	6300	11K	100	80W								21	WG	
511H		TWA	2.9	3.1	200			HP P			7500	1300	2K								IM	CO	
M513A		MAG	9.3	9.4	25 FX			EE P	6.3	500	8000	8500	22K							15	IM	WG	
M513B		MAG	9.3	9.4	25 FX			EE P	6.3	500	8000	8500	22K							15	IM	WG	
TV514		KLO	9.5	10.6				TV C	6.3	800	4500	30	2000								21	WG	
VA514		KLO	9.5	10.6				FX VA C	6.3	800	4000	25	2000								21	WG	
M515		MAG	9.4	9.4	15 FX			EE P	6.3	550	8500	10A	25K							18	IM	WG	
VA515B		KLO	13.5	13.5				FX VA C	6.3	900	2400	60	8000								21	WG	
516H		TWA	2.9	3.3	200			HP P			7100	1200	1K								IM	CO	
QKH517		MAG	0.7	0.7	18 FX			RA P			50K	90A	2M								CO		
QKH517A		MAG	0.6	0.6	18 FX			RA P			50K	90A	2M								CO		
QKH517B		MAG	0.5	0.6	18 FX			RA P			50K	90A	2M								CO		
VA517		KLO	9.5	10.6				MEC VA C	6.3	1700	11K	100	75W							250	21	WG	
QK518		BWO	2.0	4.0	VT			VA C	6.3	1300	250	20	1000								IM	CO	
TV518		KLO	9.5	10.6				TV C	6.3	2700	4300	30	2000								21	WG	
VA518		KLO	9.5	10.6				MEC VA C	6.3	750	4200	30	2000								21	WG	
M519		MAG	3.4	3.6	10 FX			EE P	5.0	2600	30K	40A	425K								2300	CO	
VA519		KLO	9.5	10.6				FX VA C	6.3	750	4200	30	2000								21	WG	
519H		TWA	2.9	3.5	200			HP P			7500	1300	1K								IM	CO	
VA520		KLO	9.5	10.6				MEC VA C	6.3	750	4200	30	2000								21	WG	
520H		TWA	2.5	3.5	220			HP P	6.3	2500	7000	1500	1K								IM	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO X10 ⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
M521		MAG	9.6	9.7	10	FX	EE	P	3.0	3500	16K	12A	45K						15	3250		WG	
VA521		KLO	5.5	7.0		MEC	VA	C			4000	30	1000								21	WG	
M523		MAG	9.6	9.7	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	21	WG
VA523		KLO	9.5	10.6		FX	VA	C	6.3	750	2500	15	200								21	WG	
VA524		KLO	9.5	10.6		MEC	VA	C	6.3	750	2500	15	200								21	WG	
524H		TWA	2.0	4.0			HP	C			1200	35	4000								IM	CO	
M525		MAG	2.7	2.9	12	FX	EE	P	8.5	9000	40K	80A	1M						7	1800		WG	
VA525		KLO	9.5	10.6		MEC	VA	C	3.6	6300	13K	140	200W								21	WG	
VA526		KLO	9.5	10.6		MEC	VA	C	3.6	6300	13K	140	200W								21	WG	
TWC527		TWA	6.3	6.6			GC	C	6.5	8000	30K	1500	5K	11K					38	50		WG	
VA527		KLO	9.5	10.6		FX	VA	C	3.6	6300	13K	140	200W								21	WG	
QK528		BWO	3.6	7.2		VT	RA	C	6.3	1000	150	5	750		100	2K			15		IM	CO	
M529		MAG	8.8	9.0	10	FX	EE	P	13.8	3250	23K	28A	225K								IM	WG	
530H		TWA	2.9	3.5	400		HP	P	6.3	2500	6000	1200	600W								IM	CO	
QK531		KLO	6.6	6.9		MEC	RA	C	6.3	2500	300	26	150	280					25		RI	WG	
VA531		KLO	26.5	35.0			VA	C	6.3	800	1500	80	1000								2E	SP	
QK532		KLO	6.9	7.1		MEC	RA	C			300	26	150	280					25		RI	WG	
VA532		KLO	18.0	24.0			VA	C	6.3	750	1500	120	4000								2E	SP	
VA533		KLO	12.4	18.0		FX	VA	C	6.3	1000	1400	120	10								21	WG	
VA534		KLO	33.0	40.0		FX	VA	C	6.3	1500	1400	120	10								21	WG	
VA535		KLO	40.0	44.0		FX	VA	C	6.3	1250	1500	80	800								21	WG	
535H		TWA	2.9	3.6	200		HP	C	6.3	2500	7000	1500	1K		150				15	1	IM	CO	
M537A		MAG	8.8	8.9	25	FX	EE	P	6.3	500	6000	5500	9K								IM	WG	
537H		TWA	3.3	3.7	50		HP	P	6.3	2300	7100	1200	1K						15		IM	CO	
M538A		MAG	9.2	9.3	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	WG	
M539		MAG	8.7	8.8	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	WG	
QK539		MAG	5.5	5.5		FX	RA	P					IM								IM	CO	
QK542		TWA	4.0	8.0			RA	C	6.3	1000	1500	40	1000	1500	300				15		IM	CO	
M546		MAG	9.7	9.8	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	WG	
M547		MAG	9.8	10.0	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	WG	
M549		MAG	8.5	8.7	10	FX	EE	P	13.8	3250	23K	28A	225K						15		IM	WG	
QK549		KLO	5.9	6.4		MEC	RA	C			300	26	150	280					25		RI	WG	
LD-550A		TWA	5.9	7.2			NE	C	6.3	600	2600	35	11W	1600	50	3K	33	25			IM	WG	
LD-550B		TWA	7.2	8.5			NE	C	6.3	600	2500	33	10W	1600	40	3K	40	28	4		IM	WG	
M554		MAG	1.3	1.4	15	FX	EE	P	20.0	14A	42K	150A	3M								950	WG	
LD-561		KLO	11.7	12.4		MEC	NE	C	6.3	450	400	45	200	220					60		IN	WG	
M561		MAG	3.0	3.1	20	FX	EE	P	10.0	1100	18K	25A	80K						6		1800	CO	
M565		MAG	1.2	1.4	25	FX	EE	P	48.0	14A	52K	250A	5M						7		800	WG	
M566		MAG	2.8	2.9	15	FX	EE	P	12.0	15A	42K	176A	2M						7	1	1675	WG	
MC567A-J		MAG	1.3	1.4	15		CS	P	20.0	13A	42K	150A	2K								650	CO	
M569		MAG	2.9	3.0	15	FX	EE	P	12.0	15A	43K	170A	2M						7		1675	WG	
M570		MAG	3.0	3.1	15	FX	EE	P	12.0	15A	43K	170A	2M						7		1580	WG	
M573		MAG	2.9	3.0	15	FX	EE	P	12.0	15A	41K	170A	2M						7		1610	WG	
M574		MAG	3.0	3.1	15	FX	EE	P	12.0	15A	44K	155A	2M						7		1675	WG	
QK574		TWA	0.5	0.7	90		RA	P	6.0	6000	10K	2500	3K						30			CO	
M575		MAG	9.3	9.4	20	FX	EE	P	10.0	2850	16K	18A	80K						15	25	IM	WG	
QK575		TWA	0.5	0.7	84		RA	P			40K	50A	300K						20			CO	
QK576		AMA	0.6	0.6	72		RA	P		95A	75K	200A	10M								440	CO	
M577A		MAG	3.0	3.0	10	FX	EE	P	16.0	3100	30K	70A	900K						15		2700	CO	
M578A		MAG	3.1	3.1	10	FX	EE	P	16.0	3100	30K	70A	900K						15		2700	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																				
M579	MAG		3.1	3.2	15	FX	EE	P	12.0	14A	42K	176A	2M								1580	WG		
M581	MAG		9.4	9.5	10	FX	EE	P	6.3	1000	16K	16A	65K						15		IM	WG		
M586	MAG		1.2	1.3	15	FX	EE	P	20.0	14A	42K	150A	3M						4		950	WG		
LD-588	KLO		7.0	7.6		MEC	NE	C	6.3	440	300	25	100	100						50	IN	CO		
M591B	MAG		9.4	9.5	25	FX	EE	P	6.3	500	8000	8500	22K						15		IM	WG		
LD593A	TWA		10.7	11.7			NE	C	6.3	600	1800	22	6000	2000	35	4K	35	25				IM	WG	
M596	MAG		9.4	9.4	10	FX	EE	P	12.6	2200	16K	15A	80K						13		IM	WG		
LD-597A	TWA		3.6	4.2			NE	C	6.3	700	3200	35	16W	1700	50	3K	33				IM	WG		
M597	MAG		9.3	9.4	25	FX	EE	P	6.3	500	6200	6000	10K						15	50	IM	WG		
M598B	MAG		9.4	9.4	25	FX	EE	P	6.3	500	8000	8500	22K						15	50	IM	WG		
M599	MAG		9.4	9.5	10	FX	EE	P	6.3	500	3800	3500	3K						18		IM	WG		
VA601B	= TWA		0.9	1.6			VA	C	7.8	1250	2300	200	60W								IM	CO		
MCV602	MAG		8.5	9.6	10		CS	P	12.6	2200	15K	15A	70K								IM	CO		
X602K	KLA		0.4	0.5	22		ET	P	11.0	23A	50K	9000	150K	1K							4E	CO		
VA604C	TWA		6.5	6.8			CV	C	6.3				15	3400	3K	33	27					WG		
LD-605	TWA		5.8	7.2			NE	C	6.3	600	2600	40	19W	2000	35	3K	40	25				IM	WG	
QK607	KLO		8.5	9.7		MEC	RA	C	6.3	300	300	25	40	200	150	2K			50		RI	WG		
QK610	BWO		6.7	11.4		VT	RA	C	6.3	1500	250	35	300								IM	CO		
VC611	TWA		1.7	2.3			CV	C	6.3	1500	2800	50	15W	2900					20		WG			
VC612A	TWA		1.7	2.3			CV	C	6.3	1500	2800	50	15W						20		WG			
VA614G	TWA		1.0	2.0			VA	C	6.3	1650	1500	120	20W								IM	CO		
VA614H	TWA		1.0	2.0			VA	C	6.3	1500	1500	120	20W								IM	CO		
614H	= TWA		5.9	6.4			HP	C	10.5		3000	10K	800								IM	CO		
VA615G	TWA		2.0	4.0			VA	C	6.3	900	1800	110	20W						2K	35	30	IM	CO	
VA615H	TWA		2.0	4.0			VA	C	6.3	900	1800	85	20W						50	30	IM	CO		
VA616G	TWA		4.0	8.0			VA	C	6.3	900	2500	95	20W						3K	35	30	IM	CO	
VA616H	TWA		4.0	8.0			VA	C	6.3	900	2500	85	20W						50	30	IM	CO		
616H	= TWA		4.3	5.1			HP	C		2900	65	20W							40		IM	CO		
VA617G	TWA		5.5	11.0			VA	C	6.3	900	3200	85	20W						3K	45	30	IM	CO	
VA617H	TWA		5.5	11.0			VA	C	6.3	900	3200	85	20W						50	30	IM	CO		
VA618G	TWA		7.0	12.4			VA	C	6.3	900	3500	85	20W	3150					35	30	IM	CO		
VA618H	TWA		7.0	12.4			VA	C	6.3	900	3200	85	20W						50	30	IM	CO		
VA619G	TWA		12.0	18.0			VA	C	6.3	900	4000	50	10W						4K	35	30	IM	WG	
VA619H	TWA		12.0	18.0			VA	C	6.3	900	4000	50	10W						45	30	IM	WG		
621H	TWA		5.5	5.9	100		HP	P	9.5	5500	37K	11A	50K	450					50		IM	WG		
QK5622	CFA		2.9	3.1			RA	P		54K	66A	3M							7		WG			
622H	TWA		5.5	5.9	250		HP	P	9.5	5500	37K	11A	50K						50		IM	WG		
QK623	KLO		7.1	7.7		MEC	RA	C	6.3	330	2900	60	10W	280						25	RI	WG		
623H	TWA		4.0	8.0			HP	C		4800	300	200W							30		IM	WG		
624H	TWA		5.9	6.4			HP	C											30		WG			
LD-624	KLA		1.7	1.8		MEC	NE	C	3.5	16A	16K	2250	10K						36		IN	WG		
VA624G	TWA		1.0	2.0			VA	C	6.3	5000	2900	300	100W						2K	30	35	IM	CO	
QK625	BWO		2.5	3.3		VT	RA	C	10.0	2000	1300	300	300W	850					5K		IM	CO		
VA625G	TWA		2.0	4.0			VA	C	6.3	3000	3500	250	100W						3K	30	35	IM	CO	
625H	TWA		5.9	6.4			HP	C		1500	22	4000							50		IM	CO		
QK626	MAG		0.6	0.6	18	MEC	RA	P			50K	90A	2M								IM	CO		
VA626G	TWA		4.0	8.0			VA	C	6.3	3200	4500	200	100W						4K	30	35	IM	CO	
X626AC	KLA		0.4	0.4	600	MEC	ET	P	7.5	95A	110K	36A	1M	500							3E	WG		
VA628G	TWA		8.0	12.4			VA	C	6.3	3200	5400	220	100W						5K	30	35	IM	CO	
VA629G	TWA		12.4	18.0			VA	C	6.3	6000	6000	200	100W						6K	33	35	IM	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR V _{cc} VOLTS	CONTROL V _{g1} VOLTS	HEATH VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
OKH32		MAG	5.2	5.3	10	FX	RA P	RA P	10.0	1400	2000	275	250W	1600	600	5K				IM	WG	
OK634		BWO	8.2	11.0		VT	RA C	NE C	6.3	1050	2500	55	20W	2000	50	3K	32	27		IM	WG	
LD-637		TWA	1.7	2.3			RA P	RA P	7.0	70A	80K	125A	5M							IM	WG	
OKS642		TWA	1.3	1.3	16	FX	VA P	VA P	4.0	8000	15K	3600	7K	250		36				IM	WG	
VA642G		TWA	2.8	3.5	250															IM	WG	
TV651G		TWA	0.5	0.9		VT	TV C	TV C	6.5	5500	2200	650	250W			30				IM	WG	
VA651A		TWA	0.5	0.9			VA C	VA C			2100	600	200W			2K	26			IM	WG	
OKS653		AMA	1.3	1.4			RA P	RA P	6.3	450	500	58	350	320		11				IM	WG	
LD-656		KLO	11.7	12.7		MEC	NE C	NE C	6.3	450	500	58	350	320		46			44	IN	WG	
LD-659		KLA	1.7	1.8		MEC	NE C	NE C	6.3	16A	18K	2800	21K						8	IN	WG	
OKA659		BWO	3.2	4.4			RA C	RA C	15.0	150A	72K	150A	5M							IM	WG	
OK665		MAG	1.2	1.3	18	FX	RA P	RA P	15.0	150A	72K	150A	5M							IM	WG	
OK666		MAG	1.3	1.4	18	FX	RA P	RA P	15.0	150A	72K	150A	5M							IM	WG	
OKH668		MAG	10.0	10.3			RA P	RA P	6.3	1200	1250	57	1800	450					60	IN	WG	
LD-670		KLO	10.7	11.7		MEC	NE C	NE C	6.3	1200	1250	57	1800	450						IN	WG	
OKK673		KLO	82.0	92.0		MEC	RA C	RA C	2.5	1450	1800	50	3	4500	300					RI	WG	
OKS681		CFA	0.4	0.5			RA P	RA P	6.3	600	1700	19	4000	1500	35	10				IM	WG	
LD690		TWA	10.7	11.7			NE C	NE C	6.3	1300	250	20	1000	1600	100					IM	WG	
OKB691		BWO	2.0	4.0		VT	RA C	RA C	6.3	2000	2000	300	100W						3K	IM	WG	
RW700		BWO	15.0	18.0		VT	WT C	WT C	6.3	2000	2000	300	100W							IM	WG	
X700		KLA	2.4	2.9	500	MEC	EI P	EI P	7.5	5500	21K	2770	20K			40				41	WG	
RW701		BWO	12.8	15.3		VT	WT C	WT C	6.3	2000	2000	320	100W						2	WG		
VC701		= MAG	2.7	2.9		FX	CV P	CV P	12.0	14K	35K	157A	2M			5				WG		
RW702		= BWO	10.8	13.0		VT	WT C	WT C	6.3	2000	2000	320	130W			5				WG		
VC702		= MAG	2.8	2.9	15	FX	CV P	CV P			35K	157A	2M							WG		
RW703		BWO	9.6	11.0		VT	WT C	WT C	6.3	2500	2000	320	150W						2	WG		
RW704		BWO	7.2	8.6		VT	WT C	WT C	6.3	2500	2000	290	175W						1	WG		
RW705		BWO	5.8	7.2		VT	WT C	WT C	6.3	3000	2000	320	200W						1	WG		
VC705		= KLO	50.0	80.0		MEC	CV C	CV C	6.3	2200	2550	25	250	1250					200	RI	WG	
RW706		BWO	4.8	6.0		VT	WT C	WT C	6.3	2500	2000	320	200W						1	WG		
RW707		BWO	3.8	4.8		VT	WT C	WT C	6.3	3000	2000	320	200W						1	WG		
VC707A		TWA	3.6	4.2		CV C	CV C	CV C	6.3	3500	1	18	3300	20	3K	40				WG		
OKB708		BWO	2.0	4.1			RA C	RA C	6.3	3000	2000	320	200W							WG		
RW708		BWO	3.2	3.9		VT	WT C	WT C	6.3	3000	2000	320	200W							WG		
OKB709		BWO	3.9	7.5			RA C	RA C	6.3	3000	2000	320	200W							WG		
RW709		BWO	2.6	3.5		VT	WT C	WT C	6.3	3000	2000	370	250W							WG		
OKB710		BWO	7.4	12.0		VT	WT C	WT C	6.3	3000	2000	350	350W							WG		
RW710		BWO	2.2	2.7		VT	WT C	WT C	6.3	2200	50	25	300	1250					200	RI	WG	
VC710		= KLO	80.0	H1.1		MEC	CV C	CV C	6.3	2200	50	25	300	1250						WG		
710H		TWA	X				HP C	HP C	12.0	2400	19K	2200	8K			50				WG		
RW712		BWO	1.4	1.8		VT	WT C	WT C	6.3	3000	2000	350	250W							WG		
RW713		BWO	1.0	1.4		VT	WT C	WT C	6.3	3000	2000	350	250W							WG		
VC713		= KLO	80.0	H1.1		MEC	CV C	CV C	6.3	2200	2550	25	400	1250					200	RI	WG	
713H		TWA	8.9	9.1	100		HP P	HP P	9.5	5200	39K	9400	100K			16				IM	WG	
RW714		BWO	0.9	1.1		VT	WT C	WT C	6.3	5000	2000	375	350W							WG		
VC714		= KLO	H1.1	H1.7		MEC	CV C	CV C	6.3	2200	2550	25	100	1250					200	RI	WG	
714H		TWA	9.3	9.5	50		HP P	HP P	11.0	3800	26K	6800	40K	250		16				IM	WG	
RW715		BWO	0.7	0.9		VT	WT C	WT C	6.3	5000	2200	350	350W							WG		
VC715		= KLO	H1.1	H1.4		MEC	CV C	CV C	6.3	2200	2550	25	200	1250					200	RI	WG	
RW716		BWO	0.5	0.7		VT	WT C	WT C	6.3	5000	2200	350	350W							WG		

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
RW717		BWO	2.6	3.5		VT	WT	C	6.3	4000	2000	650	600W			6K				1			CO
VC717		KLO	H1.4	H1.7		MEC	CV	C	6.3	2200	2550	25	100	1250						200		RI	WG
RW718		BWO	1.1	1.4		VT	WT	C	12.6	5000	3000	1000	1K			7K						CO	CO
VC718A		KLO	8.8	8.8		MEC	CV	C	6.3	1200	500	70	550	420						50		RI	WG
VC718B		KLO	9.8	9.8		MEC	CV	C	6.3	1200	500	70	550	420						50		RI	WG
718H		TWA	8.8	9.0	50		HP	P	9.5	5200	39K	9400	100K				45				IM	WG	WG
719H		TWA	9.3	9.5	50		HP	P	11.0	3800	26K	6800	40K		250		45				IM	WG	WG
LK720A		KLO	7.4	7.8		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720B		KLO	7.1	7.4		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720C		KLO	6.9	7.1		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720D		KLO	6.6	6.9		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720E		KLO	6.1	6.4		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720F		KLO	5.9	6.2		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720G		KLO	6.4	6.6		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
LK720Z		KLO	7.8	8.1		MEC	LI	C	6.3	900	750	80	1100	1000					10	60		RI	WG
QK8720		BWO	8.5	9.6			RA	C	6.3	75	250		500		100	800							
VC720A		= KLO	50.0	56.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720B		= KLO	55.0	61.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720C		= KLO	60.0	66.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720D		= KLO	65.0	71.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720E		= KLO	67.0	73.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720F		= KLO	70.0	76.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC720G		= KLO	74.0	80.0		MEC	CV	C	6.3	1800	1400	10	25	450						150		RI	WG
VC721A		KLO	8.8	8.8		MEC	CV	C	6.3	1200	500	70	600	320						50		RI	WG
LK722A		KLO	7.4	7.8		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722B		KLO	7.1	7.4		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722C		KLO	6.9	7.1		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722D		KLO	6.6	6.9		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722E		KLO	6.1	6.4		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722F		KLO	5.9	6.2		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722G		KLO	6.4	6.6		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
LK722Z		KLO	7.8	8.1		MEC	LI	C	6.3	900	750	80	1100	1000						60		RI	WG
VC722A		KLO	8.8	8.8		MEC	CV	C	6.3	1200	500	70	550	420						60		RI	WG
VC722B		KLO	9.8	9.8		MEC	CV	C	6.3	1200	500	70	550	420						60		RI	WG
722H		= TWA	8.4	9.2			HP	C	7.5	2800	11K	1200	1K				40						WG
723H		= TWA	8.4	9.2	22		HP	P	7.5	2800	10K	1200	1K				40						WG
723A/B		KLO	8.7	9.5		MEC			6.3	600	300	22	25	400						40		CO	CO
725A		MAG	9.3	9.4	10	FX	P		6.3	1000	16K	16A	50K						15		5400	WG	
725H		TWA	8.5	9.6	500		HP	P			11K	2000	2K				40				IM	WG	WG
726B		KLO	2.9	3.2		MEC		C	6.3	440	330	30	150	250								RI	CO
726C		KLO	2.7	2.9		MEC		C	6.3	440	330	35	100	400						30		RI	CO
726H		TWA	8.5	9.5	50		HP	P	11.0	3800	30K	9000	25K		250		40					WG	WG
QK8728		BWO	5.4	5.9			RA	C			1800	30	5000								IM	CO	
732H		TWA	8.0	10.0			HP	C															
QK8734		BWO	5.4	5.9			RA	C															
QK8735		MAG	5.4	5.9	20	MEC	RA	P			2100	1500	400W								IM	SP	SP
QK8736		MAG	9.1	9.3	30	MEC	RA	P			1900	1100	200W								IM	SP	SP
QK8737		MAG	5.4	5.6	30	MEC	RA	P			1700	1100	200W								IM	SP	SP
739H		TWA	8.4	9.2	50		HP	P			48K	21A	200K								IM	WG	WG
L0745		TWA	1.7	2.3		NE	C		6.3	900	2700	65	29W	2000	40	3K	35	25				IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
LD746		TWA	10.7	11.7	100%			NE C	6.3	600	2400	30	11W	2000	35	4K	40	27				IM	WG
EM747	=	MAG	0.4	1.2		VT		EI C	6.3	800	2000	20	250									IM	CO
QKB747		BWO	5.2	5.9				RA C					100										
LD749		TWA	11.7	13.5				NE C	6.3	600	1700	20	5000	2000	35	4K	40	27				IM	WG
QKB752		KLO	7.1	7.8				MEC RA C			300	26	150	280							25	RI	WG
QKB753		KLO	7.8	8.4				MEC RA C			300	26	150	280							25	RI	WG
QKB754A		KLO	5.9	6.4				MEC RA C			750	68	2500	350							40	RI	SP
QKB755A		KLO	6.6	6.9				MEC RA C			750	68	2500	350							40	RI	SP
QKB756A		KLO	6.9	7.1				MEC RA C			750	68	2500	350							40	RI	SP
QKB758A		KLO	7.1	7.8				MEC RA C			750	68	2500	350							40	RI	SP
QKB759A		KLO	7.8	8.4				MEC RA C			750	68	2500	350							40	RI	SP
QKB760A	=	BWO	4.0	8.0		VT		RA C	6.3	1000	150	45	20	1500	100							IM	CO
QKA773		BWO	8.4	11.0				RA C			2150	300	150W	1600	600	5K						IM	WG
QKB775		BWO	8.5	9.6				RA C	6.3	75	250		1000	100	2K								
QKB776	=	BWO	8.0	12.4		VT		RA C	6.8	1800	150	45	20	1500	150							IM	WG
EM778		TWA	5.0	11.0				EI C	6.3	600	3000	23	1000	3000	40	3K	60	34				IM	CO
EM779	=	TWA	0.5	1.1				EI C	6.3	600	3000	23	1000	3000	40	3K	30	34				IM	CO
X780		KLA	1.2	1.4	600			MEC EI P	7.0	90A	115K	59A	2M									4I	WG
QKS783A		AMA	2.7	2.9	50			RA P			54K	66A	3M									IM	WG
QKB786	=	BWO	1.0	2.0		VT		RA C	6.3	1500	250	45	100	1500	200							IM	CO
QKB790		MAG	8.9	9.4	10			MEC RA P			4500	1000	1K									WG	
QKB794		BWO	2.0	4.0		VT		RA C	6.3		100		20	1500								IM	CO
QKB795		BWO	3.6	7.3		VT		RA C	6.3		100		29	1500								IM	CO
QKB796		BWO	6.7	11.4				RA C	6.3		100		20	1500								IM	CO
QKB798		MAG	9.4	9.5	3	FX		RA P			5200	3500	3K									SP	
VA800C		KLA	2.1	2.4				MEC VA C	4.0	30K	20K	2350	11K									4I	WG
VA800E		KLA	1.7	2.4				MEC VA C	3.5	17A	20K	2350	12K									4I	WG
TV802D		KLA	2.7	3.1				MEC TV C	6.0	7500	7500	450	1K									4I	CO
VA802B	=	KLA	1.7	2.4				MEC VA C	6.3	7500	7000	600	1K									IM	4I
VA802C		KLA	2.4	2.7				MEC VA C	6.0	8000	8000	600	1K									IM	4I
BL803		KLO	8.5	10.0				BL C	6.3	1320	200	23	15	165							20		
VAX803T1	=	TWA	8.5	9.6	100			VA P	10.0	2500	24K	5000	10K									IM	WG
VAX803T2	=	TWA	8.5	9.6	100			VA P	10.0	2500	24K	5000	10K									IM	WG
VA804	=	KLA	4.4	5.9				MEC CV C	6.0	12A	10K	1000	2K									4I	WG
VA805	=	KLA	5.9	6.4				MEC VA C	6.5	10A	9000	1000	2K									4I	WG
VA806A	=	KLA	8.4	8.5				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806B	=	KLA	8.4	8.4				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806C	=	KLA	8.4	8.4				FX VA C	10.0	2000	10K	900	1K									4I	WG
VA806D	=	KLA	8.3	8.4				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806E	=	KLA	8.2	8.3				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806F	=	KLA	8.2	8.2				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806G	=	KLA	8.2	8.2				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806H	=	KLA	8.1	8.2				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806J	=	KLA	8.0	8.1				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806K	=	KLA	8.0	8.0				FX VA C	10.0	2000	10K	900	1K									4I	WG
VA806L	=	KLA	8.0	8.0				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806M	=	KLA	7.9	8.0				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806N	=	KLA	7.9	7.9				FX VA C	10.0	2000	10K	900	1K									4I	WG
VA806P	=	KLA	7.8	7.8				FX VA C	10.0	2200	10K	800	2K									4I	WG
VA806Q	=	KLA	7.8	7.8				FX VA C	10.0	2200	10K	800	2K									4I	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA806R	= KLA		7.7	7.8		FX	VA	C	10.0	3200	10K	800	2K				53					41 WG	
VA806S	= KLA		7.6	7.7		FX	VA	C	10.0	2200	10K	800	2K				53					41 WG	
VA806T	= KLA		7.6	7.6		FX	VA	C	10.0	2000	10K	900	1K				52					41 WG	
VA806U	= KLA		7.6	7.6		FX	VA	C	10.0	2200	10K	800	2K				53					41 WG	
VA806V	= KLA		7.5	7.6		FX	VA	C	10.0	2200	10K	800	2K				53					41 WG	
BL807	KLO		8.5	10.0			BL	C	6.3	1320	350	60	50	255					40				
QKS807	AMA		5.4	5.8			RA	P			50K	75A	3M									IM WG	
QKB808	= BWO		6.7	12.0		VT	RA	C	6.3	1600	150	45	100		150	2K	35					IM CO	
VA808	= KLA		5.3	5.9		150 FX	VA	P	6.3	2500	23K	3300	24K				57		13			IM 41 WG	
810H	KLO		51.0	55.0			HP	C			10K	60	10W									IM 41 WG	
VA811	KLA		3.0	3.1		40 FX	VA	P	7.5	32A	105K	68A	1M						170			IM WG	
VA812C	KLA		0.4	0.4		30 FX	VA	P	65.0	14A	155K	160A	10M				50		50			51 WG	
VA812D	KLA		0.4	0.4		70 FX	VA	P			220K	255A	15M									51 WG	
812H	TWA		52.0	55.0			HP	C			12K	120	150W				12					IM WG	
813H	TWA		54.5	55.5			HP	C			25K	400	1K				20					IM WG	
BL814	KLO		10.4	12.3			BL	C	6.3	1320	400	70	150	340					20				IM WG
814H	TWA		90.0	99.0			HP	C			15K	160	100W				20					IM WG	
QKK815	= KLO		16.0	17.0		MEC	RA	C	6.3	1250	350	45	20	500					55			RI WG	
QKB816A	= BWO		2.0	4.0		VT	RA	C	6.3	1300	250	45	70	1500	100		30					IM CO	
VA816J	= KLA		3.4	3.6		40 MEC	VA	P	7.5	33A	115K	80A	2M									51 WG	
817H	TWA		15.3	15.8			HP	C			20K	2500	8K				40					IM WG	
818H	TWA		12.0	14.0			HP	C			3000	40	10W				35					IM CO	
VA820B	= KLA		2.7	2.8		20 FX	VA	P	7.5	33A	135K	105A	5M				51		25			41 WG	
VA820C	= KLA		2.8	2.9		20 FX	VA	P	7.5	33A	135K	105A	5M				51		90			41 WG	
VA820D	= KLA		2.9	2.9		20 FX	VA	P	7.5	33A	150K	140A	6M				50					51 WG	
820H	TWA		16.0	17.0		100	HP	P			20K	1500	5K				36					IM WG	
QKH821	MAG		5.4	5.9		20	MEC	RA	P		3500	2800	2K									IM SP	
QKK822	KLO		12.2	12.7			MEC	RA	C	6.3	440	400	45	100	380				35			RI CO	
VA822A	= KLA		9.0	9.2		MEC	VA	C	6.0	6000	8750	750	1K				52		20			IM 41 WG	
VA822B	= KLA		9.2	9.4		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822C	= KLA		9.4	9.6		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822D	= KLA		9.6	9.8		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822E	= KLA		9.8	10.0		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822F	= KLA		10.0	10.2		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822G	= KLA		10.2	10.5		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822H	= KLA		10.5	10.8		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA822J	= KLA		10.8	11.0		MEC	VA	C	6.0	6000	8500	740	1K				52		20			IM 41 WG	
VA823	= KLA		7.1	10.0			VA	C	6.0	5400	15K	1600	8K				49		17			41 WG	
VA823A	KLA		7.5	7.5		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823B	KLA		7.6	7.6		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823C	KLA		7.7	7.7		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823D	KLA		7.8	7.8		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823E	KLA		7.9	7.9		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823F	KLA		8.0	8.0		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823G	KLA		8.1	8.1		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823H	KLA		8.2	8.2		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823J	KLA		8.3	8.3		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823K	KLA		8.4	8.4		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823L	KLA		8.5	8.5		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	
VA823M	KLA		8.6	8.6		FX	VA	C	6.0	6000	15K	1500	9K				43		22			41 WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM DR	I _k	P _o	COLLECTOR V	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA823N		KLA	8.7	8.7		FX	VA C		V	6.0	6000	15K 1500	9K				43		22		0.1mT	41 WG	
VA823P		KLA	8.8	8.8		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823Q		KLA	8.9	8.9		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823R		KLA	9.1	9.1		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823S		KLA	9.3	9.3		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823T		KLA	9.5	9.5		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823U		KLA	9.7	9.7		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA823V		KLA	9.9	9.9		FX	VA C			6.0	6000	15K 1500	9K				43		22			41 WG	
VA824B		= KLA	9.8	9.8		MEC	CV C			6.3	800 1000	90 2000				8			22			41 WG	
BL825		KLO	8.5	10.0		BL C				6.3	1320 500	65 500	450						40			21 WG	
QK825		TWA	5.9	7.4			RA C			6.3	1000 1500	40 3000				300 1K 35					IM	WG	
QK826		KLO	10.7	11.7		MEC	RA C			6.3	440 400	30 100	350						35		RI	CO	
TW827		TWA	6.3	6.4			GC C			6.5	8000 30K	1500 8K	12K			38			50			WG	
BL829		KLO	8.0	9.5		FX	BL C			6.3	1320 500	70 400 400						25	45			WG	
QK830		= BWO	8.5	9.6		VT	RA C			6.3	700 400	45 250 500	100										
QK833		KLO	12.2	12.7		MEC	RA C			6.3	675 750	75 500	450						35		RI	CO	
QK833A		KLO	12.2	12.7		MEC	RA C			6.3	750 750	75 1200	550						40		RI	SP	
VA833C		= KLA	0.7	1.0		MEC	VA C			6.5	17A 13K	3000 17K				40			10		41	CO	
QK834		= KLO	34.0	35.6		MEC	RA C			6.3	600 400	27 20 105							110		RI	WG	
QK834A		KLO	34.0	35.6		MEC	RA C			6.3	375 50	10 175							75		RI	WG	
QK834B		KLO	34.0	35.6		MEC	PA C			6.3	400 50	50 200							75		RI	WG	
VA834B		KLA	4.4	5.0		MEC	VA C			6.5	7800 7500	470 1K				51			17		IM	41 WG	
VA834D		KLA	5.4	5.8		MEC	VA C			6.5	7400 8000	500 1K				57			14		IM	41 WG	
VA835A		KLA	2.4	2.7		MEC	VA C			3.5	18A 20K	2350 10K				40			18		41	WG	
VA835B		KLA	2.7	3.0		MEC	VA P			3.5	18A 20K	2350 10K				40			18		41	WG	
QK837		KLO	67.0	70.1		MEC	RA C			2.5	1450 1400	40 15	400 400						75		RI	WG	
QK838		KLO	69.9	73.0		MEC	RA C			2.5	1450 1400	40 15	400 400						75		RI	WG	
VA838		KLA	8.0	14.0	400	MEC	VA P			7.0	18A 48K	21A 320K				50					IM	51 CO	
LK839B		KLO	7.1	7.4		MEC	LI C			6.3	800 750	80 1000	400						43		RI	WG	
MC839-103		MAG	2.9	3.5	5		CS P			5.3	2600 22K	28A 220K											
QK839		KLO	9.8	10.5		FX	RA C			5.0	9000 14K	700 2K									RI	WG	
VA839		KLA	2.7	2.9	20	FX	VA P			7.5	33A 150K	125A 5M				39			180		IM	WG	
LK840B		KLO	6.6	6.9		MEC	LI C			6.3	800 750	80 1000	400						43		RI	WG	
VA840B		KLA	1.0	1.2	260	MEC	VA P			4.2	18A 30K	10A 37K				40					41	CO	
BL841		= KLO	8.0	9.5		FX	BL C			6.3	1320 200	15 10	110						30		RI	WG	
LK841B		KLO	6.1	6.4		MEC	LI C			6.3	800 750	80 1000	400						43		RI	WG	
X841D		KLA	0.4	0.4	600	FX	EI P			30.0	28A 115K	67A 2M				33			50		61	CO	
VA842		= KLA	0.4	0.4	650	MEC	VA P			30.0	25A 120K	2000 1M				40			3		41	SP	
BL843		= KLO	8.0	9.5		FX	BL C			6.3	1320 210	23 15	135						30		RI	WG	
BL844		KLO	13.3			BL C				6.3	1320 550	70 500							45				
VA845		= KLA	9.3	9.6	12	MEC	VA P			9.5	2000 16K	1550 5K				55			16		IM	41 WG	
BL846		= KLO	8.0	9.5		FX	VA C			6.3	1320 300	30 50	150						30		RI	WG	
QK846		CFA	2.9	3.1			RA P					54K 66A	3M			7							
VA846A		= KLA	4.4	4.6		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	
VA846B		= KLA	4.6	4.7		MEC	CV C			3.4	20A 14K	1400 5K				55					41	WG	
VA846C		= KLA	4.7	4.8		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	
VA846D		= KLA	4.8	5.0		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	
VA846E		= KLA	5.0	5.2		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	
VA846F		= KLA	5.2	5.3		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	
VA846G		= KLA	5.3	5.4		MEC	CV C			3.4	20A 14K	1400 5K				55			8		41	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA846H	=	KLA	5.4	5.6	5.8	MEC	CV C	MEC	3.4	20A	14K	1400	5K				55			8		4I WG	
VA846J	=	KLA	5.6	5.8	5.9	MEC	CV C	MEC	3.4	20A	14K	1400	5K				55			8		4I WG	
VA846K	=	KLA	5.8	5.9	6.0	MEC	CV C	MEC	3.4	20A	14K	1400	5K				55			8		4I WG	
VA846L	=	KLA	5.8	6.0		MEC	CV C	MEC	3.4	20A	14K	1400	5K				55			8		4I WG	
BL847		KLO	8.5	10.0			BL C		6.3	1320	300	32	50	225						30			
TV848		KLA	9.0	10.8		MEC	TV C	MEC	8.5	2500	10K	1000	2K				56			14		4I WG	
VA848		KLA	9.0	10.8		MEC	VA C	MEC	8.5	2500	10K	1200	2K				56			14		4I WG	
BL849		KLO	10.5	11.5		BL C			6.3	1320	400	68	70	400						32		IM 4I WG	
VA849		KLA	7.1	8.5		MEC	VA C	MEC	10.5	5000	26K	3400	25K		120		54			29		4I WG	
TV851		KLA	9.2	10.6		MEC	TV C	MEC	8.5	2600	11K	940	2K				32					4I WG	
VA851		KLA	10.0	16.5		MEC	VA C	MEC	8.5	2600	11K	900	3K				32					3I WG	
VA853		KLA	0.8	1.0		MEC	VA C	MEC	7.0	18A	28K	8000	75K				60			9		5I WG	
VA854	=	KLA	9.2	10.5		MEC	VA P	MEC	9.5	2000	10K	1000	2K				45					4I WG	
VA856A	=	KLA	7.1	7.4		MEC	VA C	MEC	8.5	2580	11K	1100	2K				60			11		4I WG	
VA856B	=	KLA	7.4	7.7		MEC	VA C	MEC	8.5	2580	11K	1100	2K				60			11		4I WG	
VA856C	=	KLA	7.7	8.1		MEC	VA C	MEC	8.5	2580	11K	1100	2K				60			11		4I WG	
VA856D	=	KLA	8.1	8.5		MEC	VA C	MEC	8.5	2580	11K	1100	2K				60			11		4I WG	
VA858A		KLA	1.7	2.0		MEC	VA C	MEC	10.0	11A	35K	10A	122K		550		65			20		4I WG	
VA858B		KLA	2.0	2.4		MEC	VA C	MEC	10.0	11A	35K	10A	122K		550		65			20		4I WG	
OKK860		KLO	7.0	11.0		MEC	RA C						1									EX	
VA860		KLA	5.9	6.5		MEC	VA C	MEC	9.0	7000	22K	4500	22K		185		52			35		4I WG	
VA861		KLA	5.9	6.4		MEC	VA C	MEC	5.5	5000	7500	550	1K				48			11		IM 4I WG	
OKK863		KLO	50.0	57.0		MEC	RA C	MEC	2.5	1450	1400	50	25		450	400	63			35		RI WG	
VA863		KLA	7.1	8.5		FX	VA C		6.0	5400	18K	2250	12K									4E WG	
OKK864		KLO	56.0	65.0		MEC	RA C	MEC	2.5	1450	1400	50	25		450	400						RI WG	
VA864		KLA	9.6	10.6		MEC	VA C	MEC	6.0	6000	17K	1800	10K				50					5I WG	
OKK865		KLO	64.0	74.0		MEC	RA C	MEC	2.5	1450	1400	50	25		450	400						RI WG	
OKK866		KLO	73.0	83.0		MEC	RA C	MEC	2.5	1450	1800	60	25		500	300						RI WG	
VA866		KLA	7.1	8.5		MEC	VA C	MEC	5.5	5000	8K	550	1K				60			20		IM RI WG	
OKK867		KLO	82.0	HI.0		MEC	RA C	MEC	2.5	1450	1700	60	10		450	400						RI WG	
VA867		KLA	5.9	6.4		MEC	VA C	MEC	6.3	440	425	45	100				57			15		4I WG	
OKK869		KLO	11.7	12.2		MEC	RA C	MEC	6.0	2100	7000	525	730W		380		52			35		RI CO	
VA869A		KLA	10.0	10.2	400	MEC	VA P		6.0	2100	7000	525	730W									IM 4I WG	
OKB870	=	BWO	7.2	12.4		VT	RA C		6.3	1700	150	45	100	1800	150		35			14		IM CO	
VA870		KLA	9.2	10.0	400	VA	P		6.5	5000	12K	850	1K				50					IM 4I WG	
VA872A		KLA	9.0	10.4		MEC	VA C	MEC	6.3	440	440	45	100				50			15		4I WG	
OKK873		KLO	13.2	14.0		MEC	RA C	MEC	9.0	7000	28K	6000	60K		380		55			35		RI CO	
VA873	=	KLA	7.1	8.5		MEC	VA C	MEC	6.3	440	440	45	100				55			56		IM 4I WG	
OKK874		KLO	14.0	15.0		MEC	RA C	MEC	6.3	440	440	45	100		380		50			35		RI CO	
VA874		KLA	9.0	9.6	50	MEC	VA P		6.3	2100	43K	8000	200K				50			100		IM 5I WG	
VA874B		KLA	9.0	9.6	49	VA	P		9.0	2100	40K	7900	600W				54			40		IM WG	
OKH875		MAG	5.4	5.6	30	MEC	RA P				1700	1100	200W				50					IM SP	
VA876		KLA	7.1	8.5		MEC	VA C	MEC	6.3	440	440	45	100				50			35		5I WG	
OKK877		KLO	12.7	13.2		MEC	RA C	MEC	6.3	440	440	45	100	350						35		RI CO	
VA877A		KLA	4.4	5.0		MEC	VA C	MEC	8.5	7500	16K	2500	12K				62			34		WG	
OKK878		KLO	10.7	11.7		RA	C		6.3		800	85	650							35		RI WG	
OKK879		KLO	11.7	12.2		RA	C		9.5	8400	750	70	700							35		RI CO	
VA879		KLA	7.1	8.5		MEC	VA C	MEC	9.5	8400	41K	6600	115K							40		4I WG	
VA879A		KLA	7.1	8.5		MEC	VA C	MEC	8.0	79A	45K	10A	100K				43			30		4I WG	
OKH880		MAG	2.8	2.9		MEC	RA P				70K	130A	4M									IM	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HEAT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
QKK880		KLO	12.7	13.2				RA C			750	70	700	700	40							RI CO	
QKK881		KLO	13.2	14.0				RA C			750	70	700	700	40							RI CO	
VA881		KLA	7.1	8.5				MEC VA C	5.5	5000		14K	1400	6K			45				1M	41 WG	
QKK882		KLO	14.0	15.0				RA C			750	70	700	700	40							RI CO	
VA882		KLA	12.4	18.0				MEC VA C	4.5	5000	10K	750	2K				60				1M	41 WG	
VA882A		KLA	15.6	15.8				VA C			8500	500	1K				50				1M	WG	
QKK883		MAG	2.8	2.9				FX	8.0	79A	70K	130A	4M				50					51 WG	
TV884		KLA	5.9	6.4				MEC TV C	8.0	8000	18K	3000	10K				50					51 WG	
VA884B		KLA	5.9	6.4				MEC VA C	8.0	7000	20K	3500	20K				50					51 WG	
VA885		KLA	7.1	8.4				MEC VA C			16K	2300	10K				50				1M	41 WG	
VA888		KLA	4.4	5.0				MEC VA C	6.5	7800	8500	600	1K				40				1M	41 WG	
QKB890		= BWO	12.4	18.0				VT RA C	6.3	1800	200	30	180	1500	150		35				1M	41 CO	
TV890		KLA	0.5	0.6				MEC TV C	6.5	17A	18K	5000	30K				35					41 CO	
VA890		KLA	0.5	0.6				MEC VA C	6.5	17A	20K	5500	30K				35					41 CO	
QKB891		= BWO	18.0	26.5				VT RA C	6.3	1800	300	35	180	2500	150						1M	WG	
TV891		KLA	0.6	0.6				MEC TV C	6.5	17A	18K	5000	30K				35					41 CO	
VA891		KLA	0.6	0.7				MEC VA C	6.5	17A	20K	5500	30K				35					41 CO	
QKK892		= KLO	39.6	46.0				MEC RA C	6.3		3000	18	4	300	175							RI WG	
TV892A		KLA	0.6	0.7				MEC TV C	6.5	17A	18K	5000	30K				35					41 CO	
VA892		KLA	0.7	0.9				MEC VA C	6.5	17A	20K	5500	30K				35					41 CO	
QKK893		= KLO	45.9	50.0				MEC RA C	6.3		3000	18	4	300	175							RI WG	
VA893		KLA	0.5	0.6				MEC VA C	6.5	17A	25K	8000	50K				35					41 CO	
VA894		KLA	0.6	0.7				MEC VA C	6.5	17A	25K	8000	50K				35					41 CO	
VA895		KLA	0.7	0.9				MEC VA C	6.5	17A	25K	8000	50K				35					41 CO	
QKK896		KLO	10.0	10.3				FX RA C	3.2	6200	10K	100	120W									21 WG	
VA896		KLA	9.5	10.6				MEC VA C	6.0	5500	5000	300	230W				47				1M	41 WG	
QKH898		MAG	2.9	2.9			8 FX	RA P	8.0	79A	70K	130A	4M								1M	WG	
QKH899		MAG	2.9	2.9			6 FX	RA P	8.0	79A	52K	85A	2M								1M	WG	
VA903		KLA	7.1	8.5				MEC VA C	5.5	5000	10K	800	2K				45				1M	41 WG	
QKH904		MAG	2.4	2.4				FX RA C	4.4	28A	4500	500	1K									41 CO	
VA908		KLA	4.4	5.0				MEC VA C	8.0	7000	18K	3000	10K									51 WG	
QKB909		= BWO	5.3	5.9				VT RA C	6.3	1000	130	30	50			720					1M	CO	
VA909		KLA	9.2	10.6				MEC VA P	6.0	3000	5000	300	300W				45					41 WG	
QKK910		KLO	6.6	6.9				MEC RA C			750	68	1300	360								RI SP	
QKS912		CFA	5.5	5.8				RA P			40K	13A	250K				11					WG	
VA912		KLA	5.4	5.9				MEC VA P	6.3	2100	18K	8500	35K				21					31 WG	
QKB913		= BWO	1.0	2.0				RA C	6.3	1100	100	35	1500	150							1M	CO	
QKB914		= BWO	2.0	4.0				VT RA C	6.3	1300	200	50	1000	150		1K	35					1M CO	
QKB915		= BWO	4.0	8.0				VT RA C	6.3	1000	150	35	250	150		1K	35					1M CO	
QKB916		= BWO	8.0	12.4				VT RA C	6.3	1800	150	35	250	150		1K	35					1M CO	
QKB922		BWO	2.9	3.3				RA C					100										
VA922		KLA	8.6	11.3				MEC VA C	5.5	4700	8200	600	1K				50					51 WG	
QKK923		= KLO	23.5	24.5				MEC RA C	6.3	680	375	35	30	150								RI WG	
VA923		KLA	10.0	11.0				MEC VA P	7.5	7000	42K	8000	125K				50						
QKB924		BWO	2.7	3.2				VT RA C	6.3	1300	100	45	500	800								1M CO	
VA925		KLA	7.9	8.4				MEC VA C	7.5	7500	13K	1650	8K				54						
VA927		KLA	9.0	10.0				MEC VA P	8.0	8000	28K	4200	40K				61						
QKW928		= TWA	5.9	7.1				RA C			3000	50	10W	2950	300	3K	35	28				1M CO	
VA930		KLA	15.5	16.0				MEC VA P	5.5	2500	3000	700	1K				50						
QKB931		= BWO	7.2	12.4				RA C	6.3		100	29	200	1250	100							1M CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																	
VA932		KLA	9.2	10.6		MEC	VA	P	5.0	2000	8500	1K	1K		60			5		51	WG
VA934		KLA	18.0	18.0		MEC	VA	C			23K	3500	20K		50					51	WG
VA936		KLA	5.9	6.4		MEC	VA	C	7.5	6000	9000	900	3K		50			50			
QKB938	=	BWO	8.5	9.6		VT	RA	C	6.3	1750	110	25	50		520					IM	WG
QKH942		MAG	1.2	1.4	18	MEC	RA	P			71K	150A	5M							IM	WG
QKH943		MAG	8.5	9.6		MEC	RA	P				200M									
QKH959		MAG	1.0	1.5		MEC	RA	C			2900	225	190M							IM	CO
QKH960		MAG	2.4	3.6		MEC	RA	C			2900	225	190M							IM	CO
QKH965		KLO	5.9	6.4		MEC	RA	C			750	68	1300	360				35		RI	SP
QKH966		KLO	6.9	7.1		MEC	RA	C			750	68	1300	360				35		RI	SP
QKH967		KLO	7.1	7.8		MEC	RA	C			750	68	1300	360				35		RI	SP
QKH968		KLO	7.8	8.4		MEC	RA	C			750	68	1300	360				35		RI	SP
QKH971		KLO	11.0	11.2		MEC	RA	C	2.5	1450	1800	70	20	450	300					RI	WG
QKS973		CFA	2.8	2.9		RA	P				50K	68A	3M		9					WG	
QKH974		KLO	10.0	10.3		FX	RA	C	3.4	6400	14K	145	300M							21	WG
QKH977		KLO	88.0	11.0		MEC	RA	C	2.5	1450	1700	60	25	400	400			90		RI	WG
QKH978		KLO	12.2	12.7		RA	C				750	70	700	700	40			35		RI	CO
QKS982		CFA	2.8	2.9		RA	P				50K	68A	3M		9					WG	
QKH991		KLO	24.8	25.2		MEC	RA	C	6.3	680	600	75	250	380				100		RI	WG
QKB994	=	BWO	5.4	5.9			RA	C				100									
QKA995		BWO	2.2	3.2			RA	C			1400	115	60M								
QKS997A	=	AMA	2.3	2.3		FX	RA	C	6.3		1900	23	25M		20					CO	
QKW998		TWA	5.9	7.1			RA	C	6.3	1300	1550	30	3000	1500						IM	WG
QKH1000	=	MAG	8.5	9.6	13	MEC	RA	P	9.0	14A	28K	25A	240K					2		IM	WG
QKH1000A	=	MAG	8.5	9.6	13	MEC	RA	P	9.0	14A	28K	25A	240K					2		IM	WG
YH1000		TWA	1.7	2.3		VT	TE	C	6.3	550	1700	85	22M	2000						CO	
YJ1000		MAG	9.2	9.3	10	FX	PH	P	6.3	500	3800	3500	3K				15		IM	WG	
YK1000		KLA	0.4	0.6		MEC	PH	C	7.5	32A	18K	2000	14K	18K						4E	WG
BM1001		MAG	3.0	3.0	15	MEC	EE	P	8.5	9000	47K	110A	2M		30		7		1550		WG
F1001		MAG	3.1	3.3	10	FX	TV	P	16.0	3100	32K	70A	800K				15				
QKH1001	=	MAG	8.5	9.6	13	HY	RA	P	9.0	14A	28K	25A	240K							IM	WG
QKH1001A	=	MAG	8.5	9.6	13	HY	RA	P	9.0	14A	28K	25A	240K							IM	WG
YK1001		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K	14K				2		4E	
QKH1002		MAG	8.5	9.6		HY	RA	P				200K			30						
YK1002		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K	14K						4E	
BM1003		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	47K	110A	1M							1600	WG
YK1003		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K	14K				7		1600	4E
BM1004		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	47K	110A	1M							1600	WG
YK1004		KLA	0.6	0.8		MEC	PH	C	7.5	32A	18K	2000	14K	18K				7		1600	4E
BM1005		MAG	2.9	3.0	15	FX	EE	P	8.5	9000	47K	110A	1M							1600	WG
BM1006		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	38K	70A	1M							1375	WG
EM1006	=	TWA	2.0	4.0		ET	C		6.3	600	1350	30	1000							IM	CO
F1007		MAG	3.0	3.0	10	FX	TV	P	16.0	3100	32K	70A	900K				15			2750	CO
ZV1009		KLO	1.5	6.0		MEC	PO	C	6.3	600	350	35	250	700	20			6		RE	CO
ZV1009		KLO	1.5	6.0	30	MEC	PO	P	6.3	600	350			700	150					RE	CO
EM1010	=	TWA	4.0	8.0		ET	C		6.3	600	2600	30	1000	2600	40					IM	CO
N1010		BWO	7.0	11.5		VT	EE	C	6.3	2300	300	50	130	250	2K					IM	CO
N1010A		BWO	7.0	11.5		VT	EE	C	6.3	2300	300	50	130	250	2K					IM	CO
N1010S		RWO	7.0	11.5		VT	EE	C	6.3	2300	300	50	130	250	2K					IM	CO
YJ1010		MAG	9.0	9.0	10	FX	MU	P	13.8	3100	23K	28A	225K				14			IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANGLE	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HEAT SINK VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
YK1010		KLO	67.0	74.0	100	MEC	PH C	3.5	1750	2600	20	130	500	200	100	100	6				RI	WG	
ZV1010		KLO	0.7	3.0	30	MEC	PO C	6.3	600	350	35	575	700	20							RE	CO	
ZV1010		KLO	0.7	3.0	30	MEC	PO P	6.3	600	350	30	1000	2600	40	3K	30	34				IM	CO	
EM1011		TWA	4.0	8.0		EI C		6.3	600	2600	11K	1500	1K								IM	CO	
OKW1011		TWA	7.0	11.0	100	RA P															IM	CO	
YJ1011		MAG	8.5	9.6	11	MEC	PH P	13.8	3100	23K	30A	225K							15		IM	WG	
ZV1011		KLO	3.0	11.0	20	MEC	PO C	6.3	600	1250	28	375	800	20					20		RE	CO	
ZV1011		KLO	3.0	11.0	20	MEC	PO P	6.3	600	1250	28	375	800	150							RE	CO	
OKS1012		AMA	1.2	1.4	250	RA P											13				RE	CO	
ZV1012		KLO	0.5	3.0		MEC	PO C	6.3	600	350	35	510	700	20					3		RE	CO	
ZV1012		KLO	0.5	3.0	30	MEC	PO P	6.3	600	350			700	150							RE	CO	
OKW1013		TWA	1.2	1.4	800	RA P															380	CO	
BM1014		MAG	2.7	2.8	5	EE P															1350	CO	
OKH1014		MAG	1.3	1.4	11	MEC	RA P														IM	CO	
WJ1014		TWA	2.2	2.4		WJ C																	
BM1015		MAG	2.8	2.8	5	EE P															1350	CO	
EM1015		= TWA	4.0	8.0		EI C															IM	CO	
BM1016		MAG	2.8	2.9	5	EE P															1350	CO	
EM1016		= TWA	4.0	8.0		EI C															IM	CO	
N1016M		TWA	4.1	7.0		VT	EE C														520	CO	
N1017M		TWA	1.2	1.4		VT	EE C														450	CO	
OKS1017		KLO	23.5	24.5		MEC	RA C	6.3	680	425	60	60	150						100		RI	WG	
YH1020		TWA	0.4	1.0		SH C															IM	CO	
YJ1020		MAG	32.7	33.4	3	FX	PH P	4.0	3400	14K	16A	25K									IM	WG	
YK1020		KLO	7.6	8.2		MEC	TE C	6.3	440	300	28	100	300								RI	CO	
OK1021		AMA	4.2	4.4		RA C																	
X1021		= TWA	4.0	8.0		EI C															IM	CO	
YJ1021		MAG	32.7	33.4	3	FX	PH P	4.0	3400	14K	16A	30K									IM	WG	
KLO		KLO	6.5	7.2		MEC	TE C	6.3	440	300	28	100	300								RI	CO	
ZV1021		KLO	1.0	4.0		MEC	PO C	6.3	600	450	35	375	700	20							RE	CO	
ZV1021		KLO	1.0	4.0	30	MEC	PO P	6.3	600	450			700	150							RE	CO	
OKK1022		KLO	9.5	10.9		MEC	RA C	6.3	600	400	40	125	300								RI	WG	
TV1022AB		MAG	2.4	2.5		FX	TV C	7.5	5000	2350	850	1K									IM	SP	
TV1022C		MAG	2.4	2.5		FX	TV C	7.5	5000	1800	1000	1K									IM	SP	
TV1022D		MAG	2.4	2.5		FX	TV C	7.5	5000	2350	850	1K									IM	SP	
TV1023		MAG	2.4	2.5		FX	TV C	7.5	5000	4250	1200	2K									IM	SP	
YK1023		KLO	7.6	8.2		TE C															RI	WG	
OK1024		KLO	6.5	69.5		FX	RA C	6.3	440	330	40	120	300								IM	SP	
EM1025		= TWA	4.0	12.0		EI C															IM	SP	
F1025		MAG	8.5	9.6	20	FX	TV P	12.6	2100	17K	20A	70K									IM	SP	
N1025M		TWA	3.6	4.2		VT	EE C	6.3	360	800	2	100	800	50	800	33	21				400	WG	
BM1026		MAG	9.5	9.5	10	FX	EE P	6.3	900	16K	15A	50K									5600	WG	
F1026		MAG	8.5	9.6	10	FX	TV P	13.8	3400	24K	28A	200K									IM	WG	
OK1026		TWA	8.0	12.0		RA C															5600	WG	
BM1027		MAG	9.5	9.6	10	FX	EE P	6.3	900	16K	15A	50K									5600	WG	
OK1027		KLO	0.9	1.2		RA C															5600	WG	
BM1028		MAG	9.6	9.6	10	FX	EE P	6.3	900	16K	15A	50K									5600	WG	
OK1028		TWA	6.0	8.0		RA C															5600	WG	
BM1029		MAG	9.6	9.7	10	FX	EE P	6.3	900	16K	15A	50K									5600	WG	
N1029		TWA	5.8	7.2		EE C															5600	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10 ⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING	
			MIN	MAX																				
																								GHz
QK1029		BWO	4.0	8.0				RA C	6.3	900	16K	15A	50K	20					15		5600	WG		
BM1030		MAG	9.7	9.7	10	FX	EE P	6.3	600	3400	34	5000	3400	40	3K	60	34				IM	CO		
EM1030	=	TWA	7.0	11.0			EI C	6.3	600	3400	34	15K												
QK1030		AMA	3.0	3.0		FX	RA C																	
YH1030		TWA	5.9	7.2			AM C	6.3	800	2500	70	25W	2000				38	30			600	WG		
YJ1030		MAG	5.4	5.9	10	MEC	MU P	5.0	500	1180	800	120W							10		IM	CO		
YK1030		KLO	6.2	7.2		MEC	TE C	6.3	1550	750	90	2100	610							44	RI	WG		
BM1031		MAG	9.4	9.5	10	FX	EE P	6.3	800	14K	12A	40K							15		4850	WG		
EM1031	=	TWA	7.0	11.0			EI C	6.3	600	3400	40	5000	3400	40	3K	30	34				IM	CO		
N1031		TWA	3.8	4.2			EE C	6.3	360		6000	2	1000	75	600	25	8				550	WG		
QK1031		MAG	4.3	4.3			RA C					1000												
BM1032		MAG	9.4	9.5	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
BM1033		MAG	9.8	9.9	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
N1033		TWA	3.8	4.8		VT	EE C	6.3	710	2800	30	7000	2500		2K	37					550	WG		
QK1033	=	TWA	2.2	2.7			RA C	6.3	500	1300	54	10W	900	300	1K	43	33				IM	CO		
BM1034		MAG	9.6	9.7	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
N1034A		BWO	2.4	4.5		VT	EE C	6.3	2400	200	70	400			150	1K					IM	CO		
N1034S		BWO	2.4	4.5		VT	EE C	6.3	2200	200	70	400			150	1K					IM	CO		
QK1034		MAG	2.7	2.8			RA C					4K												
BM1035		MAG	9.5	9.6	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
BM1036		MAG	9.2	9.3	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
BM1037		MAG	9.1	9.2	10	MEC	EE P	6.3	800	18K	12A	50K							15		6800	WG		
N1038		TWA	7.0	8.5			EE C	6.3	800	3300	40	10W	3300	150	3K	40					IM	WG		
QK1038		TWA	1.7	2.7			RA C					5000												
QK1039		KLO	10.0	10.2			RA C					50W												
BM1040		MAG	9.0	9.1	10	EE P	EE P	6.3	800	16K	12A	50K							17		6800	WG		
QK1040		KLO	35.0	35.0		FX	RA C					50												
YH1040		TWA	5.9	6.4			SH C	7.0	2500		1000	2K	17K	150	15K	30					IM	WG		
YJ1040		MAG	9.3	9.4	10	FX	MU P	6.3	550	6500	5750	14K							15		IM	WG		
YK1040		KLO	9.1	9.5		MEC	MU C	6.3	600	300	34	55	80								RI	WG		
BM1041		MAG	X		7		EE P	6.3	800	14K	9000	30K							15		5000	WG		
QK1041	=	KLO	10.9	11.0		MEC	RA C	6.3	1200	450	45	150	350							50	RI	WG		
YH1041		TWA	5.9	6.4			SH C	6.5	2500		1	3K	10K								IM	WG		
YK1041		KLO	8.6	9.4		MEC	MU C	6.3	600	350	40	60	100								RI	WG		
N1042M		TWA	2.7	3.5		VT	EE C	5.0	500	500	5000	1	500	20	500	25	6				525	CO		
QK1042		MAG	1.2	1.4			RA C					9K												
YK1042		KLO	8.1	8.9		MEC	MU C	6.3	600	350	40	60	100								RI	WG		
QK1043	=	KLO	17.0	18.0		MEC	RA C	6.3	1000	750	70	300	300						60		RI	WG		
YK1043		KLO	9.3	10.1		MEC	MU C	6.3	600	350	40	60	100								RI	WG		
QK1044		BWO	3.8	4.0			RA C					180W												
YK1044		KLO	10.1	10.6		MEC	MU C	6.3	600	350	40	60	100								RI	WG		
X1044A		TWA	0.5	11.0			EI C	6.3	600	2050	30	2K	2050								IM	CO		
EM1045	=	TWA	8.0	12.0			EI C	6.3	600	2950	23	1000	2950	40	3K	60	34				IM	CO		
N1045M		TWA	2.5	4.1			EE C	5.0	320	500	3500	3	500	450	28	8					525	CO		
QK1045	=	KLO	23.5	24.5		MEC	RA C	6.3	680	450	60	125	300							100	RI	WG		
EM1046	=	TWA	8.0	12.0			EI C	6.3	600	2950	25	1000	2950	40	3K	30	34				IM	CO		
N1047M		TWA	2.7	3.2		VT	EE C	5.0	300		2000	2	1100	20	500	24	4				1400	CO		
N1048M		TWA	3.8	4.4			EE C	5.0	A 30	0	2000	5000	800		220	25	6					RI	WG	
QK1048	=	KLO	10.5	12.4		MEC	RA C	6.3	1200	450	50	180	300								50	RI	WG	
QK1049	=	TWA	7.1	8.5			RA C				3250	50	10W	3200	300	3K	37	28			IM	CO		

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
EMI050	= TWA	8.0 12.0						EI C	6.3	600	3500	30 3000	3500	50	4K	60	34	15		IM		CO
F1050	MAG	5.4 5.8			12 FX			TV P	9.5	5500	28K	30A 250K								IM		WG
QK1050	AMA	2.3 2.3						RA C				500										
YH1050	TWA	4.4 5.0			VT			TE C	6.3	350	1000	22 3000	1200		1K	30			40			CO
YK1050	KLO	7.0 8.2			MEC			TE C	6.3	380	300	32 170	170								RI	CO
EMI051	= TWA	8.0 12.0						EI C	6.3	600	3500	30 3000	3500	50	3K	30	34			IM		CO
QK1051	AMA	2.3 2.3						RA C				25W										
QK1052	AMA	0.8 0.9						RA C				10K										
QK1053	KLO	1.2 1.4						RA C				10K										
F1054	MAG	2.9 3.0			10			CS P	14.0	5200	30K	65A 1M										
QKW1054	= TWA	4.8 6.5						RA C				50 10W	2950	300	3K	35-30				IM		CO
F1055	MAG	3.0 3.1			10			CS P	14.0	5200	30K	65A 1M										
MCV1055E	MAG	2.9 3.0			10			CS P	14.0	5200	30K	65A 1M										
MCV1055F	MAG	3.0 3.1			10			CS P	14.0	5200	30K	65A 1M										
MCV1055G	MAG	3.1 3.2			10			CS P	14.0	5200	30K	65A 1M										
NI055	TWA	5.8 7.0						EE C	6.3	800		50 20W	4000	150	4K	40	27			IM		WG
A1056V2	TWA	1.2 1.4						RC C	5.0	700		270U	250U	600	250	20	4			800		CO
F1056	MAG	3.1 3.2			10			CS P	14.0	5200	30K	65A 1M										
NI056	TWA	3.6 5.0						EE C	6.3	800		50 16W	3500	150	3K	40	27					WG
F1057-1077	MAG	2.9 3.5			5			CS P	5.3	2600	22K	28A 220K										
QKW1058	= TWA	5.9 6.4						RA C	6.3	1000	3100	55 10W	1800	50	3K	37	28			IM		WG
QK1059	TWA	8.5 10.5						RA C				10W										
X1059	TWA	4.0 8.0			10			EI C	6.3	600	2700	35 2K	2700	12	3K	38	34			IM		CO
EMI060	= TWA	2.5 11.0						EI C	6.3	600	3000	35 500	3000	40	3K	30	34	14		IM		CO
YJ1060	MAG	9.3 9.4			20 FX			P	6.3	550	7400	8000 20K								IM		WG
YK1060	KLA	0.5 0.9						MEC PH C	7.5	32A	24K	3200	27K	19K		30				4E		
YK1061	KLA	0.5 0.9						MEC PH C	7.5	32A	24K	3200	27K	19K		30				4E		
YK1062	KLA	0.5 0.9						MEC PH C	7.5	32A	24K	3200	27K	19K		30				4E		
QK1064	BWO	8.7 11.0						RA C				80										
QK1065	BWO	0.9 1.1						RA C				50W										
QKL1066	KLA	10.2 10.6						MEC RA C	8.5	3000	10K	900 2K				53		8				WG
QKB1067	BWO	24.0 26.0						RA C	6.3	35	300	200		100	2K							
QK1068	AMA	S						RA C				100W										
QKW1070	TWA	2.7 3.1			250			RA P	6.3	3750	7400	1300 1K				36				IM		CO
YK1070	KLO	7.8 8.1						MEC MU C	6.3	800	750	70 1000	350					21		RI		WG
YJ1071	MAG	9.4 9.4			20 FX			PH P	6.3	550	5900	7000 10K								IM		WG
YK1071	KLO	7.4 7.8						MEC MU C	6.3	800	750	70 1000	350					25		RI		WG
QKB1072	BWO	10.6 13.0						RA C	6.3	30	130	200		100	1K							
YK1072	KLO	7.1 7.4						MEC MU C	6.3	800	750	70 1000	350					28		RI		WG
QKB1073	BWO	16.0 18.0						RA C	6.3	35	250	200		100	1K							
YK1073	KLO	6.9 7.1						MEC MU C	6.3	800	750	70 1000	350					28		RI		WG
QKK1074	KLO	9.1 10.1						MEC RA C	2.5	1450	18K	60 10	500	300								
YK1074	KLO	6.6 6.9						MEC MU C	6.3	800	750	70 1000	350					28		RI		WG
QKK1075	KLO	10.0 11.0						MEC RA C	2.5	1450	18K	70 5	500	300								
YK1075	KLO	6.4 6.6						MEC MU C	6.3	800	750	70 1000	350					28		RI		WG
QKK1076	KLO	10.9 12.0						MEC RA C	2.5	1450	18K	70 5	500	300								
YK1076	KLO	6.1 6.4						MEC MU C	6.3	800	750	70 1000	350					28		RI		WG
YK1077	KLO	5.9 6.2						MEC MU C	6.3	800	750	150U	250U	400								
A1078-V1	TWA	2.5 4.0						RC C	5.0	650		150U	250U	400						800		CO
A1078-V10	TWA	2.1 2.4						RC C	5.0	650		150U	250U	400						800		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
QK1078		KLO	5.0	5.7		VEC	RA C		6.3	2000	15K	40	50	450	400							RI	WG
QK1079		KLO	5.6	6.5		VEC	RA C		6.3	2000	15K	40	50	450	400							RI	WG
EM1080	=	MAG	1.2	2.2		VT	EI C		6.3	800	1500	25	100									RI	WG
QK1080		KLO	6.4	7.4		VEC	RA C		6.3	2000	15K	40	50	450	400								
YH1080		TWA	7.4	8.5			PH C		6.3	900		50	15W	2000		4K	37	27					
YJ1080		MAG	2.4	2.5		FX	PH C		2.8	54A	4900	800	2K									IM	CO
QK1081	=	TWA	2.5	3.2			RA C				1300	50	7000	1300	300	1K	37	32				IM	CO
X1081	=	MAG	0.9	1.2		VT	EI C		6.3	1000	2400	30	12W									IM	CO
YJ1082	=	MAG	2.4	2.5		FX	PH C		2.8	54A	4900	800	2K									IM	CO
X1083B	=	MAG	0.3	0.5		VT	EI C		6.3	800	2300	10	50									IM	CO
X1084	=	MAG	0.3	0.6		VT	EI C		6.3	800	1800	10	200									IM	CO
EM1086	=	MAG	0.9	1.1		VT	EI C		6.3	1000	2500	35	16W									IM	CO
QK1087		BWO	8.0	9.7			RA C						150W										
F1088-1096		MAG	1.3	1.4	15		CS P		20.0	13A	42K	150A	2K										
QK1088		BWO	7.0	11.5			RA C						20										
X1088B	=	MAG	0.5	0.9		VT	EI C		6.3	800	2300	10	50									IM	CO
QK1090		MAG	15.5	17.5			RA C						12W										
YH1090		TWA	3.4	4.2			PH C		6.3	1050		65	23W	1300		2K	40	25	3			IM	CO
YJ1090		MAG	9.0	9.5	20	VEC	MU P		5.0	500	1180	900	50W									RI	WG
YK1090		KLO	10.5	12.2		VEC	C		6.3	1200	400	60	370	300									
EM1091A		MAG	2.1	2.3		VT	VA C		6.3	860	2500	50	20W									IM	CO
QK1091		BWO	22.0	25.0			RA C						40										
X1091	=	MAG	2.2	2.3		VT	EI C		6.3	1000	2500	60	35W									IM	CO
YK1091		KLO	10.5	12.2		VEC	C		6.3	1200	400	60	370	300								RI	WG
YJ1091		MAG	8.5	9.0	20	VEC	MU P		5.0	500	1180	900	50W									IM	CO
X1092	=	MAG	0.8	1.4		VT	EI C		6.3	800	2070	15	750									IM	CO
EM1093	=	MAG	2.5	2.7		VT	EI C		6.3	650	1500	25	3000									IM	CO
QK1093		AMA	1.3	1.4			RA C						1K									IM	CO
QK1094		AMA	1.3	1.4			RA C						1K									IM	CO
X1094	=	MAG	0.4	0.5		VT	EI C		6.3	800	2000	10	50									IM	CO
QK1095		TWA	4.5	8.0	150		RA P		6.3	5000	11K	1750	1K	11K		11K	36					IM	CO
X1095	=	KLO	5.9	6.3		VEC	EI C		6.3	850	600	50	400	225								RE	
QK1096		BWO	2.2	4.3			RA C						1000										
F1097		MAG	8.5	9.6	10	CS P			12.6	2200	15K	15A	70K										
QK1097		BWO	4.2	8.4			RA C						20										
X1097	=	MAG	0.6	1.2		VT	EI C		6.3	800	3000	35	5500									IM	CO
QK1098		BWO	1.2	1.3			RA C						250										
X1098	=	MAG	0.9	1.5		VT	EI C		6.3	800	1800	20	80									IM	CO
QK1099		BWO	2.7	2.9			RA C						200									IM	CO
X1099	=	MAG	0.5	0.7		VT	EI C		6.3	800	1500	10	25									IM	CO
QK1100		MAG	2.7	2.9			RA C						400W										
YH1100		BWO	8.0	12.4		VT	PH C		6.3	1700	2100	35	50		150							IM	WG
YJ1100		MAG	9.0	9.5	20	VEC	P		5.0	500	1180	900	180W									IM	CO
KLO		KLO	7.3	7.8		VEC	TE C		6.3	1550	900	120	1700	800								RI	CO
YJ1101		MAG	8.5	9.0	20	VEC	P		5.0	500	1180	900	180W									RI	CO
YK1101		KLO	7.1	7.4		TE C			6.3	1550	800	95	1200	400								RI	WG
QK1102		KLO	10.0	10.3		VEC	RA C		3.2	6200	10K	100	120W									2I	WG
YK1102		KLO	8.2	8.6		TE C			6.3	1550	800	95	1100	400								RI	
F1103/7008		MAG	8.5	9.6	10		CS P		9.0	2600	22K	28A	220K										
QK1103		BWO	1.0	1.4			RA C						400W										

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
OK1106		KLO	10.2	10.6	FX	RA C	RA C	6.3	3200	4200	30	5000										2I WG
OK1109		MAG	2.6	2.8		RA C	RA C					400W										
OKS1110		AMA	2.9	3.1	270	RA P	RA P	6.3	800	53K	22A	3M				12				IM		WG
YH1110		TWA	5.8	8.5		TE C	TE C	6.3	800		50	15W	1450	40	3K	40	22			800		CO
YJ1110		MAG	9.3	9.4	15	FX	P	6.3	600	8200	9000	20K								IM		WG
OK1111		BWO	10.7	18.1			RA C					35										
YJ1111		MAG	9.4	9.5	5	FX	MU P	6.3	550	8200	7500	20K						18		IM		WG
F1112		MAG	2.4	2.5		CS C	CS C	12.0	3000	3500	800	1K										
OKB1112		BWO	18.0	26.6		RA C	RA C					35										
A1113V8		TWA	2.7	3.5		RC C	RC C	6.3	1300		8	100	700		700	30				IM		CO
F1113		MAG	1.2	1.4	20	CS P	CS P	8.0	15A	30K	30A	500K										
OKK1113		KLO	13.3	14.4		MEC RA C	MEC RA C	6.3	800	400	37	140	280						35		RI	WG
EM1114		KLO	13.9	13.9		MEC EI C	MEC EI C	6.3	1300	500	55	200	500						25		RI	WG
OKK1114		KLO	14.4	15.5		MEC RA C	MEC RA C	6.3	800	400	37	140	280						35		RI	WG
OK1115		AMA	2.3	2.3		RA C	RA C					500W										
X1115		KLO	12.2	12.7		MEC EI C	MEC EI C	6.3	1300	900	110	1000	1000						40		RI	WG
X1115A		KLO	12.2	12.7		MEC EI C	MEC EI C	6.3	800	500	60	150	500						30		RI	WG
X1115B		KLO	12.2	12.7		MEC EI C	MEC EI C	6.3	800	425	45	40	400						35		RI	WG
X1116		KLO	11.7	12.2		MEC EI C	MEC EI C	6.3	1300	900	110	1000	1000						40		RI	WG
X1116A		KLO	11.7	12.2		MEC EI C	MEC EI C	6.3	800	500	60	150	500						30		RI	WG
X1116B		KLO	11.7	12.2		MEC EI C	MEC EI C	6.3	800	425	45	40	400						35		RI	WG
F1117		MAG	2.4	2.5		CS C	CS C	15.0	5000	4600	1000	2K										
OK1117		KLO	34.0	35.6		RA C	RA C					10										
X1117A		KLO	11.2	11.7		MEC EI C	MEC EI C	6.3	1300	900	110	1000	1000						40		RI	WG
X1117B		KLO	11.2	11.7		MEC EI C	MEC EI C	6.3	1000	500	60	100	500						40		RI	WG
X1117B		KLO	11.2	11.7		MEC EI C	MEC EI C	6.3	1000	425	45	30	400						60		RI	WG
OK1118		KLO	5.2	5.9		RA C	RA C					70										
X1118		KLO	10.7	11.2		MEC EI C	MEC EI C	6.3	1300	900	110	1000	1000						40		RI	WG
X1118A		KLO	10.7	11.2		MEC EI C	MEC EI C	6.3	1000	500	60	100	500						40		RI	WG
X1118B		KLO	10.7	11.2		MEC EI C	MEC EI C	6.3	1000	425	45	30	1000						40		RI	WG
OK1119		AMA	2.2	2.4			RA C					50W										
X1120		KLO	12.5	15.0		MEC EI C	MEC EI C	6.3	1250	400	38	225	300						35			WG
X1120B		KLO	13.3	13.3		FX EI C	FX EI C	6.3	1250	500	52	200	150						155			WG
YH1120		TWA	8.2	8.5		TE C	TE C	6.3	900		50	20W	1400	50	3K	45		18		850		IM
YJ1120		MAG	9.4	9.4	5	FX	P	6.3	550	8500	8000	25K										WG
OK1121		MAG	9.3	9.7		RA C	RA C					14W										
YJ1121		MAG	9.4	9.5	5	FX	MU P	6.3	600	8500	9000	26K						18		IM		WG
F1122		MAG	2.4	2.5		FX CS C	FX CS C	12.0	3000	4000	900	1K										
X1123		KLO	13.4	13.4		MEC EI C	MEC EI C	6.3	800	500	55	20	500						30		RI	WG
OKH1124		MAG	K		3	RA P	RA P	5.2	2500	14K	10A	30K										CO
OKB1125		BWO	9.5	10.7			RA C					500			100	1K						
X1126B		KLO	16.5	17.2		MEC EI C	MEC EI C	6.3	1300	500	55	20	500						40		RI	WG
OKW1129		TWA	4.0	8.0		RA C	RA C	6.3	1250	3250	55	10W	3200	50	3K	35	30			IM		CO
OKS1130		CFA	5.5	5.6		RA P	RA P					60K				15						WG
X1130		KLO	15.0	18.0		MEC EI C	MEC EI C	6.3	1250	500	52	250	300						35			WG
YH1130		TWA	7.1	7.7		TE C	TE C	6.3	900		30	10W	1300	50	3K	40				850		WG
OK1131		MAG	9.4	9.5		RA C	RA C					60W										
X1131		TWA	7.0	8.0		TE C	TE C	6.3	300	1600	16	3K	575		1K	40	28			IM		CO
YH1131		TWA	5.9	6.4		TE C	TE C	6.3	900		35	15W	1800	50	3K	40				850		WG
OKW1132		TWA	7.0	11.0	100	RA P	RA P	6.3	3500	11K	2000	1K	11K		11K	40				IM		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE V	I _k mA	P _o mW	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
X1132	= TWA		7.0	8.0	102		EI P														IM		WC
QK1133	MAG		4.1	4.2			RA C						6000										
QK1134	MAG		1.5	2.3			RA C						185W										
QK1135	MAG		2.3	3.2			RA C						185W										
QK1136	MAG		3.1	4.2			RA C						185W										
QK1137	BWO		8.5	11.0			RA C						150W										
A1138V1	TWA		2.0	4.0			RC C						20 2000	1250							IM		CO
EM1138	= KLO		18.0	26.5			MEC VA C						36 240	250						80		RE WG	
X1138	= KLO		20.0	30.0			EI C						40 200	700						90		RI WG	
A1140	TWA		8.0	12.0			VT RC C						800 10 1500			2K 33					IM		WG
QK1140	MAG		2.9	3.1			RA C						3000										
YJ1140	MAG		16.4	16.6	10	FX	PH P					17A	45K								IM		WG
QK1141	MAG		9.3	9.4			RA C						1K										
QK1143	TWA		5				RA C																
QK1148	KLO		50.0	57.0			MEC RA C						50 150	600 300								RI WG	
EM1149	= KLO		12.0	18.0			MEC VA C						90 1200	300						70		RE WG	
QK1149	= KLO		56.0	65.0			MEC RA C						50 160	300								RI WG	
X1149	= KLO		12.5	18.0			MEC EI C						95 1200	300						60		RE	
QK1150	= KLO		64.0	74.0			MEC RA C						50 110	600 300							RI		CO
X1150	= MAG		1.0	1.0			VT EI C						60 45W										
YJ1150	MAG		1.2	1.4	25	MEC PH P						80A	750K								1400		CO
QK1151	KLO		73.0	83.0			MEC RA C						60 25	600 300						80		WG	
QK1152	KLO		82.0	92.0			MEC RA C						60 25	600 300						90		WG	
QK1153	KLO		91.0	H1.0			MEC RA C						60 10	600 300						100		WG	
X1153C	= MAG		0.6	1.2			EI C						50								IM		CO
QK1156	BWO		1.7	2.4			RA C						20										
QK1157	MAG		7.9	8.1			RA C						10W										
QK1158	KLO		8.0	8.0		FX	RA C						100										
YJ1160	MAG		2.4	2.5		FX	PH C					800	2K								IM		WC
QK1162	MAG		5.4	5.8			RA C						200W										
YJ1162	MAG		2.4	2.5		FX	PH C					800	2K								IM		WC
QK1164	TWA		1.2	1.8			RA C						2000										
QK1165	TWA		2.2	2.6			RA C						2000										
QK1166	MAG		9.0	9.4			RA C						200W										
QK1167	KLO		9.0	9.7			RA C						20										
QK1168	MAG		16.3	16.8			RA C						43W										
QK1169	MAG		9.0	9.8			RA C						35K										
QK1170	MAG		5.4	5.9			RA C						6000										
YJ1170/DX249	MAG		8.5	9.3	16	MEC PH P						17A	90K								IM		WG
QK1172	= MAG		16.5	16.5	7	FX	RA P					17A	60K							15		IM	WG
QK1174	MAG		5.4	5.8			RA C						1K										
QK1175	BWO		2.5	3.6			RA C						400W										
YJ1180/DX285	MAG		8.7	9.5	11	MEC PH P						28A	205K	6500	7K					12		IM	WG
A1181	TWA		7.5	11.2	50		RC P					6	25W	6500								IM	WG
A1181V2	TWA		8.0	11.0	50		RC P					5	3000	6500								IM	WG
QK51181	AMA		1.2	1.3	8		RA P					99A	5M									IM	WG
QK1184	KLO		2.2	2.4			MEC RA C						50										
QK1185	KLO		27.0	31.0			RA C						50										
QK1186	KLO		32.0	37.0			RA C						50										
QK1187	KLO		3.7	4.1			MEC RA C						50										

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTS	HELIUM VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
EM1188																							
QK1188																							
Al1189																							
Al1189V1																							
QK1189																							
YJ1190																							
QK1192																							
QK1193																							
QK1194																							
QK1197																							
QK1199																							
QK1200																							
Al200V3																							
Al201V1																							
QK1201																							
Al203																							
QK1203																							
Al205																							
Al207V17																							
Al207V26																							
Al207V29																							
QK1210																							
Al212																							
QK1213																							
QK1214																							
Al215																							
Al217																							
Al217V4																							
QK1219																							
Al225																							
QK1225																							
QK1226																							
QK1228																							
QK1229																							
QK1232																							
QK1233																							
QK1234																							
QK1235																							
QK1240																							
Al243																							
QK1243																							
QK1244																							
QK1245																							
QK1247																							
TH1249																							
TH1249A																							
TH1249B																							
QK1250																							
QK1250-1																							
TH1250																							

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX								mA	mW										
TH1250A		MAG	8.8	9.0	10	FX	TV P	P	6.3	700	15K	15A	40K						15				WG
TH1250B		MAG	8.8	9.0	10	MEC	TV P	P	6.3	700	15K	15A	36K						15		5400		WG
OKA1251		BWO	1.3	1.8			RA C				2100	300	200W	3500	1K	5K						IM	WG
OKA1252		BWO	1.8	2.5			RA C				2100	300	200W	3500	1K	5K						IM	WG
OKA1253		BWO	2.5	3.5			RA C				2100	300	180W	3500	1K	5K						IM	WG
OKA1253-2		BWO	2.5	3.5			RA C				2100	300	235W	3500	1K	5K						IM	WG
OKA1254		BWO	3.5	4.8			RA C				2100	300	180W	3500	1K	5K						IM	WG
OKA1255		BWO	4.8	6.5			RA C				2100	300	155W	3500	1K	5K						IM	WG
TV1255B		MAG	8.8	8.8		FX	TV C		6.3	1000	12K	12A	40K									IM	CO
OKA1256		BWO	6.5	8.5			RA C				2100	300	150W	3500	1K	5K						IM	WG
OKA1257		BWO	8.5	11.0			RA C				2100	300	150W	3500	1K	5K						IM	WG
OKA1258-2		BWO	4.4	5.9			RA C				2100	300	220W	3500	1K	5K						IM	WG
OKA1260		BWO	0.5	0.7			RA C				2100	500	400W	3400	700	5K						IM	WG
OKA1261		BWO	0.7	1.0			RA C				2100	500	400W	3400	700	5K						IM	WG
OKS1262		AMA	2.4	2.5			RA C				22K	10A	100K									IM	WG
OK1263		BWO	24.0	26.0			RA C						200									IM	WG
OKS1267		AMA	2.9	3.1	300		RA P		6.3	1350	29K	3800	60K				16					IM	WG
AL1268		TWA	1.0	2.0			RC C					6	600	600		1K	25					IM	CO
OKW1269		TWA	2.9	3.1	300		RA P		6.3	4000	10K	2000	2K	10K		10K	36					IM	CO
OKB1272		BWO	17.0	18.0			RA C		6.3	35	250		300		100	1K						IM	WG
OKW1276		TWA	8.5	9.6	200		RA P		6.3	3500	11K	2000	2K	11K		11K	40					IM	CO
OKS1284		CFA	0.5	0.7			RA C				7000	500	2K				10					WG	WG
OKS1286		CFA	3.0	3.2			RA P				54K	42A	2M				9					RI	SP
OKK1288		KLO	3.7	4.2		MEC	RA C				750	68	1500	350					40			RI	SP
OKK1289		KLO	4.4	4.5		MEC	RA C				750	68	1500	350					40			RI	SP
OKK1290		KLO	24.0			MEC	RA C						100										CO
AL1294		TWA	1.0	2.0			RC C		6.3	600		2	10	500								IM	CO
AL1295		TWA	2.0	4.0			RC C		6.3	600		1	10	500								IM	CO
AL1297		TWA	2.5	3.5			RC C		6.3	700		4	5	500								IM	CO
EM1300		MAG	0.2	0.5		VT	VA C		6.3	860	2200	10	150				14						CO
OKH1302		MAG	16.6	17.1	10	MEC	RA P		6.3	220	12K	9500	35K										WG
AL1304		TWA	7.0	11.0			RC C		6.3	700		750U	4	10	500		30	10				IM	CO
AL1308		TWA	1.5	4.5			RC C		6.3	700		3500	45	500			33					IM	CO
CO1308B		BWO	23.5	37.5		CS	C						20										WG
OKK1308		KLO	9.0	10.0		MEC	RA C																CO
AL1309		TWA	1.9	4.1			RC C		6.3	1400		30	1000	1100								IM	CO
OKW1309		TWA	7.0	11.0	200		RA P		6.3	3500	11K	2000	1K	11K		11K	35					IM	CO
AL1310		TWA	2.6	6.0			RC C		6.3	1350		30	3000	1100								IM	CO
EM1310		MAG	0.5	1.0		VT	EI C		6.3	860	2200	10	150									IM	CO
AL1311		TWA	1.9	4.1			RC C		6.3	1300		35	1000	1100								IM	CO
AL1312		TWA	2.0	4.0			RC C		5.0	500		30	5000	800								IM	CO
OKK1312		KLO	3.6	4.3		MEC	RA C						100										CO
AL1313		TWA	2.0	4.0			RC C		6.3	700		4	10	500								IM	CO
OKK1313		KLO	4.3	5.0		MEC	RA C				300		26	150	280		30			25		RI	WG
AL1314		TWA	2.0	4.0			RC C		6.3	1500		35	2000	1150								IM	CO
OKK1314		KLO	15.4	15.6		MEC	RA C						10										CO
OKK1315		KLO	7.0	11.0		MEC	RA C						15										CO
AL1316		TWA	2.0	4.0	12		RC P		6.3	2500		30	100W	3500								IM	CO
AL1317		TWA	0.8	1.0			RC C		6.3	950		55	20W	1650								IM	CO
AL1318		TWA	2.5	4.5			RC C		5.0	500		70	45W	1400								IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
QK51319		CFA	1.2	1.4				RA P	5.0	500	30A	100K	1000			15						WG
A1320		TWA	2.0	4.0				RC C	6.3	900	20	20W	1000			30				IM		CO
EMI320	=	MAG	0.9	1.8		VT		EI C	6.3	900	12	200										CO
EMI321		MAG	1.5	3.0		VT		VA C	6.3	860	18	650										CO
A1322		TWA	2.0	6.0				RC C	6.3	700	4	10	780			35				IM		CO
A1323		TWA	2.0	6.0				RC C	6.3	1350	30	2000	1600			33				IM		CO
QK1323		MAG	1.0	2.5		VT		VA C	6.3	860	12	400										WG
QK1325		MAG	16.5	16.5		7 FX		RA P	6.3	200	14A	65K								IM		CO
A1327		TWA	2.0	4.0				RC C	6.3	200	3	10	450			36 17						CO
QK1330		TWA	4.0	8.0		200		RA P	6.3	200	1675	10W	1105			40						CO
EMI1331		MAG	2.2	2.3		VT		EI C	6.3	1000	60	42W										CO
QK1331		TWA	8.2	10.0		50		VA C	6.3	860	20	200				35						WG
EMI1332		MAG	2.0	3.0		VT		VA C	6.3	860	20	200										CO
QK51335		CFA	5.5	5.8				RA P	6.3	800	21K	4700	60K									WG
QK1336		TWA	5.0	12.0		200		RA P	6.3	250	11K	1K	4K	90		40						CO
QK51347		CFA	5.5	5.8				RA P	6.3	200	50K	75A	3M			7						WG
A1350		TWA	1.0	2.6				RC C	6.3	200	2	10	500			30 12				IM		CO
A1350V1		TWA	0.8	1.6				RC C	6.3	200	2	10	500			30 13				IM		CO
QK51350		AMA	8.9	9.6		130		RA P	6.3	200	16K	1700	10K			10				IM		WG
A1351		TWA	7.0	11.0				RC C	6.3	250	800U	10	1380			40				IM		CO
A1358		TWA	5.8	6.4				RC C	6.5	1350	27	3000	1500			35				IM		CO
A1359		TWA	4.4	5.0				RC C	5.0	520	40	15W	1050			30				IM		CO
A1360		TWA	4.0	8.0				RC C	6.3	220	2	10	900			30 17				IM		CO
A1361		TWA	4.0	8.0				RC C	6.3	800	2	10	900			30				IM		CO
QK1368		MAG	17.2	17.2		10 FX		RA P	6.3	800	12K	9500	35K									WG
QK1376		KLO	23.0	25.0		FX		RA C	6.3	450	50	100	325					15		RI		WG
KL1379		KLA	5.6	5.8		MEC		RA C	6.0	5000	13K	1200	5K			47		16				WG
QK1381		MAG	2.5			FX		RA C	3.0	12A	4000	300	60W									WG
KL1391		KLO	10.1			FX		RA C	3.5	6200	13K	125	200W			10						WG
QK1392		KLO	10.1			FX		RA C	3.5	6000	10K	85	65W			10						WG
QK1393		KLO	10.0	10.2				RA C	3.5	6000	10K	85	50W			10						WG
TH1452A		MAG	9.3	9.3		20 FX		TV P	12.6	2100	16K	30A	70K					15		IM		WG
CV1475		MAG	3.3	3.4		2 FX		GC P	5.0	2600	26K	40A	450K							2100		WG
CV1476		MAG	3.3	3.3		2 FX		GC P	5.0	2600	26K	40A	450K							2100		WG
CV1477		MAG	3.3	3.3		2 FX		GC P	5.0	2600	26K	40A	450K							2100		WG
CV1478		MAG	3.2	3.3		2 FX		GC P	5.0	2600	26K	40A	450K							2100		WG
CV1479		MAG	3.0	3.1		10 FX		GC P	5.0	2600	27K	35A	450K							2300		WG
CV1480		MAG	3.0	3.0		10 FX		GC P	5.0	2600	27K	35A	450K							2300		WG
CV1481		MAG	3.0	3.0		10 FX		GC P	5.0	2600	27K	35A	450K							2300		WG
CV1482		MAG	3.0	3.0		10 FX		GC P	5.0	2600	27K	35A	450K							2300		WG
CV1483		MAG	3.6	3.6		2 FX		GC P	5.0	2600	27K	40A	400K							2300		WG
CV1484		MAG	3.5	3.6		2 FX		GC P	5.0	2600	27K	40A	400K							2300		WG
CV1485		MAG	3.5	3.5		2 FX		GC P	5.0	2600	27K	40A	400K							2300		WG
CV1486		MAG	3.4	3.5		2 FX		GC P	5.0	2600	27K	40A	400K							2300		WG
CV1495		MAG	3.0	3.0		10 FX		GC P	6.0	1250	22K	22A	200K					7		2050		CO
CV1496		MAG	3.0	3.0		10 FX		GC P	6.0	1250	22K	22A	200K							2050		CO
CV1497		MAG	3.0	3.1		10 FX		GC P	6.0	1250	22K	22A	200K							2050		CO
CV1498		MAG	3.1	3.1		10 FX		GC P	6.0	1250	22K	22A	200K							2050		CO
CV1499		MAG	3.1	3.1		10 FX		GC P	6.0	1250	22K	22A	200K							2050		CO
CV1500		MAG	3.1	3.1		10 FX		GC P	6.0	1250	22K	22A	200K							2050		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		OUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
TV1501		MAG	5.4	5.5	5	FX	TV P	P	9.5	5500	30K	33A	400K						15				
TV1502		MAG	5.4	5.8	12	FX	TV P	C	9.5	5500	28K	30A	250K						15				
TV1542		MAG	3.0	3.0		FX	TV P	C	8.5	9000	45K	90A	2M								1550		SP
SAS1592		KLA	2.9				9	FX	SP P		250K	250A	21M				49			15	20		CO
TH1658B		MAG	3.1	3.1	10	FX	TV P	P	16.0	3100	32K	70A	900K								2750		
TV1658A		MAG	2.9	2.9		FX	TV P	C	16.0	3100	28K	70A	900K								2750		CO
TH1725A		MAG	9.3	9.4	10	FX	TV P	P	6.3	800	15K	15A	40K						15		5400		WG
TH1725B		MAG	9.3	9.5	10	MEC	TV P	P	6.3	800	15K	15A	36K						15		5400		WG
TH1725C		MAG	9.3	9.5	10	MEC	TV P	P	6.3	800	15K	15A	36K						15		5400		WG
TH1725D		MAG	9.3	9.3	10	FX	TV P	P	6.3	800	15K	15A	40K						15				WG
TH1725E		MAG	9.4	9.5	10	FX	TV P	P	6.3	800	15K	15A	40K						15				WG
TV1780A		MAG	8.5	9.6		MEC	TV P	C	13.7	3300	22K	25A	200K								IM		WG
MG2000		MAG	2.4	2.4		FX	TE C		9.0	5000	2400	1350	1K								1100		CO
TV2001		KLA	1.2	1.4		FX	TV P	C	25.0	24A	230K	220A	20M							10			WG
WJ2001		BWO	7.0	12.4		VT	WJ C		6.3	900	200	12	25	100	20	2K				5K	IM		CO
WJ2001-1		BWO	8.2	12.4		VT	WJ C		6.3	900	200	12	50	100	20	2K				4K	IM		WC
MA2002		TWA	5.9	6.4		MA C			6.3	900	2500	40	8000	1700		3K	34	28			IM		WG
MA2003		= TWA	0.3	0.9		MA C			15.0	3000	2200	1600	1K			3K	30				IM		CO
WJ2003		BWO	12.4	18.0		VT	WJ C		6.3	900	200	12	40	100	20	2K				6K	IM		WG
WJ2004		= BWO	9.5	13.0		WJ C						10	10		800								WG
WJ2005		= BWO	4.0	8.0		WJ C			6.5	7500	7500	500	10K		2K					4		4I	WG
F2006		KLA	4.4	5.9		MEC	TV C					12	50		2K								
WJ2006		= BWO	8.0	12.4		WJ C																	
F2008		KLA	0.5	0.6		MEC	CS P				18K	4800	30K				30						
WJ2008		BWO	8.0	12.4		VT	WJ C			800	130	10	225		7	2K					IM		CO
F2009		TWA	4.0	8.0	400	IT P		P	6.3	2500		5	2000	2500		2K	33						
MA2009		= TWA	0.4	1.0		MA C			12.5	2800		650	300W		2K	27							CO
MA2010		= TWA	0.4	0.7		MA C			12.5	2800		800	250W		2K	27							CO
F2011		KLA	3.0	3.0		FX	CS P				40K	15A	50K										
MA2011		TWA	0.7	1.4		MA C			12.6	1700	2200	800	350W				28						
TV2011		= KLA	2.7	3.1	20	TV P		P	25.0	24A	250K	220A	20M						15				WG
CO2012B		BWO	15.5	24.0		CS C					2700	40	400										
MA2012		TWA	2.0	4.0		MA C			12.6	3000	3000	800	300										
TV2012		= KLA	2.7	3.1	42	TV P		P			130K	95A	5M							15			WG
TV2013		KLA	2.7	3.1		FX	TV P		P	25.0	24A	120K	85A	4M						15			5I WG
MA2014		TWA	0.4	1.0		MA C			12.6	4000	2400	1800	1100	2000									WG
TV2014		= KLA	2.7	3.1	20	TV P		P			250K	250A	25M						15				
F2015		KLA	3.0	3.0		FX	CS P				125K	105A	5M										
MA2015		TWA	0.2	0.4		MA C			12.6	4000	2400	1800	1100	2000									
WJ2015		BWO	4.0	8.0		VT	WJ C		6.3	900	135	8	4		7	2K					IM		CO
MA2016		TWA	0.2	0.4		MA C			12.6	2000	500	175	10W										
TV2016		KLA	5			TV P		P	25.0	24A	225K	225A	20M										5I WG
TV2017		KLA	2.7	3.1		MEC	TV P		22.5	22A	135K	105A	5M							60			5I WG
MA2017		TWA	0.5	1.0		MA C			12.6	3000	6000	4500	5K	4500									
WJ2017		= BWO	8.7	11.0		WJ C						12	150			1K							
F2018		TWA	8.0	12.0		IT C			6.3	2000		50	5000	3900							IM		5I WG
TV2018		KLA	2.8	3.3		FX	TV P		22.5	22A	135K	105A	5M							100			
WJ2018		= BWO	2.0	4.0		WJ C						14	70			2K							
F2019		TWA	4.0	8.0		IT C			6.3	2000	3000	65	10W							4K	IM		CO
TV2019		= KLA	2.7	3.1	42	TV P					170K	150A	10M							15			

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, ETC. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
			GHz																				
WJ2019	=	BWO	4.0	8.0				WJ C				12	30			2K	35		100		5I	WG	
TV2020		KLA	2.7	3.1		FX		TV P	25.0	24A	135K	105A	5M										
WJ2020	=	BWO	8.0	12.4				WJ C				12	50			2K							
F2021		KLO	2.9	3.5				CS C	6.3	1000	500	30	200	300						10		RI	WG
WJ2021	=	BWO	12.4	18.0				WJ C				12	40			2K							
F2022		KLO	3.4	3.8				CS C	6.3	1000	850	67	1600	435						25		RI	WG
TV2022		KLA	1.2	1.4		FX		TV P	25.0	24A	230K	220A	20M				50			10		5I	WG
F2023		KLO	3.8	4.0				CS C	6.3	1000	850	67	1500	450						25		RI	WG
TV2023		KLA	1.2	1.4		FX		TV P	25.0	35A	300K	330A	40M				50			10		5I	WG
F2024		KLO	4.0	4.2				CS C	6.3	1000	850	67	1300	400						26		RI	WG
TV2024		KLA	C			FX		TV P	8.0	25A	130K	95A	5M				50			20		5I	WG
WJ2024		BWO	2.0	4.0		VT		WJ C	6.3	800	130	8	250	300		8	1K					IM	CO
F2025		KLO	2.9	3.5				CS C	6.3	1000	500	30	200	300						10		RI	CO
WJ2025		BWO	4.0	8.0		VT		WJ C	6.3	750	100	8	70	435		7	2K		5			IM	CO
F2026		KLO	3.4	3.8				CS C	6.3	1000	850	67	1600	435						25		RI	CO
WJ2026		BWO	8.2	12.4		VT		WJ C	6.3	750	125	8	100	450		10	2K					IM	CO
F2027		KLO	3.8	4.0				CS C	6.3	1000	850	67	1500	450						25		RI	CO
WJ2027		BWO	8.0	12.4		VT		WJ C	6.3	750	150	8	175	400		7	1K					IM	CO
F2028		KLO	4.0	4.2				CS C	6.3	1000	850	67	1300	400						26		RI	CO
TV2028		KLA	2.7	3.1		FX		TV P	25.0	24A	240K	235A	25M				50			15		5I	WG
WJ2028		BWO	12.4	18.0		VT		WJ C	6.3	750	150	8	85	300		10	2K					IM	CO
F2029		TWA	2.7	2.9	50			IT P	6.3	4000		1800	2K	8000			8K	35				IM	CO
WJ2029		BWO	14.0	17.0		VT		WJ C	6.3	750	150	7	30	300		10	760					IM	CO
F2030		KLO	2.9	3.5				CS C	6.3	1000	500	30	200	300						10		RI	WG
WJ2030		BWO	4.0	8.0		VT		WJ C	6.3	750	100	8	150	300		7	2K					IM	CO
F2031		KLO	2.9	3.5				CS C	6.3	1000	500	30	200	300						10		RI	WG
WJ2031	=	BWO	8.0	12.4				WJ C				14	100			2K							
WJ2031-2	=	BWO	2.1	4.2				WJ C				14	60			1K							
F2032		TWA	5.4	5.9	50			IT P	6.3	4000		1800	4K	12K			12K	28					
F2032		KLO	3.4	3.8				CS C	6.3	1000	850	67	1600	435						25		RI	WG
F2033		KLO	3.8	4.0				CS C	6.3	1000	850	67	1500	450						25		RI	WG
WJ2034	=	BWO	4.0	8.0				WJ C	6.3	1000	850	14	60			2K							
F2036		TWA	1.8	4.0				IT C	6.3	2500		70	10W	1400			1K	30					CO
F2040		KLA	3.0	3.0				CS P			260K	265A	25M				50						
F2041		TWA	7.0	11.0	100			IT P	6.3	4000		1800	1K	10K	100	10K	33						
F2042		KLA	2.9	2.9		FX		CS P	23.0	11A	280K	250A	30M				54					5E	CO
F2043		KLA	3.0	3.0		FX		CS P	9.0	70A	250K	230A	20M				40					4E	CO
F2047		KLA	1.4	1.4		FX		CS P	7.7	12A	12K	2600	10K				40					4E	CO
F2048		TWA	7.0	11.0	50			IT P	6.3	4000		1800	1K	10K	100	10K	33						
F2049		KLA	2.8	2.8		FX		CS P	23.0	11A	280K	250A	30M				54					5E	CO
TV2053		KLA	C					TV P	8.0	25A			5M										
F2055		BWO	1.0	2.6				IT C	6.3	1000			10			125	2K						
F2056		BWO	2.3	4.5				IT C	6.3	1000			10			125	2K						
F2057		TWA	2.0	4.0	100			IT P	6.3	3000	8000	2000	1K	8000			30					IM	CO
F2058		TWA	2.9	3.1	100			IT P	6.3	3000	8000	2000	1K	8000			30					IM	CO
F2060		TWA	3.4	3.6	100			IT P	6.3	3000	8000	2000	2K	8000			32					IM	CO
F2061		TWA	2.9	3.1	200			IT P	6.3	3000	8000	2000	1K	8000			30					IM	CO
F2062		TWA	2.0	4.0	100			IT P	6.3	3000	8000	2000	1K	8000	100							IM	CO
F2063		TWA	2.5	4.0	100			IT P	6.3	3000	8000	2000	1K	8000	100							IM	CO
F2064		TWA	2.8	3.5	100			IT P	6.3	3000	8000	2000	1K	8000	100							IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM DR	I _k	P _o	REFLECTOR	CONTROL	HEXIS	GAIN	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
F2065		TWA	2.0	4.0	100		IT	P	6.3	3000	8000	2000	1K	8000			31			IM		CO
F2072	=	TWA	8.0	12.0		VT	IT	C	6.3	1500	4200	60	10W		400		30			IM		CO
F2073		TWA	2.9	3.1	200		IT	P	6.3	3000		1500	2K	7500		8K	33			IM		CO
F2075		TWA	1.1	1.8			IT	C	6.3	3200		40	2000	1000	35	1K	45			IM		CO
F2076		BWO	5.6	5.8			IT	C	6.3	1000			400	100	20	2K				IM		CO
F2084	=	TWA	5.4	11.0			IT	C	6.3	1250	3600	70	10W	2000	800	200	60	40		IM		CO
F2085		TWA	7.0	11.0	100		IT	C	6.3	2300	12K	1600	1K		300	36				IM		CO
F2086	=	TWA	2.0	16.0			IT	C	6.3	1250	3200	70	2000	2000	800	200	40	40		IM		CO
F2087	=	TWA	8.2	12.4			IT	C	6.3	1250	3600	70	15W	1500	800	200	60	40		IM		CO
F2088	=	TWA	8.5	9.6			IT	C	6.3	1250	3600	70	25W	2000	800	200	65	40		IM		CO
F2090	=	TWA	7.0	11.0			IT	C	6.3	1670	3600	70	10W		450	43	33			IM		CO
F2095	=	TWA	6.0	8.0		VT	IT	P	6.3	2300	12K	1400	1K		90	36				IM		CO
M2102C		TWA	1.0	2.0			EC	C	6.3	250	400	2	5		50	500	25	15		IM		CO
TV2102		KLA	5				TV	P	6.3	7000	25K	8000	25K		35					6I	WG	
M2102G		TWA	1.0	2.6			EC	C	6.3	230	400	2	5		50	500	25	13		IM		CO
TV2103		KLA	5				TV	P	6.3	7000	25K	8000	35K		35					6I	WG	
M2105H		TWA	5.5	11.0			EC	C	6.3	230	700	2	10		50	1K	20	17		IM		CO
M2105J		TWA	7.0	11.0			EC	C	6.3	250	600	2	10		50	1K	30	11		IM		CO
M2106G	=	TWA	7.0	11.0			EC	C	6.3	230	800	2	10	1200		50	1K	33	20		IM	CO
M2106I		TWA	7.0	10.8			EC	C	6.3	250	800	2	10		50	1K	30	15		IM		CO
M2106J		TWA	7.0	10.8			EC	C	6.3	250	800	2	10		50	1K	30	20		IM		CO
TV2107		KLA	2.7	3.1			TV	P	6.3	250	800	2	10		50	1K	30	20	20		IM	CO
TV2110		KLO	2.4	2.4		FX	TV	C	6.3	20A	19K	5300	25K									CO
CV2111		MAG	9.8	9.9		5 FX	GC	P	6.3	1300	14K	10A	50K					13		3250		WG
CV2112		MAG	9.8	9.8		5 FX	GC	P	6.3	1300	14K	10A	50K					13		3250		WG
CV2113		MAG	9.7	9.7		5 FX	GC	P	6.3	1300	14K	10A	50K					13		3250		WG
CV2114		MAG	9.6	9.7		5 FX	GC	P	6.3	1300	14K	10A	50K					13		3250		WG
M2116C		TWA	34.5	35.5			EC	C	6.3	250	1750	2	4		50	3K	20	25		IM		WG
TV2125CB		KLO	4.4	5.0		MEC	TV	C	6.3	1250	1000	110	1800	750						RI	WG	
TV2151		KLA	0.8	1.0		MEC	TV	C	6.0	16A	13K	3000	10K			40		10		41	CO	
SRU2161		KLO	16.0	17.0		MEC	SP	C	6.3	600	300	35	45	180						RI		WG
SOV2200	=	KLO	31.0	40.0			SP	C	6.3	500	1500	65	1000							RI		WG
TL2200/O1		TWA	1.7	2.1			TE	C	11.0	3800		1200	1K	4800								
M2201A	=	TWA	7.0	12.4			EC	C	6.3	230	450	3	10	1200		1K	25	30		400		CO
M2201B	=	TWA	8.0	12.4			EC	C	6.3	230	435	3	10	1200		1K	30	30		400		CO
M2201BA		TWA	8.0	12.4			EC	C	6.3	300	500	3	10			1K	30	30		IM		CO
M2201BB		TWA	8.0	12.4			EC	C	6.3	300	500	3	10			1K	30	30		IM		CO
M2201C	=	TWA	8.0	11.0			EC	C	6.3	230	450	3	10	1200		1K	30	30		400		CO
M2201E		TWA	8.0	12.4			EC	C	6.3	230	450	3	10			1K	30	30		400		CO
M2201H		TWA	8.0	12.4			EC	C	6.3	300	500	3	50			1K	30	30		IM		CO
M2201K		TWA	7.0	12.4			EC	C	6.3	230	500	3	20			1K	30	30		400		CO
M2201L		TWA	7.0	11.0			EC	C	6.3	300	500	3	10			1K	33	30		IM		CO
M2201M		TWA	7.0	11.0			EC	C	6.3	300	500	3	10			1K	30	30		IM		CO
SOV2201		KLO	39.5		FX		SP	C	6.3	600	1500	250		800						2I	WG	
M2203B	=	TWA	4.0	8.0			EC	C	6.3	230	450	3	10		800	20			2K	400		CO
M2203E		TWA	5.0	6.5			EC	C	6.3	230	450	3										CO
M2204AE		TWA	9.0	10.2			EC	C	6.3	300	500	3	3		900	30				IM		CO
M2204AF		TWA	7.5	8.5			EC	C	6.3	300	500	3	3		1K	15				400		CO
M2204AG		TWA	10.2	10.5			EC	C	6.3	300	500	3	3		1K	18				400		CO
M2204E		TWA	9.0	10.0			EC	C	6.3	300	500	3	3		1K	30				400		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, &c VOLTS	CONTROL VOLTS	HEATX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
M2204FE		TWA	9.0	10.2				EC C			450	3									IM		CO
M2204FG		TWA	10.2	10.5				EC C			450	3									IM		CO
M2207A	=	TWA	4.0	8.0				EC C	6.3	230	450	3	10	800							400		CO
M2207E		TWA	4.0	8.0				EC C	6.3	250	500	3	10								IM		WG
M2207G		TWA	4.0	8.0				EC C	6.3	230	500	3	10								400		CO
M2207H		TWA	4.0	8.0				EC C	6.3	230	500	3	20								IM		CO
M2208A		TWA	12.4	18.0				EC C	6.3	230	600	4	10								400		WG
M2208B		TWA	12.4	18.0				EC C	6.3	230	500	4	10								IM		WG
TV2211	=	KLO	10.5	13.5				TV C	6.3	1500	775	80	500	500									RI WG
TV2212ABCD		KLO	10.7	12.7				MEC TV C	6.3	700	750	65	500										RI WG
TV2213		KLO	5.9	7.8				MEC TV C	6.3	800	750	80	1000										RI WG
TV2217H		KLO	8.5	9.6				MEC TV C	6.3	1200	350	45	20	500									RI WG
TV2218		KLO	10.5					FX TV C	6.3	1200	500	26	500										RI WG
TV2219		KLO	9.5	10.9				MEC TV C	6.3	1200	350	35	100										RI WG
STL2221		TWA	1.0	2.0				SP C	6.3	3200	1000	35	2000		30		50	35			IM		
SOX2391		KLO	9.5	11.0				FX SP C	6.3	600	4500	30	3000										21 WG
SOX2392		KLO	9.5	11.0				FX SP C	6.3	600	4900	40	10W										21 WG
SOX2394		KLO	X					FX SP C	6.3	600	4300	30	3000										21 WG
M2403E		TWA	7.0	11.0				EC C	6.3	500	2500	30	2000		50		2K	30	35		IM		CO
M2403F		TWA	7.0	12.4				EC C	6.3	500	2500	30	1000		50		2K	30	35		1000		CO
M2403H		TWA	7.0	11.0				EC C	6.3	500	2000	30	2000		50		2K	30	35		IM		CO
M2403I		TWA	8.0	12.4				EC C	6.3	500	2000	30	1000		50		2K	30	35		IM		CO
M2403KA		TWA	7.0	11.0				EC C	6.3	500	2000	30	1000		50		2K	30	35		IM		CO
M2403L		TWA	7.0	12.4				EC C	6.3	500	2000	30	1000		50		2K	30	35		IM		CO
M2403LB		TWA	7.0	12.4				EC C	6.3	500	2000	30	1000		50		2K	30	35		IM		CO
M2403LC		TWA	8.0	12.4				EC C	6.3	500	2000	30	2000		50		2K	30	35		IM		CO
M2403O		TWA	7.0	12.4				EC C	6.3	500	2000	30	1000		50		2K	30	35		IM		CO
M2404F		TWA	7.0	11.0				EC C	6.3	500	3600	50	5000		50		4K	30	35		IM		CO
M2404G		TWA	7.0	10.0				EC C	6.3	500	3600	60	10W		50		4K	30	35		1250		CO
M2404GA		TWA	7.0	8.0				EC C	6.3	500		60	10W		50		4K	30	35		1200		CO
M2404H		TWA	7.0	11.0				EC C	6.3	500	3600	60	5000		50		4K	30	35		1200		CO
M2404I		TWA	8.0	12.4				EC C	6.3	500	3600	60	2000		50		4K	30	35		1200		CO
M2404K		TWA	8.0	11.0				EC C	6.3	500	3600	60	10W		50		4K	30	35		1250		CO
M2404KA		TWA	8.0	11.0				EC C	6.3	500	3600	60	10W		50		4K	30	35		1200		CO
M2404L		TWA	7.0	11.0				EC C	6.3	500	3600	60	10W		50		4K	30	35		IM		CO
M2404M		TWA	7.1	8.5				EC C	6.3	500	3600	60	10				4K	35	35		IM		CO
M2404N		TWA	8.0	9.6				EC C	6.3	500	3600	60	10W		50		4K	30	35		1200		CO
M2404O		TWA	7.0	11.0				EC C	6.3	500	3600	60	5000		50		4K	30	35		1200		CO
M2404P		TWA	8.0	12.4				EC C	6.3	500	3600	60	2000		50		4K	30	35		1200		CO
M2404PA		TWA	11.0	12.4				EC C	6.3	500	3500		5000		50		4K	30	35		IM		CO
M2404Q		TWA	7.0	11.0				EC C	6.3	500	3500		10W		50		4K	30	35		IM		CO
M2405A		TWA	12.4	18.0				EC C	6.3	500	3300	30	1000		50		3K	30	35		1200		WG
M2405B		TWA	12.4	18.0				EC C	6.3	500	3300	35	1000		50		3K	30	35		IM		WG
M2405BA		TWA	14.0	18.0				EC C	6.3	500		35	2000		50		3K	30	35		IM		WG
M2405BB		TWA	12.4	18.0				EC C	6.3	500		40	2000		50		3K	30	35		IM		WG
M2405DA		TWA	10.0	20.0				EC C	6.3	500		35	1000		50		3K	30	35		IM		WG
M2405E		TWA	12.4	18.0				EC C	6.3	500	3300	30	5000		50		3K	30	35		IM		WG
M2405F		TWA	12.4	18.0				EC C	6.3	500	3300	30	1000		50		3K	30	35		1200		WG
M2405H		TWA	10.0	20.0				EC C	6.3	500	2500	35	1000		50		3K	30	35		IM		WG
M2407A		TWA	4.0	8.0				EC C	6.3	500	2500	30	1000		50		2K	30	35		800		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MACNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																				
M2407B		TWA	4.5	6.5				EC C	6.3	500	2500	30	2000		50	2K	30	35			IM		CO	
M2407BA		TWA	5.4	5.9				EC C	6.3	500	2000	30	1000		50	2K	30	35			IM		CO	
M2407BB		TWA	4.0	8.0				EC C	6.3	500	2000	30	1000		50	2K	30	35			IM		CO	
M2407C		TWA	5.0	6.0				EC C	6.3	500	2000	30	5000		50	2K	30	35			IM		CO	
M2407CA		TWA	5.0	6.0				EC C	6.3	500	2000	30	5000		50	2K	30	35			IM		CO	
M2407CB		TWA	6.3	6.5				EC C	6.3	500	2000	30	5000		50	2K	30	35			IM		CO	
M2407D		TWA	4.0	8.0				EC C	6.3	500	2000	30	1000		50	2K	30	35			IM		CO	
M2407DB		TWA	4.0	8.0				EC C	6.3	500	2000	30	1000		50	2K	30	35			IM		CO	
M2407DC		TWA	4.0	8.0				EC C	6.3	500	2000	30	2000		50	2K	30	35			IM		CO	
M2407GA		TWA	4.0	8.0				EC C	6.3	500	2000	30	2000		50	2K	30	35			IM		CO	
M24110		TWA	7.5	11.0				EC C	6.3	500	2000	20	1000			3K	30	35			IM		WG	
TV2412		KLO	5.1	5.9			MEC	TV C	6.3	440	350	35	70	350							RI		WG	
F2507		= BWO	1.8	2.8			VT	IT C	6.3	1080	250	15	190	150	30	200					IM		CO	
F2508		BWO	1.0	2.0			VT	IT C	6.3	960	250	25	300	150	30						IM		CO	
F2508A		BWO	1.0	2.0			VT	IT C	6.3	1080	250	25	800	150	30						IM		CO	
F2509		BWO	2.0	4.0			VT	IT C	6.3	960	250	15	250	150	30						IM		CO	
F2509A		BWO	2.0	4.0			VT	IT C	6.3	1080	250	15	250	150	30						IM		CO	
F2510		BWO	4.0	8.2			VT	IT C	6.3	1080	250	15	175	150	30						IM		CO	
F2510A		BWO	4.0	8.2			VT	IT C	6.3	1080	250	15	175	150	30						IM		CO	
F2511		BWO	8.0	12.4			VT	IT C	6.3	960	250	12	130	150	30						IM		CO	
F2512		= BWO	3.6	7.2			VT	IT C	6.3	1080	250	15	200	150	30						IM		CO	
F2516		= BWO	5.3	10.3			VT	IT C	6.3	1080	250	15	200	150	30						IM		CO	
F2517		BWO	3.7	5.5			VT	IT C	6.3	980	250	20	250	150	30	1K					IM		CO	
F2518		BWO	6.6	8.7			VT	IT C	6.3	970	250	12	150	150	30	1K					IM		CO	
F2520		BWO	7.0	12.4			VT	IT C	6.3	960	250	12	150	150	30						IM		CO	
F2520A		BWO	7.0	12.4			VT	IT C	6.3	1080	250	15	150	150	30						IM		CO	
F2521		BWO	5.4	5.9			VT	IT C	6.3	960	250	25	480	150	30						IM		CO	
F2547		= BWO	7.0	11.0			VT	IT C	6.3	960	200	25	100	100	30	1K					IM		CO	
F2552		= TWA	7.0	11.0			IT C	IT C	6.3	1250	3600	70	20W	3200	800	200	65	40			IM		CO	
F2554		= BWO	8.0	12.4			VT	IT C	6.3	960	150	12	100	100	30	2K					IM		CO	
F2555		= BWO	4.0	8.0			VT	IT C	6.3	960	200	15	100	100	30	2K					IM		CO	
MA2600		= KLA	3.1	3.5	250		MEC	MA P	7.0	17A	16K	1940	10K				43						WG	
F2900		= KLO	33.0	38.0			FX	IT C	6.3	1200	2500	50	1000	1000	100					35		RI	WG	
F2904		= KLO	28.0	33.0			FX	IT C	6.3	1200	2500	50	1000	1000	100					30		RI	WG	
F2905		= KLO	33.0	38.0			FX	IT C	6.3	1200	2500	50	1000	1000	100					35		RI	WG	
F2906		= KLO	28.0	33.0			FX	IT C	6.3	1200	2500	50	1000	1000	100					30		RI	WG	
SOK2920		KLO	18.0	26.5			FX	SP C	6.3	550	1150	45	600							25		21	WG	
SOK2921		KLO	24.0				FX	SP C	6.3	600	1200	45	600									21	WG	
SOK2922		KLO	21.6				FX	SP C	6.3	700	1450	70	800									21	WG	
SOK2924		KLO	25.0				FX	SP C	5.0	550	1300	50	1000									21	WG	
SOK2925		KLO	21.7				FX	SP C	6.3	600	1850		4000										21	WG
SOK2926		KLO	25.0				FX	SP C	6.3	600	1250	48	600										21	WG
STA2971		TWA	8.0	9.6				SP C	6.3	2000	2500	40	5500		250		36	35			IM		CO	
SBA2980		BWO	8.0	12.0				SP C	6.3	400	1100	8	15	400							IM		CO	
K3001		KLO	8.5	9.0			MEC	EE C	6.3	600	350	50	70							40		RI	WG	
K3002		KLO	9.0	9.5			MEC	EE C	6.3	600	350	50	70	400						40		RI	WG	
X3002		KLA	1.2	1.4	300		MEC	EI P	7.5	5500	13K	1120	4K		50		23					31	CO	
K3003		KLO	9.3	9.5			MEC	EE C	6.3	600	350	35	70	500						50		RI	WG	
K3004		KLA	0.5	0.6			MEC	EE C	5.5	42A	12K	3000	8000				38					4E	CO	
K3005		KLA	0.6	0.7			MEC	EE C	5.5	42A	12K	3000	8000				38					4E	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR, REF. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	
			MIN	MAX																			
K3006		KLA	0.7	0.9		MEC	EE	C	5.5	42A	12K	3000	8000					38			4E	CO	
K3007		KLO	9.3	9.4		MEC	EE	C	6.3	600	375	45	40	500					32		RI	WG	
K3014		KLA	0.5	0.6		MEC	EE	C	7.0	50A	20K	6000	25K					42			4E	CO	
K3015		KLA	0.6	0.7		MEC	EE	C	7.0	50A	20K	6000	25K					42			4E	CO	
K3016		KLA	0.7	0.9		MEC	EE	C	7.0	50A	20K	6000	25K					42			4E	CO	
K3017		KLA	0.5	0.6		MEC	EE	C	8.5	44A	23K	7000	45K					40			4E	CO	
K3018		KLA	0.6	0.7	15	MEC	EE	C	8.5	44A	23K	7000	45K					40			4E	CO	
K3019		KLA	0.7	0.9		MEC	EE	C	8.5	44A	23K	7000	45K								RI	WG	
K3020		KLO	9.3	9.5		MEC	EE	C	6.3	600	350	28	45						40				
L3023	=	MAG	9.3	9.3	300	FX	LI	P	6.3	1000	5800	3800	7K										
L3028D		MAG	9.2	9.3	20	FX	LI	P	6.3	500	7500	550	120W						20	2	IM	WG	
L3029A		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	2	IM	WG	
L3029B		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	2	IM	WG	
L3029C		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	2	IM	WG	
L3029D		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	2	IM	WG	
L3030		MAG	9.4	9.4	10	FX	LI	P	13.8	3500	29K	28A	300K						20		IM	WG	
L3030B		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	28K	28A	300K						15	3	IM	WG	
L3030C		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	28K	28A	300K						15	3	IM	WG	
L3030D		MAG	9.4	9.4	10	FX	LI	P	13.8	3500	28K	28A	300K						15	3	IM	WG	
X3034		TWA	1.7	2.1			EI	C	5.6	3800	13K	1000	1K				25					CO	
L3035		KLA	1.2	1.4	30	MEC	LI	P	16.0	8000	115K	78A	2M				36				IM	3I	WG
L3036A	=	MAG	9.4	9.4	10	FX	LI	P	12.6	2300	15K	15A	65K					15	2	IM	WG		
L3036B	=	MAG	9.3	9.3	10	FX	LI	P	12.6	2300	15K	15A	65K					15	2	IM	WG		
L3036F	=	MAG	9.2	9.2	10	FX	LI	P	12.6	2300	15K	15A	65K					15	2	IM	WG		
L3039A		MAG	8.8	8.8	10	FX	LI	P	13.8	3300	22K	28A	225K					15	2	IM	WG		
L3039D		MAG	8.8	8.8	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039E		MAG	8.9	8.9	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039F		MAG	8.9	8.9	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039G		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039H		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039I		MAG	9.1	9.1	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039J		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039K		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039L		MAG	9.3	9.3	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039M		MAG	9.3	9.3	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039N		MAG	9.4	9.4	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039P	=	MAG	9.4	9.4	10	FX	LI	P	13.8	3200	22K	28A	225K					15	2	IM	WG		
L3039R	=	MAG	8.8	8.8	100	FX	LI	P	13.8	3350	22K	28A	225K						15	2	IM	WG	
X3039		KLA	1.2	1.4			EI	C			180K	167A	10M				33		100		7I	WG	
X3050		KLA	7.2	8.4		MEC	EI	C	11.0	3400	20K	3000	20K				43		50		5I	WG	
X3051		KLA	2.8	2.8	11	FX	EI	P	15.0	15A	250K	250A	24M				50				IM	WG	
X3052		KLA	5.7	6.4		MEC	EI	C	11.0	3400	20K	3000	20K						40		5I	WG	
X3054		KLA	5.9	6.4		MEC	EI	C	5.8	3700	8500	850	3K				56				IM	5I	WG
L3058		MAG	9.3	9.3	10	FX	LI	P	6.3	500	2900	1500	1K					20	3	IM			
X3060		KLA	2.1	2.4		MEC	EI	C	13.0	5000	36K	6800	100K				50		15		5I	WG	
X3064		KLA	2.3	2.3		FX	EI	C	6.3	500	3000	120	100W				30		30		7I	CO	
X3065		KLA	2.1	2.1		FX	EI	C	6.3	1000	3500	144	200W				30		7		4I	CO	
X3066		KLA	8.0	8.0		FX	EI	C	13.0	5000	36K	6800	100K						320		5I	WG	
E3080		TWA	0.4	0.7			GC	C					3500				3K	30			IM	CO	
L3083A	=	MAG	16.0	17.0	10	MEC	LI	P	12.6	2400	17K	16A	60K						18	2	IM	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIOT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY
			MIN	MAX																		
L3087A		MAG	9.2	9.3	20	FX	LI	P	5.0	700	910	600	120W							3	IM	
L3089B		MAG	8.8	8.8	25	FX	LI	P	6.3	900	900	240	40W							5	IM	
L3101A		MAG	16.0	17.0	10	MEC	LI	P	12.6	2400	17K	16A	60K						18	2	IM	WG
L3103		MAG	8.5	9.6	20	MEC	LI	P	12.6	2300	12K	10A	30K						15	2	IM	WG
L3105		MAG	9.3	9.3	270	FX	LI	P	6.3	500	900	550	100W						20	3	IM	WG
L3106		MAG	8.5	9.6	10	MEC	LI	P	12.6	2300	15K	15A	65K						15	2	IM	WG
L3106A		MAG	8.5	9.6	10	MEC	LI	P	12.6	2300	15K	15A	65K						15	2	IM	WG
L3107		MAG	9.4	9.4	10	FX	LI	P	13.8	3370	23K	28A	225K						15	2	IM	WG
L3154		MAG	9.5	9.5	10	FX	LI	P	13.8	3200	22K	28A	225K						15	2	IM	WG
L3156		MAG	9.4	9.4	20	FX	LI	P	13.8	3200	20K	16A	112K						15	6	IM	WG
L3168		MAG	9.4	9.4	20	FX	LI	P	12.6	2300	12K	10A	30K						15	2	IM	WG
L3180		MAG	9.2	9.2	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3181		MAG	9.2	9.2	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3187		MAG	9.2	9.2	20	FX	LI	P	6.3	700	800	550	120W						20	2	IM	WG
L3189		MAG	2.4	2.4		FX	LI	C					1K							3		
L3212		MAG	9.0	9.0	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3213		MAG	9.0	9.1	270	MEC	LI	P	6.3	500	900	600	120W						20	2	IM	WG
L3214		MAG	9.1	9.1	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3218		MAG	9.1	9.1	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3225		MAG	9.3	9.3	30	FX	LI	P	6.3	500	2800	1330	1K						20	3	IM	WG
L3226		MAG	9.1	9.2	20	FX	LI	P	6.3	500	800	550	120W						20	2	IM	WG
L3227		KLA	1.2	1.4	20	VT	LI	P	16.0	8000	136K	100A	5000				30		20	2	IM	WG
L3238		MAG	9.3	9.3	30	FX	LI	P	6.3	500	28K	1330	1K						20	3	IM	WG
L3239		MAG	9.3	9.3	30	FX	LI	P	6.3	500	3400	2250	2K						20	3	IM	WG
L3250		KLA	1.2	1.4	15	MEC	LI	P	16.0	8200	250K	200	10M				36		20	3	IM	WG
L3257		KLA	1.3	1.3	3		LI	P	16.0	8000	136K	100A	4000				31					31
L3258		MAG	9.3	9.3	10	FX	LI	P	6.3	900	3750	3750	4K						20	3	IM	WG
L3270		KLO	1.2	1.4	30		LI	P	17.0	2000	115K	10W	2M						15	100	IM	WG
L3312		MAG	8.5	9.6	10	FX	LI	P	13.8	3000	23K	28A	200K						20		IM	WG
L3314		MAG	9.0	9.0	270	FX	LI	P	6.3	500	925	600	100W						20		IM	WG
L3323		KLA	1.2	1.4	20		LI	P	17.0	20A	185K	190A	10M				36		100			WG
L3326		MAG	16.5	16.5	10	FX	LI	P	12.6	2400	17K	16A	60K								IM	WG
L3327		MAG	9.3	9.3	20	FX	LI	P	6.3	500	8000	550	120W						20	3	IM	WG
L3358		MAG	16.0	16.5	10		LI	P	6.3	1000	35K	2000	1K						21	2	IM	WG
L3359		MAG	16.0	16.5	10		LI	P	6.3	1000	35K	2750	2K						21	2	IM	WG
L3379		MAG	8.8	9.5	30	FX	LI	P	6.3	900	3350	1150	1K						20	2	IM	WG
L3380		MAG	8.8	9.5	20	FX	LI	P	6.3	900	3450	2250	2K						20	2	IM	WG
L3381		MAG	8.8	9.5	10	FX	LI	P	6.3	900	3600	3250	3K						18	2	IM	WG
L3382		MAG	8.8	9.5	10	FX	LI	P	6.3	900	4000	4000	4K						20	2	IM	WG
L3383		MAG	16.2	16.3	30	FX	LI	P	6.3	950	3000	2000	1K								IM	WG
L3384		MAG	9.2	9.3	30	FX	LI	P	6.3	500	2800	1330	1K						20	3	IM	WG
L3401		KLA	1.2	1.4	600	MEC	LI	P	24.0	15A	140K	120A	5M				35					WG
L3403		KLA	0.4	0.4	600	MEC	LI	P	32.0	22A	120K	37A	1M				35					WG
L3429		MAG	9.3	9.3	20	FX	LI	P	6.3	900	13K	2200	1K						20	2		WG
L3431		MAG	9.4	9.4	10	FX	LI	P	6.3	1300	7000	7000	18K						20		IM	WG
L3434		MAG	9.9	9.9	100	FX	LI	P	6.3	500	800	550	100W						20	3	IM	WG
L3436		MAG	9.6	9.6	270	FX	LI	P	6.3	500	925	600	100W						20	3	IM	WG
L3452		MAG	16.2	16.2	30	FX	LI	P	6.3	950	3600	2750	2K						20	2	IM	WG
L3455		MAG	0.4	0.4	20	MEC	LI	P	6.5	55A	97A	2M										WG
L3460		MAG	2.4	3.6		MEC	LI	C	6.0	15A	4500	800	850W						20	2	IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTAGE	HEAT SINK VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
L3461		MAG	3.6	5.0		MEC	LI	C	6.0	15A	4300	800 600W						20	2	IM		WG
L3462		MAG	7.3	8.8		MEC	LI	C	6.0	15A	4800	800 400W						35	2	IM		WG
L3463		MAG	8.8	10.5		MEC	LI	C	6.0	15A	4800	800 350W						47	2	IM		WG
L3464		MAG	1.5	2.4		MEC	LI	C	6.0	15A	4300	800 600W						15	2	IM		CO
L3465		MAG	1.0	1.5		MEC	LI	C	6.0	15A	4300	800 850W						10	2	IM		CO
L3467		MAG	5.0	6.2		MEC	LI	C	6.0	15A	4800	800 600W						25	2	IM		WG
L3468		MAG	6.2	7.3		MEC	LI	C	6.0	15A	4800	800 500W						25	2	IM		WG
L3469		MAG	9.4	9.4	100	FX	LI	P	12.6	500	7250	20K										WG
L3470		TWA	4.0	8.0			LI	C	6.3	700	900	3	20						4K			WG
L3471		TWA	4.0	8.0			LI	C	6.3	1100	2300	35 2000										CO
L3472		TWA	8.5	9.6			LI	C	6.3	1200	3000	60 10W										CO
L3486		KLA	1.2	1.4	680	VT	LI	P	16.0	8300	45	22A 250U										
L3496		= MAG	16.0	16.5	30	FX	LI	P	6.3	700	3000	1600 1K										WG
L3498		= MAG	16.3	16.3	30	FX	LI	P	6.3	950	3600	2750 2K										WG
L3499		= TWA	2.0	4.0			LI	C	6.3	1500	1000	35 2000										CO
L3502		MAG	1.0	1.5		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3503		MAG	1.5	2.4		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3504		MAG	2.4	3.6		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3505		MAG	3.6	5.0		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3506		MAG	5.0	6.2		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3507		MAG	7.2	7.3		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3508		MAG	7.3	8.8		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3509		MAG	8.8	10.5		MEC	LI	C	5.5	17A	3200	130 110W										WG
L3531		MAG	9.4	9.4	10	FX	LI	P	6.3	1000	8000	8500 20K						20				WG
L3601		MAG	9.3	9.3	20	FX	LI	P	6.3	500	825	550 170W						20	2			WG
L3602		MAG	8.6	8.6	200	FX	LI	P	6.3	500	550	300 30W										
L3603		MAG	9.3	9.3	200	FX	LI	P	6.3	900	1300	1300 500W						20	2			WG
L3604		MAG	9.3	9.3	30		LI	P	6.3	500	2800	1330 1K						20	2			WG
L3605		MAG	9.3	9.3	10	FX	LI	P	6.3	500	3600	3150 3K						20	2			WG
L3606		= MAG	9.3	9.3	100	FX	LI	P	6.3	1000	1300	1300 500W										
L3611		TWA	7.0	11.0			LI	C	6.3	700	1500	2 20							4K			CO
L3612		TWA	7.0	11.0			LI	C	6.3	1100	2500	30 2000							4K			CO
L3613		MAG	9.4	9.4	10	FX	LI	P	13.8	3350	21K	28A 225K										
L3614		TWA	8.0	11.0	200		LI	P	6.3	1700	11K	2000 1K										CO
L3616		= MAG	9.4	9.4	270	MEC	LI	P	6.3	500	900	650 120W						20				WG
L3617		KLA	2.9	2.9	30	FX	LI	P	16.0	8A	160K	128A 5M										WG
L3618		= KLO	2.9	2.9	20	FX	LI	P	16.0	14A	285K	285A 25M										WG
L3628		= KLO	35.0	35.0		MEC	LI	C	6.3	2000	4000	150 10W										WG
L3629		= KLO	35.0	35.0		FX	LI	C	6.3	2000	4000	150 15W										WG
L3630		= KLO	23.0	23.0		FX	LI	C	6.3	2100	4000	150 10W										WG
L3631		= KLO	23.0	23.0		MEC	LI	C	6.3	2100	4000	150 8000										WG
L3635		= KLO	9.4	9.4	200	FX	LI	P	6.3	1300	6000	6000 10K										WG
L3638		= KLO	74.0	74.0		FX	LI	C	6.3	2000	4000	150 100										WG
L3639		= KLO	74.0	74.0		FX	LI	C	6.3	2000	4000	150 500										WG
L3640		= KLO	50.0	50.0		FX	LI	C	6.3	2000	4000	150 1000										WG
L3642		= KLO	23.0	23.0		MEC	LI	C	6.3	2200	3500	30 100 1000 100							60			RI
L3645		= MAG	16.2	16.2	100	FX	LI	P	6.3	950	4000	3750 4K										WG
L3647		KLO	2.8	2.8	100		LI	P	6.3			140K 119A 5M							100			WG
L3652		CFA	8.5	10.5			LI	P	6.3			7500 500 750W										WG
L3652C		CFA	8.5	10.5			LI	C	6.3			2500 5 750W										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
L3654	=	MAG	9.4	9.4	10	FX	LI	P	6.3	1300	8000	8250	24K								IM		WG
L3657		TWA	4.0	8.0			LI	C	6.3	1200	2500	55	10W				33						CO
L3659	=	KLO	35.0	35.0		MEC	LI	C	6.3	2000	4000	150	5000	1K									WG
L3660		KLA	1.3	1.3	20	FX	LI	P	17.0	20A	180K	175A	10M				33						
L3661		KLA	1.2	1.4	15	FX	LI	P	17.0	20A	265K	260A	20M				36						
L3663		TWA	2.0	4.0			LI	C	6.3	1500	1750	80	10W				33				IM		CO
L3668H		KLA	2.8	2.8		FX	LI				26K	4200	35K				30			15			
L3674		TWA	0.4	0.4	600		LI	P									37				IM		CO
L3689	=	KLO	74.0	74.0		MEC	LI	C	6.3	2000	4000	150	500	1K									WG
L3690	=	KLO	74.0	74.0		MEC	LI	C	6.3	2000	7000	150	100	1K									WG
L3691	=	KLO	74.0	74.0		MEC	LI	C	6.3	2300	4200	150	100	1K									WG
L3692	=	KLO	21.0	21.0		MEC	LI	C	6.3	2200	3500	30	350	1000	100					60		RI	WG
L3693	=	KLO	50.0	50.0		MEC	LI	C	6.3	2000	4000	150	1000	1K									WG
L3694		KLA	0.4	0.4		MEC	LI	P	32.0	22A	120K	37A	1M				35						
L3695	=	MAG	9.0	9.6	10	MEC	LI	P	13.8	3200	23K	28A	200K						15		IM		WG
L3702		KLA	1.2	1.3		MEC	LI	P	31.0	25A	310K	350A	30M				33			60			
L3703	=	TWA	8.0	10.0			LI	C					4000				33						
L3707		KLA	1.2	1.3		MEC	LI	P	13.0	25A	225K	200A	10M				36			100			
L3710	=	KLO	35.0	35.0		MEC	LI	C	6.3	1600	2300	15	30	290	200					60		RI	WG
L3711		TWA	4.0	8.0			LI	C	6.3	1100	1600	25	1000				36						CO
L3713	=	KLO	35.0	35.0		FX	LI	C	6.3	2100	6000	200	30W	1K									WG
L3714		MAG	0.5	0.7		MEC	LI	C	5.5	1700	3500	200	165W						3		IM		
L3719	=	MAG	15.0	15.0	100	FX	LI	P	6.3	900	1800	1750	750W						20		IM		WG
L3721	=	BWO	1.0	1.4		VT	LI	P	6.3	1900	300	200W		700	4K								CO
L3724	=	BWO	2.5	3.6		VT	LI	P	6.3	1900	300	180W		700	4K								CO
L3724A		BWO	2.5	3.5		VT	LI	P	6.3	2000	1900	300	220W		700	4K							CO
L3725	=	BWO	3.5	4.8		VT	LI	P	6.3	1900	300	180W		700	4K								CO
L3726	=	BWO	4.8	6.6		VT	LI	P	6.3	1900	275	165W		700	4K								WG
L3727	=	BWO	6.5	8.5		VT	LI	P	6.3	1900	275	150W		700	4K								WG
L3728	=	BWO	8.5	11.0		VT	LI	P	6.3	1900	275	150W		700	4K								WG
L3729A	=	BWO	4.4	5.9		VT	LI	C		1900	300	220W	4000	700	2K								WG
L3733		KLA	2.8	2.8	20		LI	P	16.0	8250	200K	172A	10M				36			100			
L3735		KLA	2.7	2.8		MEC	LI	P			140K	119A	5M				50						
L3736	=	KLO	35.0	35.0		FX	LI	C	6.3	2200	6300	200	50W	1K									WG
WX3737		MAG	8.5	9.6	13	MEC	WH	P	9.0	1420	30K	50A	600K								IM		WG
L3738		MAG	16.5	16.5	10	FX	LI	P	12.6	2400	14K	14A	40K										
L3739		KLA	1.3	1.3		FX	LI	P			40K	17A	200K				30						
L3742		KLA	2.9	3.1		FX	LI	P			80K	35A	1M				35				IM		WG
L3750		MAG	34.5	35.2	10	FX	LI	P	6.3	11A	20K	25A	100K						45				WG
L3751	=	MAG	34.9	34.9	10	FX	LI	P	6.3	2000	9500	3500	5K										
L3752	=	MAG	34.4	35.4	4	FX	LI	P	6.3	4000	15K	14A	40K						45				WG
L3753	=	MAG	34.9	34.9	4	FX	LI	P	6.3	7500	21K	25A	100K						45				WG
L3759	=	MAG	15.5	15.5	100	FX	LI	P	12.2	2400	16K	16A	60K								IM		WG
L3763		TWA	4.0	8.0			LI	C	6.3	1000	1700	30	1000	45			60				IM		CO
L3765		CFA	8.8	10.5			LI	C					1K				17						
L3768		KLA	2.8	2.8	20	FX	LI	P	1.7	200K	200K	172A	10M								IM		CO
L3769		TWA	5.4	11.0			LI	C					1000				60						CO
L3775		KLA	0.4	0.4		MEC	LI	P	32.0	56A	250K	375A	30M				36			10			
L3812	=	MAG	9.3	9.3	500	MEC	LI	P	6.3	900	1400	2200	1K								IM		WG
L3813	=	MAG	9.3	9.3	100	FX	LI	P	6.3	850	1400	1500	5K						20		IM		WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM 3A VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIUM VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
L3815		TWA	7.0	11.0	100	MEC	LI P	LI P	6.3	1000	7000	700	200W				30				IM		WG
L3816	=	MAG	16.5	16.5	200	FX	LI P	LI P	12.6	2400	12K	12A	25K								IM		WG
L3820	=	MAG	8.5	8.5	12	FX	LI P	LI P	6.3	500	500	120	100W						100				
L3823		KLA	1.2	1.3		MEC	LI P	LI P	30.0	18A	300K	340A	30M				36						
L3843		KLA	2.8	2.8		FX	LI P	LI P	17.0	20A	160K	128A	5M				40						
L3844		TWA	0.4	0.4	10		LI P	LI P	18.0	2500	12K	4000	4K				37						CO
L3845	=	TWA	1.0	2.0			LI C	LI C					1000				40						
L3849	=	TWA	3.5	5.5	12		LI P	LI P	6.3	1000	4000	250	50W				33				IM		CO
L3853		MAG	10.3	10.7	10	FX	LI P	LI P	12.6	2200	15K	15A						15	2		IM		WG
L3854		MAG	11.3	11.7	10	FX	LI P	LI P	12.6	2200	15K	15A						15	2		IM		WG
L3856	=	MAG	34.9	34.9	10	FX	LI P	LI P	6.3	7500	15K	15A	40K					45					WG
L3874	=	MAG	16.0	17.0	10	MEC	LI P	LI P	12.6	2400	17K	16A	66K					25			IM		WG
L3876		KLA	1.2	1.4		MEC	LI C	LI C			43K	30A	400K				38						
L3879		TWA	7.0	12.0			LI C	LI C					10W				36				IM		WG
L3890A	=	MAG	9.4	9.4	10	FX	LI P	LI P	6.3	1200	8000	8250	24K					20					
L3895		MAG	16.0	16.0	10	FX	LI P	LI P	12.6	2500	16K	16A	100K										
L3897		MAG	5.0	5.4	10		LI P	LI P	13.5	2500	2150	22A	175K										
L3898		TWA	8.5	9.6			LI C	LI C					6000										
L3910		KLA	2.3	2.3		FX	LI C	LI C	5.0	1000	1400	40	20W				22			4			CO
L3910B		KLA	2.3	2.3		FX	LI	LI			1600	48	20W				20			4			
L3913		CFA	7.1	8.2			LI P	LI P	10.0		11K	650	2K	16K				23					WG
L3915	=	MAG	16.2	16.3	30		LI C	LI C	6.3	900	3600	2750	2K										
L3916	=	MAG	16.0	16.5	10	MEC	LI P	LI P	16.0	7600	250K	175A	5M										
L3928	=	TWA	7.0	11.0			LI C	LI C	6.3	1400	3300	5000	4K								IM		CO
L3938		KLA	1.2	1.4	300		LI P	LI P	24.0	15A	135K	115A	5M				40						WG
L3943		KLA	1.3	1.3		FX	LI P	LI P			140K	105A	10M				36						
L3944		KLA	1.3	1.3	15	FX	LI P	LI P	16.0	7600	250K	175A	5M				30						WG
L3949		KLA	4.4	5.0			LI	LI			8000	500	1K				40			5			
L3950	=	MAG	16.5	16.5	12	FX	LI P	LI P	12.6	2400	18K	16A	65K						7				WG
L3951	=	MAG	16.0	17.0	12		LI P	LI P	12.6	2400	18K	16A	60K						7				WG
L3954		TWA	8.0	11.0	100		LI P	LI P	6.3	1450	11K	1750	1K				33				IM		
L3956		MAG	8.9	8.9	12	FX	LI P	LI P	6.3	900	3800	3750	4K										CO
L3957	=	TWA	5.4	10.7			LI C	LI C	6.3	800	2300	35	2000				60				IM		CO
L3958	=	MAG	15.5	15.5	20	FX	LI P	LI P	6.3	1600	5000	5000	10K								IM		WG
L3971	=	TWA	2.0	4.0			LI C	LI C	6.3	900	1000	40	2000				50				IM		CO
L3972		TWA	5.4	10.7			LI C	LI C	6.3	800	2300	35	2000				70				IM		CO
L3975		KLA	3.1				LI	LI			85K	28A	1M				30			90			
L3976	=	MAG	16.5	16.5	12	FX	LI P	LI P	12.6	2400	18K	18A	110K						10		IM		WG
L3977		TWA	5.7	8.4			LI C	LI C	6.3	900	1900	30	3000				50				IM		CO
L3978	=	MAG	16.0	16.5	10	MEC	LI P	LI P	12.6	2400	18K	16A	70K				25				IM		WG
L3980		KLA	2.8	2.8	10	FX	LI P	LI P	15.0	14A	250K	250A	21M								IM		WG
L3987	=	MAG	16.0	17.0	12	MEC	LI P	LI P	12.6	2400	18K	16A	75K						7		IM		WG
L3989		KLA	2.8	2.8	10	FX	LI P	LI P	15.0	14A	250K	250A	21M								IM		WG
L3994		TWA	7.0	11.0	100		LI P	LI P	6.3	1400	10K	1500	1K				150				IM		CO
L3996	=	TWA	5.0	7.0			LI C	LI C	6.3	900	1700	30	2000				65						CO
L3998		TWA	7.0	11.0			LI C	LI C	6.3	900	2300	37	2000								IM		CO
F4005C		BWO	1.6	3.2			CS C	CS C			1700	70	2000				36						CO
F4007/C063C		BWO	4.8	9.6			CS C	CS C			1500	40	1000										CO
LK4008		KLO	5.3	6.3		MEC	LI C	LI C	6.3	800	750	70	1000	380						43		RI	WG
LK4009		KLO	5.3	6.6		MEC	LI C	LI C	6.3	800	750	70	1000	390						43		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MHz																				
			MIN	MAX																			
LK4010		KLO	5.8	7.1		MEC	LI	C	6.3	800	750	70	1000	390						43		RI	WG
LK4011		KLO	6.3	7.5		MEC	LI	C	6.3	800	750	70	1000	360						43		RI	WG
F4017		TWA	1.7	2.7				C			1900	40	7000										
4017		TWA	2.0	4.0				RC	C	6.3	600	550	1	10	1000	100	1K 30 16					IM	CO
4020		TWA	4.0	7.0				RC	C	6.3	600	1100	2	10	900	150	1K 28 18					IM	CO
4021		TWA	1.0	2.0				RC	C	6.3	1850	1200	25	1000	900	100	1K 27					IM	CO
SBE4023		BWO	70.0	86.0				SP	C	6.3	1500	3300	20	5	600							IM	CO
F4024		= TWA	2.2	4.3				CS	C	6.3	450	500	2	60	800	40	42 12					IM	CO
F4025		= TWA	4.0	7.0				CS	C	6.3	450	800	1	40	800	800	40 12					IM	CO
F4026		= TWA	6.9	11.1				CS	C	6.3	450	900	1	30	1000		1K 42 12					IM	CO
F4028E		BWO	1.0	2.1				CS	C		1500		70	1500									CO
F4029D		BWO	2.0	4.0				CS	C		1500	55	1500										CO
F4032B		BWO	8.0	16.0				CS	C		1900	20	150										CO
F4033B		BWO	15.5	24.0				CS	C		2700	40	400										WG
F4034B		BWO	23.5	37.5				CS	C		3500	45	500										WG
SOU4040		= KLO	1.3	1.8		FX	SP	C	6.3	400	1050	75	1000									2I	WG
SOU4041		KLO	17.5	17.5		FX	SP	C	6.3	500	1080	80	1000							15		2I	CO
4041		TWA	8.0	12.0				RC	C	6.3	850	12	1000	3000								IM	CO
SOU4042		KLO	17.4			FX	SP	C	6.3	500	1025	65	1000									2I	WG
F4053		BWO	7.0	12.4				CS	C		1500	25	300									2I	CO
4053		TWA	1.0	2.0				RC	C	6.3	1750		70	10W	2200		2K 25					IM	CO
4054		TWA	1.7	2.7				RC	C	6.3	1750		70	17W	2000		28					IM	CO
F4056		TWA	5.9	8.4				CS	C		2400	40	10W				24					IM	CO
4056		TWA	2.2	3.0				RC	C	5.0	500	38	13W	1000		1K 35						IM	CO
F4059		TWA	5.9	6.4				CS	C	6.3	800	650	55	20W	4000	100	35 23					IM	WG
F4061		TWA	1.2	1.4				CS	P		850	80	6500				25						CO
F4063		TWA	1.2	1.4				CS	P		12K	4500	4K				27					IM	CO
F4064A		TWA	1.2	1.4				CS	C		300	1	150U				25		4			IM	WG
L4064A		MAG	34.7	35.0	8 FX		LI	P	6.3	3500	21K	24A	125K	5			30		30			IM	
F4065		TWA	8.5	9.6				CS	C		660	600U										IM	
F4066		TWA	3.8	4.2				CS	C		2000	40	6000				25						WG
F4074/CO.10		BWO	H2.9	H3.2				CS	C		6000	50	50										WG
F4075/20B		BWO	H1.3	H1.4				CS	C		6000	60	1000										WG
F4076/CO40B		BWO	68.0	72.0				CS	C		6000	70	10W										WG
F4084		BWO	4.0	8.0				CS	C		1500	40	300										CO
F4087		TWA	1.0	2.0				CS	C		1200	30	1000				32						
F4088		TWA	2.0	4.0				CS	C		1500	30	1000				32						
SAC4092		KLA	4.4	5.0		MEC	SP	C	10.0	5000	18K	2300	15K				50			25			
F4100A		TWA	2.0	4.0				CS	C		600	2	10				35		12				
F4101A		TWA	4.0	8.0				CS	C		850	1	10				35		13				
M4101A		KLA	0.5	0.5		MEC	TO	C	7.5	34A	18K	2530	20K	18K	250		42				150	4E	CO
F4102A		TWA	8.0	12.0				CS	C		1000	1	1000				35		14			IM	CO
WX4103		MAG	4.3	4.4		MEC	WH	C	6.3	600	350	25	1500										CO
F4108/CO30		BWO	90.0	H1.0				CS	C		4000	35	1000										WG
F4109/CO35		BWO	80.0	90.0				CS	C		4000	35	1000										WG
F4110/CO70		BWO	37.0	50.0				CS	C		3000	35	100										WG
F4112/CO.06		BWO	H4.8	H5.2				CS	C		6000	40	10										WG
F4114/CO0.9		BWO	H3.1	H3.5				CS	C		6000	50	15										WG
F4123A		TWA	1.0	2.0				CS	C		600	2	10				35		12				CO
F4129		TWA	2.7	3.3				CS	C	6.3	450	450	8	3			31		6			IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANGLE	I _k	P _o	COLLECTOR REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
F4130	TWA	1.7	2.7					CS C	6.3	1300	1600	60	20W	2700		3K	30	30			15	IM	CO
SOVA130	KLO	26.5	31.0					SP C	6.3	700	1550	80	500									2I	
F4134	TWA	1.0	2.0					CS C	6.3	1300	1400	50	10W	1600		2K	33	30				IM	CO
F4135	TWA	2.0	4.0					CS C	6.3	1300	1400	55	10W	2300		2K	33	30			8	IM	CO
SOJA141	KLO	13.3	13.3					FX SP C	6.3	500	950	65	1500									2I	
F4143	BWO	40.0	40.0					CS C	6.3	2000	3000	85	20W		200								WG
F4146	BWO	H1.4	H1.6					CS C			2000	60	1000										WG
F4149	TWA	4.2	4.6					CS P			70K	40A	500K				23						
F4150/CO.40	BWO	73.0	77.0					CS C			6000	70	10W										WG
F4151	BWO	H5.7	H6.3					CS C			10K	50	5								IM		WG
L4154	MAG	24.0	24.0					LI P	5.0	3100	14K	25A	65K										
F4157	BWO	68.0	77.0					CS C			6000	70	30W										CO
F4158	BWO	13.0	15.5					CS C			6000	60	5000										WG
F4159	BWO	29.0	32.0					CS C			12K	50	400										WG
WX4160	= MAG	4.2	4.4					MEC WH C	6.3	600	440	30	4500										WG
WX4163	MAG	4.3	4.3					FX WH C	6.3	600	350	25	1500										CO
L4164	MAG	8.5	9.6					MEC LI P	13.7	3200	23K	28A	270K										WG
L4164B	= MAG	8.5	9.6					MEC LI P	13.8	3200	21K	28A	200K										
SAC4170	KLA	5.8						FX SP C	10.0	5000	20K	2900	20K								15		
SAC4173	KLA	5.9	6.4					MEC SP C	10.0	5000	18K	2300	14K								40		
SAC4175	KLA	6.4						FX SP C	10.0	5000	15K	1900	10K								30		
F4178	BWO	29.0	32.0					CS C			12K	50	1000									IM	WG
SAX4181	KLA	7.0	8.0					MEC SP P	5.5	8500	21K	3100	25K								55		
SAX4182	KLA	7.4						FX SP C	10.0	5000	20K	2900	20K								20		
SAX4183	KLA	8.2						FX SP C	10.0	5000	20K	2900	20K								20		
SAX4184	KLA	8.0						FX SP C	10.0	5000	20K	2900	20K								20		
SAX4186	KLA	10.5						SP P	5.5	8500	39K	7600	100K								30		
SAX4187	KLA	10.6						SP P	5.5	8500	32K	5700	65K								30		
SAX4188	KLA	8.0						FX SP C	10.0	5500	20K	2900	20K								20		
SRU4191	KLO	15.5	17.5					MEC SP C	6.3	550	475	60	200	400							60	RI	WG
SRU4192	= KLO	15.5	18.0					FX SP C	6.3	550	475	60	250	400							45	RI	WG
L4193B	= MAG	9.2	9.6					MEC LI P	13.8	3200	23K	28A	200K								15	IM	WG
L4193C	= MAG	8.5	9.6					MEC LI P	13.8	3750	23K	28A	200K								15	IM	WG
SBM4212	= BWO	50.0	63.0					VT SP C	6.3	1500	3300	25	50										WG
L4218	MAG	34.5	35.0					FX LI P	6.3	3600	13K	13A	25K								40	IM	WG
SBF4221	BWO	86.0	98.0					SP C	6.3	1500	2900	17	5									IM	RI
SRX4241	KLO	8.5	10.5					SP C	6.3	500	300	34	40								30		
L4242	MAG	9.4	9.4					LI P	6.3	500	7200	7500	15K										
L4264	MAG	9.6	10.0					MEC LI P	6.3	2400	8000	8000	20K								15	IM	WG
L4306	MAG	34.7	35.0					MEC LI P	6.3	3500	20K		110K								30	IM	WG
L4310	MAG	8.5	9.4					LI P	13.7	3200	23K	28A	270K								12	IM	WG
L4316	MAG	23.8	24.3					LI P	5.0	2400	15K	8000	30K								30	IM	WG
L4328A	MAG	15.5	17.5					LI P	12.6	2400	18K	16A	90K								6	IM	WG
LK4332	KLO	10.5	10.5					LI C	6.3	800	400	55	65	700							35	RI	WG
LK4333	KLO	10.5	10.5					FX LI C	6.3	750	400	55	20	300							20	RI	WG
LK4334	KLO	9.3	9.3					LI C	6.3	800	400	55	40	700							30	RI	WG
LK4335	KLO	13.3	13.3					LI C	6.3	800	400	55	25	700							30	RI	WG
LK4339	KLO	9.4	9.4					LI C	6.3	800	400	55	40	700							30	RI	WG
LK4340	MAG	9.7	9.7					LI P	12.6	300	17K	16A	100K								13	IM	WG
LK4362	MAG	16.0	17.0					LI P	12.6	2600	18K	16A	60K								8	IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR *VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
L4370		MAG	13.3	13.3		FX	LI P	LI P	6.3	1000	950	240	40W						15		IM		WG
LK4370		MAG	13.3	13.3	10	FX	LI P	LI P	6.3	1000	900	280	40W						15		IM		WG
SRV4370		BWO	34.0	40.0			SP C	SP C	6.3	1500	2500	20	20								IM		WG
L4371		MAG	9.3	9.4	13	MEC	LI P	LI P	13.8	3200	23K	28A	250K						35		IM		WG
L4380		MAG	9.4	9.4	10	FX	LI P	LI P	6.3	1100	8000	7000	20W						15		IM		WG
L4396A		MAG	8.5	9.6	13	MEC	LI P	LI P	13.7	3200	23K	28A	350K						20		IM		WG
L4398		MAG	9.4	9.4	10	FX	LI P	LI P	6.3	1100	9000	8000	24W						15		IM		WG
SRV4401		KLO	36.0				SP C	SP C	6.3	700	500	55	100	200							RI	WG	
SRV4402		KLO	39.8				SP C	SP C	6.3	700	700	85	200	175							50	RI	WG
SRV4403		KLO	30.7				SP C	SP C	6.3	700	700	90	500	300							50	RI	WG
SRV4404		KLO	39.8				SP C	SP C	6.3	700	700	90	250	200							50	RI	WG
SRV4405		KLO	32.9	33.1			SP C	SP C	6.3	700	475	50	100	100							100	RI	WG
SRV4406		KLO	38.4				SP C	SP C	6.3	700	475	50	40	100							50	RI	WG
SRV4407		KLO	39.0				SP C	SP C	6.3	700	700	85	275	175							50	RI	WG
SAX4410		KLA	X		12		SP P	SP P	5.6	2000	25K	2000	15K						60				
L4419		= MAG	16.5			FX	LI P	LI P	12.6	2600	16K	16A	65K						12		IM		WG
SRU4430		= KLO	16.0	17.0			SP C	SP C	6.3	550	300	27	30	170							50	RI	WG
SRU4431		KLO	16.5	17.2			SP C	SP C	6.3	600	300	30	70	140							50	RI	
SRU4432		KLO	16.0	17.0			SP C	SP C	6.3	600	300	30	80	130							55	RI	
SRU4434		KLO	16.4	16.7			SP C	SP C	6.3	600	250	25	40	99							55	RI	
SRU4435		KLO	15.8	16.5			SP C	SP C	6.3	600	300	30	30	130							65	RI	
STL4441		TWA	0.8	1.5			SP C	SP C	6.3	1700	600	55	2500										
SRV4450		KLO	30.0	40.0		MEC	SP C	SP C	6.3	600	400	33	20	100							100	RI	
L4451		MAG	16.6	17.1		MEC	LI P	LI P	12.6	1700	12K	9500	35K						9		IM		WG
L4472		MAG	16.0	17.0	10	MEC	LI P	LI P	12.6	2800	16K	16A	65K						10		IM		WG
SRU4472		KLO	14.4				SP C	SP C	6.3	600	540	50	600	300							50	RI	
SRU4473		KLO	13.3				SP C	SP C	6.3	600	500	45	500	250							70	RI	
SRU4474		KLO	13.3				SP C	SP C	6.3	600	350	32	150	100							100	RI	
SRU4480		= KLO	16.0	17.0			SP C	SP C	6.3	550	500	45	400	500					8		IM		WG
L4500		MAG	15.5	17.5		MEC	LI P	LI P	12.6	2400	16K	150K	90K										
SRU4500		KLO	13.3				SP C	SP C	6.3	600	300	28	70	100							50	RI	
L4503		MAG	8.5	10.0	13	MEC	LI P	LI P	12.6	2200	15K	15A	75K						12		IM		WG
WX4529		= MAG	4.2	4.4		FX	WH C	WH C	6.3	600	250		1000										CO
SRU4530		BWO	15.4	17.0			SP C	SP C	6.3	650	1300	23	15										
SRX4550		KLO	10.6				SP C	SP C	6.3	600	400	36	200	200							50	RI	
SAX4570		KLA	7.8		FX		SP C	SP C	10.0	10A	38K	7400	100K								15		
SRX4591		KLO	8.8				SP C	SP C	6.3	1200	600	70	1000	300							40	RI	
SRX4592		KLO	8.8				SP C	SP C	6.3	600	500	45	600	240							65	RI	
SRX4610		KLO	8.2	12.4			SP C	SP C	6.3	550	500	70	500	550							50	RI	
M4620		KLA	0.5	0.5		MEC	TO C	TO C	10.0	48A	22K	6300	50K	22K	250						250	4E	CO
M4627A		KLA	6.4	6.4		MEC	TO C	TO C	11.0	7000	10K	1450	3K	10K	40						1800	4I	WG
M4627D		KLA	6.4	6.4		MEC	TO C	TO C	11.0	7000	12K	1750	5500	12K	30						2100	4I	WG
STX4630		TWA	8.7	9.0			SP C	SP C	11.0	1000	2300	22	2000										
M4640		KLA	0.5	0.7		MEC	TO C	TO C	7.5	34A	20K	2600	20K	20K	500						150	4E	CO
SRK4660		KLO	24.5				SP C	SP C	6.3	600	450	50	200	250							100	RI	WG
SRK4661		KLO	24.3	24.7			SP C	SP C	6.3	600	450	50	300	170							60	RI	WG
SRK4662		KLO	21.9	22.1			SP C	SP C	6.3	600	475	55	250	100							110	RI	
WX4700		MAG	8.5	9.6	10	MEC	WH P	WH P	13.8	3100	23K	28A	220K						3				
SAX4705		KLA	7.9	8.4		MEC	SP C	SP C	10.0	5000	14K	1700	8K								40		
WX4742		MAG	8.5	9.6		MEC	WH P	WH P	13.8		22K	28A	230K										

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HEAT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1 mT	CAVITY	COUPLING
			MIN	MAX																			
SRK4761		KLO	25.7					SP C	6.3	600	400	43	80	290								RI WG	
SRX4770		KLO	9.3					SP C	6.3	600	300	25	50	275								RI	
SRK4780		KLO	23.5	25.0				SP C	6.3	600	600	70	600	300						70		RI	
SRK4781		KLO	23.5	25.0				SP C	6.3	600	600	60	550	400						60		RI	
STC4820		TWA	2.6	5.3				SP C	6.3	1100	1875	80	10W									IM	
SRX4840		KLO	10.9	11.1				SP C	6.3	500	475	65	200	100						100		RI	
SRU4850		KLO	16.4	16.6				SP C	6.3	600	475	55	300	100						100		RI	
SOU4870		KLO	U					FX SP P	6.3	400	1800	175	10W									21 WG	
SOX4880		KLO	X					FX SP C	6.3	600	3800	25	1000									21 WG	
SAC4890		KLA	C					73 FX SP P	6.3	600	85K	50A	1M							250			
SAC4900		KLA	C					50 FX SP P	6.3	1200	100K	60A	1M							200			
WX4906		KLO	8.5	10.0				MEC WH C	6.3	350	42	90	1000							50		RI WG	
SAC4910		KLA	C					10 FX SP P	6.3	150K	120A	6M								380			
SAC4920		KLA	C					10 FX SP P	6.3	145K	115A	5M								500			
L5004		TWA	5.0	11.0				LI C	6.3	900	2000	30	1000									IM CO	
L5005		= TWA	2.0	4.0				LI C					20W										
M5005		MAG	9.3	9.4				10 FX EE P	12.6	2200	14K	12A	45K							13		IM WG	
L5006		TWA	7.0	10.0				LI C	6.3	1000	3200	70	10W									IM WG	
M5006		MAG	9.1	9.1				10 FX EE P	13.8	3250	23K	28A	225K							15		IM WG	
L5007		TWA	2.0	4.0				LI C	6.3	1000	1000	40	2000									IM CO	
M5007		MAG	9.2	9.3				10 FX EE P	13.8	3250	23K	28A	225K							15		IM WG	
L5008		= TWA	8.0	12.0				LI C	6.3	900	2100	40	2000									IM CO	
M5008		MAG	5.2	5.3				15 FX EE P	6.3	13A	36K	65A	840K							10		1 3100 WG	
L5009		= TWA	4.0	8.0				LI C	6.3	900	2100	35	2000									IM CO	
M5009		MAG	5.4	5.5				15 FX EE P	6.3	13A	38K	65A	840K							10		1 3100 WG	
L5010		= TWA	2.0	4.0				LI C	6.3	1000	1850	100	10W									IM CO	
M5010		MAG	9.1	9.2				10 FX EE P	13.8	3250	23K	28A	225K							15		IM WG	
Z5010A		KLA	1.2	1.3				MEC GE P	16.0	16A	250K	120A	10M									500 31 WG	
L5011		TWA	4.0	8.0				LI C	6.3	1000	3000	55	10W							5		IM CO	
L5013		= MAG	15.5	16.5				100 MEC LI P	6.3	1600	4500	3500	5K									IM WG	
L5014		TWA	2.0	4.0				LI C	6.3	250	400	3	10									IM CO	
L5015		TWA	4.0	8.0				LI C	6.3	250	700	4	10									IM CO	
L5022		TWA	8.0	10.0				LI P	6.3	1400	10K	1500	1K									IM CO	
L5023		= TWA	7.0	12.0				MEC LI C	6.3	250	800	6	10									IM CO	
L5024		KLA	0.4	0.4				MEC LI P			250K	380A	30M							40			
L5026		TWA	7.0	10.0				LI C	6.3	500	2150	30	2000	1000								IM CO	
L5027		MAG	16.0	17.0				10 MEC LI P	12.6	2500	16K	16A	66K										
L5029		MAG	16.0	17.5				50 MEC LI P	12.6	1700	12K	10A	30K										
CV5031		MAG	9.0	9.2				10 FX GC P	3.0	3500	14K	12A	50K							12		3800 WG	
L5031		CFA	15.5	17.5				LI C					250W							20			
L5035		= MAG	15.9	16.5				400 MEC LI P	6.3	1600	5000	6000	10K									IM WG	
L5036		= TWA	1.0	2.0				LI C					10W										
L5041		TWA	8.0	12.0				100 LI P	6.3	1400	11K	1600	1K									IM CO	
L5042		MAG	16.0	16.5				10 MEC LI P	12.6	2500	16K	16A	80K										
L5043		TWA	7.0	11.0				MEC LI C	6.3	1000	3500	90	10W									IM CO	
L5044		KLA	2.3	2.3				FX LI			2700	105	100W										
L5045		TWA	7.0	11.0				MEC LI C	6.3	900	1600	25	1000									IM CO	
M5046		TWA	12.4	18.0				EC C	6.3	230	3100	40	3000									IM WG	
L5047		MAG	9.4	9.4				12 FX LI P	12.6	1500	13K	15A	75K							5		IM WG	
M5047		TWA	13.5	13.5				EC C	6.3	500	1000	35	4000									IM WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	MELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			CHZ																				
			MIN	MAX																			
L5048	=	MAG	16.0	16.5	15	MEC	LI P	LI P	4.8	600	3100	2000	1K						8		IM	WG	
L5049	=	MAG	16.1	16.8	10	MEC	LI P	LI P	12.6	1500	13K	16A	60K						8		IM	WG	
M5052		BWO	2.0	4.0			EC C	EC C	6.3	300	450		5			900	15 30				IM	CO	
M5053		BWO	4.0	8.0			EC C	EC C	6.3	300	450		50			900	15 30				IM	CO	
M5054		BWO	8.0	12.0			EC C	EC C	6.3	300	450		25			1K	15 30				IM	CO	
M5055		BWO	12.0	18.0			EC C	EC C	6.3	300	450		25			1K	15 30				IM	CO	
L5070	=	TWA	2.0	4.0			LI C	LI C	6.3	900	950	40	1000		20		50				IM	CO	
L5071	=	TWA	4.0	8.0			LI C	LI C	6.3	900	1500	35	2000		35		60				IM	CO	
L5072	=	TWA	7.0	12.0			LI C	LI C	6.3	900	2100	35	1000		35		50				IM	CO	
L5073		TWA	7.0	11.0			LI C	LI C					20W				60				IM	CO	
L5080	=	MAG	5.4	5.8	12	MEC	LI P	LI P	5.0	5000	28K	30A	250K					15			IM	WG	
R5081		KLO	3.9	4.2		MEC	EM C	EM C	6.3	900	800	150	4000	550			40			40	RI	WG	
L5083	=	TWA	4.0	8.0			LI C	LI C					20W				50				IM	CO	
L5085	=	TWA	2.6	5.2			LI C	LI C	6.3	900	1050	40	2000		60		55 30			1K	IM	WG	
L5086		TWA	8.5	9.6		FX	LI C	LI C	6.3	850	2300	30	2000								IM	WG	
L5088		TWA	2.0	4.0		FX	LI C	LI C	6.3	300	500	2	5		200		33 12		2K		IM	CO	
L5089		TWA	8.0	12.0	100	FX	LI P	LI P	6.3	1450	11K	2000	2K		50		40		4K		IM	CO	
M5102		TWA	2.0	4.0			EC C	EC C	6.3	250	400	2	5		50		500 30 10				IM	CO	
M5103		TWA	2.0	4.0			EC C	EC C	6.3	250	400	2	10		50		500 30 15				IM	CO	
M5104		TWA	2.0	4.0			EC C	EC C	6.3	250	400	2	10		50		500 30 20				IM	CO	
M5106		TWA	2.3	4.4			EC C	EC C	6.3	250	400	2	10		50		500 30 15				IM	CO	
M5107		TWA	2.3	4.4			EC C	EC C	6.3	250	400	2	10		50		500 30 20				IM	CO	
M5108		TWA	4.0	8.0			EC C	EC C	6.3	300	600	2	5		50		850 30 11				IM	CO	
M5110		TWA	4.0	8.0			EC C	EC C	6.3	300	600	2	10		50		850 30 15				IM	CO	
M5111		TWA	4.3	7.4			EC C	EC C	6.3	300	600	2	10		50		850 30 15				IM	CO	
L5112	=	MAG	15.4	15.7	100	MEC	LI P	LI P	6.3	1600	3600	3100	2K								IM	WG	
M5112		TWA	4.0	8.0			EC C	EC C	6.3	300	600	2	10		50		850 30 20				IM	CO	
M5113		TWA	4.3	7.4			EC C	EC C	6.3	300	600	2	10		50		850 30 20				IM	CO	
M5114		TWA	7.0	11.0			EC C	EC C	6.3	300	600	2	10		50		1K 30 15				IM	CO	
M5115		TWA	7.0	11.0			EC C	EC C	6.3	300	600	2	10		50		1K 30 20				IM	CO	
M5116		TWA	7.0	11.0			EC C	EC C	6.3	300	800	2	10		50		1K 30 15				IM	CO	
CV5117		MAG	3.3	3.3	6	FX	GC P	GC P	6.0	1250	22K	24A	180K		45		60		7		1880	WG	
M5117		TWA	7.0	11.0			EC C	EC C	6.3	300	800	2	10		50		1K 30 20				IM	CO	
M5118		TWA	7.0	10.8			EC C	EC C	6.3	300	600	2	10		50		1K 30 15				IM	CO	
M5120		TWA	12.4	18.0			EC C	EC C	6.3	300	500	2	5		50		1K 25 14				IM	WG	
L5121		TWA	2.6	5.3			LI C	LI C	6.3	900	1250	50	2000		45		60				IM	CO	
M5121		TWA	12.4	18.0			EC C	EC C	6.3	300	500	2	5		50		1K 30 17				IM	WG	
M5138		TWA	7.0	10.8			EC C	EC C	6.3	250	600	2	10		50		1K 30 10				IM	CO	
M5139		TWA	1.0	2.0			EC C	EC C	6.3	230	150	1500	5	700	50		450 25 10			60	RI	CO	
R5146		KLO	34.0	36.5		MEC	EM C	EM C	6.3	800	2200	12	60	500								WG	
M5153	=	BWO	7.0	12.4			EC C	EC C	6.3	300	200	20	20				2K				IM		
M5154	=	BWO	12.0	18.0			EC C	EC C	6.3	300	200	20	20				2K				IM		
M5155	=	BWO	18.0	27.0			EC C	EC C	6.3	300	200	20	15				2K				IM		
M5157	=	BWO	8.5	9.6			EC C	EC C	6.3	300	200	20	20				600				IM		
M5158		BWO	10.0	20.0			EC C	EC C	6.3	300	200	20	20				3K				IM		
M5159		TWA	2.3	4.4			EC C	EC C	6.3	250	400	2	5		50		500 30 10				IM	CO	
M5160		TWA	4.3	7.4			EC C	EC C	6.3	250	600	2	5		50		850 30 10				IM	CO	
M5162		TWA	8.0	12.4			EC C	EC C	6.3	250	800	2	5		50		1K 30 12				IM	WG	
M5163		TWA	10.0	20.0			EC C	EC C	6.3	250	500	2	4		50		1K 25 18				IM	WG	
M5164		TWA	18.0	26.5			EC C	EC C	6.3	250	1750	2	5		50		3K 20 23				IM	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
M5165		TWA	20.0	40.0				EC C	6.3	250	1750	2	1		50	3K	20	25				IM	WG
M5166	= BWO		7.0	12.4				EC C	6.3	300	200	20	20			2K						IM	WG
M5174	= BWO		7.0	11.0				EC C	6.3	300	700	20	2000		50	6K	30	20				IM	WG
M5175		BWO	7.0	11.0				EC C	6.3	300	900	2000	2000		50	6K	30	20			25		CO
SAX5180		KLA	10.6					FX SP C	5.5	8500	20K	2900	15K				55						
SAX5186		KLA	10.5					SP P	5.5	8500	39K	7600	100K				55			30			
SAX5187		KLA	10.6					SP P	5.5	8500	32K	5700	65K				55			30		RE	
R5222		KLO	5.0	11.7				MEC EM C	6.3	700	370	55	200	500									
CV5426		KLO	8.8	8.8				MEC EE C	6.3	1600	1100	70	1200								10	IM	WG
WX5457		MAG	8.5	9.6				MEC WH P	9.0		28K	30A	300K						5			IM	WG
5586	*	MAG	2.7	2.9				5 MEC RA P	16.0	3100	30K	70A	800K									2700	CO
5609A		MAG	2.4	2.8				FX RA C	6.3	1800	1450	135	70W						7			IM	CO
5657	*	MAG	2.9	3.1				5 MEC RA P	16.0	3100	32K	70A	700K									2700	CO
5721		KLO	4.0	11.0				MEC C	6.3	580	1250	20	100	200								EX CO	
5777		KLO	0.6	2.4				MEC RA C	6.3	985	400		160	625	5						8	RE CO	
5780	*	MAG	8.5	9.6				10 MEC NE P	20.0	4000	38K	36A	300K						15			IM	WG
5789		MAG	34.5	35.2				6 FX LI P	6.0	2400	14K	20A	32K						55	15		IM	WG
5795		MAG	3.1	3.5				22 MEC NE P	10.7	3650	50K	50A	1M						10			IM	WG
5836	*	KLO	1.4	6.5				LI C	6.3	675	350	35	300	700	150						6	RE	
5837		KLO	0.6	3.8				LI C	6.3	675	350	29	220	700	150						8	RE	
5976		KLO	6.2	7.4				MEC KK C	6.3	440	330	35	110	350								RI CO	
5981	*	KLO	1.2	1.5				MEC C	6.3	455	250	50	134	220								RI CO	
6002		MAG	9.2	9.4				10 FX RA P	4.0	44A	30K	32A	250K					15				IM	WG
R6010		KLO	4.4	4.8				MEC EM C	6.3	900	800	150	3700	550						50		RI	WG
R6015		KLO	4.3	4.8				MEC EM C	6.3	900	350	70	150	250						20		RI	WG
6027	*	MAG	9.3	9.4				25 FX P	6.3	515	8000	8000	20K						15			IM	WG
6027H	=	MAG	9.3	9.4				25 FX P	6.3	500	8000	8000	18K						10			IM	WG
CV6034		MAG	9.5	9.6				10 FX GC P	2.0	10A	17K	12A	75K						15			IM	WG
CV6035		MAG	9.6	9.6				10 FX GC P	2.0	10A	17K	12A	75K						15			IM	WG
CV6036		MAG	9.6	9.7				10 FX GC P	2.0	10A	17K	12A	75K						15			IM	WG
RK6037		KLO	5.1	5.4				TH RA C			300	37	30	160						40		RI	SP
ZM6046		MAG	2.6	2.9				VT GE C	2.1	5000	3100	70	75W									IM	CO
ZM6047		MAG	2.9	3.2				VT GE C	2.1	5000	3100	70	75W									IM	CO
ZM6051		MAG	1.0	2.0				VT GE C	2.2	2000	2000	10	100									IM	CO
ZM6085		MAG	0.9	1.5				VT GE C	2.3	2000	1625	20	150	170								IM	CO
ZM6086		MAG	1.4	2.6				VT GE C	2.3	2000	1740	20	150	160									CO
ZM6087		MAG	2.5	4.3				VT GE C	2.3	2000	1700	20	150	300									CO
RK6112A		KLO	1.0	4.0				MEC EM C	6.3	700	300	45	150	500								RE	CO
6115A		KLO	5.1	5.9				MEC KK C	6.3	440	330	32	100	350								RI	CO
6116	*	KLO	8.5	9.7				TH C	6.3	520	350	32	34	350							45	RI	CO
RK6133		KLO	1.8	4.0				MEC RA P			300	30	100	250								EX	
R6138		MAG	34.5	35.3				4 FX EM P	6.3	2400	16K	13A	18K							40	10	IM	WG
6177A		MAG	4.3					FX WH C	6.3	540	275	30	1000							4		IM	WG
6178		KLO	15.8	16.2				MEC RA C	6.3	600	330	45	25	300								RI	WG
ZM6203		MAG	2.4	2.8				VT GE C	2.5	2000	1200	20	1750									IM	CO
ZM6211		MAG	2.5	3.5				VT GE C	2.5	2000	2500	40	10W	450									CO
ZM6215		MAG	2.5	3.5				VT GE C	2.5	2000	2500	40	10W									IM	CO
ZM6222		MAG	2.0	4.0				VT GE C	2.8	2000	1000	15	1000									IM	CO
ZM6223		MAG	2.0	4.0				VT GE C	2.5	2000	1500	15	1250									IM	CO
6229		MAG	8.9	9.4				5 MEC MA P			4000	500	400W										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		OUTY RATIO 100%	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTS	I _k	P _o	COLLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING	
			MIN	MAX																				
																								CHz
6230	MAG		8.9	9.4	30	MEC	MA	P	6.3	1000	4300	800	900W						20	2	IM	WG		
6233	MAG		9.2	9.3	30	FX	LI	P			5500	3800	7K								EX			
RK6236			KLO	3.8	8.0		MEC				1250	20	60	375										
6237	=		KLA	0.5	0.5		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
ZM6238			MAG	0.9	2.3		VT	GE	C	2.5	2000	2000	25	1000							IM	CO		
6238	=		KLA	0.5	0.6		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
ZM6239			MAG	2.6	2.9		VT	GE	C	2.5	6000	3500	70	100W			27			6	500	3I	WG	
6239	=		KLA	0.6	0.7		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
ZM6240			MAG	2.9	3.2		VT	GE	C	2.5	6000	3500	70	100W			27			6	500	3I	WG	
6240	=		KLA	0.6	0.7		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
6241	=		KLA	0.7	0.8		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
ZM6242			MAG	1.8	1.9		VT	GE	C	2.2	2400	1500	20	3000			27			6	500	3I	WG	
6242	=		KLA	0.8	0.9		FX	GE	C	5.5	35A	18K	3000	15K			27			6	500	3I	WG	
ZM6243			MAG	2.9	3.1		VT	GE	C	2.2	2400	1500	30	3000							IM	CO		
ZM6244			MAG	2.6	3.2		VT	GE	C	2.5	6000	3500	70	100W							IM	CO		
6249B	MAG		8.5	9.6	13	MEC	P	P	9.0	14A		32A	250K					15			IM	WG		
RK6253	KLO		18.0	22.0		MEC	RA	C	6.3	580	2300	9	40	500	100				40		RI	WG		
RK6254			KLO	22.0	25.0		MEC	RA	C	6.3	580	2300	9	40	500	100				40		RI	WG	
6310	*		KLO	8.5	10.0			BL	C	6.3	1320	300	32	25	225				30					
6311	=		KLO	8.5	10.0		MEC	VA	C	6.3	1200	350	42	70	1000				40		RI	WG		
6312	*		KLO	8.5	10.0		MEC	WH	C	6.3	1200	350	42	70	1000				40		RI	WG		
6314	=		KLO	8.5	10.5		MEC	VA	C	6.3	1200	385	74	55	1000	105			5		RI	WG		
6315			KLO	8.5	10.0		MEC	VA	C	6.3	1200	350	52	25	1000				60		RI	WG		
6316			KLO	8.5	10.0		MEC	VA	C	6.3	1200	350	52	25	1000				45		RI	WG		
6344	MAG		5.4	5.8	10	MEC	P	P	11.0	12A	24K	30A	260K					15			IM	WG		
6344A	MAG		5.4	5.8	10	MEC	P	P	13.5	2500	22K	22A	175K					15	2		IM	WG		
6390	*		KLO	6.7	11.0		MEC	RA	C	6.3	580	1250	20	60	700	25					RI	CO		
6402	MAG		3.4	3.6	16	MEC	RA	P	8.3	43A	57K	55A	700K							IM	WG			
RK6403			MAG	3.4	3.6	14	MEC	RA	P	8.3	43A	54K	80A	2M							IM	WG		
6406A	MAG		2.8	2.9	6	FX	P	P	8.3	85A	56K	95A	2M					10			IM	WG		
RK6410A	MAG		2.8	2.9	10	FX	RA	P			70K	130A	4M									WG		
6510	MAG		9.3	9.3	10	FX	LI	P	12.6	2200	15K	15A	70K					13	2		IM	WG		
RK6517	MAG		1.2	1.4	13	MEC	RA	P	2.8	75A	70K	60A	1M					5			IM	WG		
6518	MAG		2.9	2.9	7	FX	RA	P	13.0	44A	48K	92A	2M					16			IM	CO		
6521	=		MAG	5.4	5.4	10	FX	RC	P	10.0	3200	16K	16A	16K				10	2		IM	WG		
6543	MAG		8.5	9.6	13	MEC	P	P	12.6	2200	15K	15A	75K					12			IM	WG		
6543A	MAG		8.5	9.6	13	MEC	P	P	12.6	2200	15K	15A	75K					12			IM	WG		
6551	=		MAG	23.8	24.3	7	FX	RA	P	5.0	3200	16K	18A	34K				30			IM	WG		
RK6573			KLO	15.5	17.0		MEC	RA	C	6.3	600	330	45	40	300				75		RI	WG		
6584			KLO	5.1	5.9		MEC	BE	C	6.3	500	300	32	120	175				35		RI	CO		
RK6695	MAG		3.4	3.6	10	MEC	RA	P	16.0	3100	31K	60A	650K							2600	RI	WG		
6781	KLO		8.5	10.0		MEC	VA	C	6.3	1200	400	23	23	1000				55			RI	WG		
6825	TWA		2.0	4.0	50	VT	IT	P	6.3	5000	8500	2500	20W	9000	300	30				2K	1200	CO		
6826	TWA		2.0	4.0	50	VT	IT	P	6.3	5000	7500	2500	10W	9000	300	30				2K	1200	CO		
RK6841	=		MAG	16.4	16.6	10	FX	RA	P	4.0	10A	19K	16A	50K				15			IM	WG		
6845	KLO		8.5	9.6		MEC	BE	C	6.3	1300	300	32	20	120						45	RI	CO		
6861	TWA		2.7	3.5		VT	RC	C	5.0	650		150U	250U	400	20	500	20	7			525	CO		
6868	TWA		1.7	4.0		VT	IT	C	6.3	2500	1500	75	10W	1750	250	40	30				1000	CO		
6940	KLO		8.5	9.6		TH	IC	C	6.3	1300	300	32	20	145						45	RI	CO		
RK6959	MAG		9.3	9.4	10	FX	RA	P	6.0	30A	33K	67A	800K							4	IM	WG		

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
RK6967A	=	MAG	9.2	9.3	10	FX	RA	P	6.3 2900	16K	14A	75K							15	4	IM		CO
6972		MAG	9.3	9.4	20	FX	PH	P	10.0 2850	16K	18A	80K							10		IM		WG
6975	* KLO		8.5	9.6		MEC		C	6.3 450	350	52	40		500			30			50		RI	WG
6996		TWA	8.0	9.6		VT	IT	C	6.3 2300	3400	50	10W		3500	250						1300		CO
7006	=	MAG	9.0	9.6	13	MEC	LI	P	13.8 3200	23K	28A	190K							15		IM		WG
7008		MAG	8.5	9.6	11	MEC		P	13.7 3200	23K	28A	270K							12		IM		WG
7028		MAG	9.3	9.5	10	FX	PH	P	6.3 500	3800	3500	3K							15		IM		WG
RK7040		MAG	5.4	5.4	10	FX	RA	P	6.3 1650	14K	14A	85K								6		IM	WG
7049		KLO	1.5	6.0		MEC	PO	C	6.3 600	350	35	250		700	20							RE	CO
7049		KLO	1.5	6.0	30	MEC	PO	P	6.3 600	350				700	150							RE	CO
7090		MAG	2.4	2.5		FX		C	5.3 3200	2900	230	200W									IM		CO
7093		MAG	34.5	35.2	3	FX		P	5.0 3900	13K	16A	40K							35		IM		WG
7098		MAG	9.3	9.5	20	MEC	LI	P	5.0 650	2000	1250	60W							15	3	IM		CO
7111		MAG	8.5	9.6	13	MEC		P	13.7 3200	23K	28A	270K							12		IM		WG
7156	=	MAG	5.4	5.8	12	MEC		P	50.5 000	28K	24A	250K							15		IM		WG
7208		MAG	15.8	17.2	10	MEC	LI	P	12.6 3500	20K	20A	100K							8		IM		WG
7208B	*	MAG	15.5	17.5	10	MEC	LI	P	12.6 3500	18K	19A	125K							10		IM		WG
7256		MAG	8.5	9.6	10	MEC	RA	P	6.3 1000	16K	16A	55K									IM		WG
7292		MAG	2.4	2.4		FX		C	5.0 32A	4500	2100	2K									1200		CO
F7338		TWA	2.0	4.0	50		IT	P	6.3 5000	8500	2500	10W		9000	300	40							CO
F7340		TWA	7.0	11.0	50		IT	P	6.3 4000		1800	1K		10K	100	10K	30			4K	1200		CO
F7347		TWA	2.0	4.0	50		IT	P	6.3 5200	8000	2500	15W			300	30			25		IM		WG
7449A		MAG	23.8	24.2	10	FX	LI	P	5.0 3100	16K	12A	70K									IM		WG
7452		MAG	15.8	16.1	22	FX	RA	P	4.8 13A	24K	50A	70K									IM		WG
7460		MAG	5.4	5.8	3	MEC		P		24K	25A	250K									IM		WG
7484A		MAG	1.2	1.4	14	MEC		P	2.8 75A	80K	10.4	2M							4		IM		WG
7503		MAG	9.3	9.5	20	MEC	LI	P	5.0 650	2000	1150	100W							15		IM		CO
7505		KLO	0.7	3.0		MEC	PO	C	6.3 600	350	35	575		700	20				6		RE	CO	
7505		KLO	0.7	3.0	30	MEC	PO	P	6.3 600	350				700	150					3		RE	CO
7506		KLO	0.5	3.0		MEC	PO	C	6.3 600	350	35	510		700	20								CO
7506		KLO	0.5	3.0	30	MEC	PO	P	6.3 600	350				700	150								CO
7521		MAG	8.9	9.4	10	MEC	RA	P	5.0 450	4300	950	950W									IM		WG
7528		MAG	1.2	1.4	12	MEC	RA	P	3.7 90A	60K	90A	2M									IM		WG
7529		MAG	2.7	2.8		MEC	RA	P	8.2 78A	62K	115A	3M									IM		WG
7537		TWA	4.4	5.0				C	6.3 800	1500	55	6000		1500		1K	34	30			600		WG
7541		MAG	8.5	9.6	11	MEC	WH	P	13.8 3500	23K	28A	250K							15	1	IM		WG
7547	=	MAG	0.4	0.4	18	MEC	RA	P	6.5 55A	55K	97A	2M									IM		CO
7577	AMA		1.3	1.4	7		RA	P	3.8 60A	97K	98A	5M									IM		WG
RK7578		MAG	5.4	5.9	20	MEC	RA	P		2800	2000	800W									IM		SP
7619	=	MAG	34.8		10	FX	LI	P	12.6 2800	13K	20A	40K							40		IM		WG
RK7630		MAG	15.8	16.2	22	MEC	RA	P	4.8 12A	24K	52A	70K									IM		WG
7642		TWA	1.7	2.3				C	6.3 1750	1700	75	18W		3000	7	2K	30				IM		CO
7718		MAG	9.3	9.4	9	FX	RA	P	3.6 36A	39K	69A	1M									IM		WG
7783	BWD		2.0	4.0		VT	RA	C	6.3 1300	250	45	1000		100	2K						IM		CO
7794	=	MAG	4.2	4.4		MEC	WH	C	6.3 600	500	100	5000							4		IM		CO
7795	=	MAG	4.3	4.3		FX	WH	C	6.3 600	425	30	10W									IM		CO
7829A	=	KLO	11.0	11.0		FX	VA	C	6.3 420	300	29	90		305							IM	RI	WG
F7847		TWA	5.0	6.0			IT	C	6.3 2200	3000	70	10W									1200		CO
F7848		TWA	5.4	5.9	50		IT	P	6.3 5600	17K	3700	2K									2000		CO
7950		MAG	8.4	9.6	15	MEC	LI	P	20.0 4000	34K	20A	275K							13		IM		WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
8052		KLO	3.0	11.0		MEC	PO	C	6.3	600	1250	28	375	800	20					20		RE	CO
8052		KLO	3.0	11.0	20	MEC	PO	P	6.3	600	1250			800	150							RE	CO
8128		TWA	2.9	3.1	210		RA	P	8.0	8000	34K	12A	60K				20				700	WG	
8129		AMA	2.9	3.1	55		RA	P			54K	66A	3M								IM	WG	
8153		MAG	34.5	35.2	5	FX	AM	P	5.0	3900	600K	20A	80K					50			IM	WG	
8198		= TWA	5.0	11.0			EI	C	6.3	600	3000	25	1000	3000	40	3K	60	34			IM	CO	
8232		TWA	2.7	3.6	30		VA	P	7.5	2000	18K	4000	7K	300					900		IM	CO	
8232F		TWA	2.7	3.6	2	VT	TV	P	6.3	1200	15K	4000	5K								CO	CO	
8332		= KLO	9.7	9.9		FX	VA	C	6.3	1200	500	55	915	315					15		RI	WG	
8356		MAG	9.3	9.4	25	FX	EE	P	6.3	500	8000	8000	20K								IM	WG	
8357		MAG	9.3	9.4		FX	EE	P	6.3	500	8000	8500	25K								IM	WG	
8366		MAG	33.0	33.4		FX	LI	P	12.6	2800	12K	25A	50K						25		IM	WG	
8379		TWA	2.3	2.7			RC	C	5.0	650	500	150U	1	600	20	500	28	5	40		650	CO	
8427		TWA	2.7	3.2	250		RA	P			7500	1000	1K								IM	CO	
8460		KLO	8.5	9.6		MEC	BE	C	6.3	450	300	32	20	150					35		RI	CO	
8493		KLA	0.9	1.2	250	MEC	SP	P	4.2	35A	20K	10A	12K							4		WG	
8543		MAG	9.3	9.4		FX	LI	P	6.3	1100	8250	8250	24K						16		IM	WG	
8568		= KLA	2.8	2.8	10	FX	RC	P	15.0	14A	260K	270A	21M								51	WG	
8609		TWA	7.0	11.0	100		RA	P	6.3	3500	2000		1K	150	295	12K	40				IM	CO	
8635		MAG	8.5	9.6	20	MEC	WH	P	12.6	2200	17K	22A	70K						4			WG	
8684		MAG	0.9	0.9		FX	RC	C	11.4	100A	14K	3000	30K									WG	
TH9110		TWA	S				TV	C	12.6	7000	12K	2000	4K									CO	
TH9116		TWA	4.8	5.8	3		TV	P	7.5	5500	16K	4000	6K				37					CO	
TH9121A		TWA	2.7	3.3	100		TV	P	6.3	1000	2300	150	30W									CO	
TH9124		TWA	0.2	0.4	200		TV	P	12.6	6500	1750	3500	1K									CO	
TH9125		TWA	1.5	2.5	200		TV	P	12.6	6500	10K	1000	2K									CO	
TH9128		TWA	5.0	6.0	3		TV	P	6.3	450	3300	130	30W				34					CO	
TH9131		TWA	2.7	3.3	3		TV	C	6.3	1000	2100	60	6000				25					CO	
TH9134		TWA	0.2	0.4			TV	C	14.5	8000	1900	1400	500W				18					CO	
TH9136		TWA	0.4	0.8	3		TV	C	12.6	6500	1900	1400	500W				20					CO	
R9509		MAG	16.2	17.2	8	FX	EM	P	6.3	7500	18K	30A	50K						10		IM	WG	
R9515		MAG	34.5	35.3	4	FX	EM	P	6.3	4000	16K	25A	35K						80		IM	WG	
R9516/3		KLO	7.0	7.3		MEC	EM	C	12.6	1100	1200	140	2200	750						60		RI	WG
R9518		KLO	27.8	32.2		MEC	EM	C	6.3	800	2200	15	60	500						60		RI	WG
R9521		KLO	35.0	40.0		MEC	EM	C	6.3	800	2200	15	40	500						60		RI	WG
R9538P		KLO	9.1	9.3		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9539P		KLO	9.3	9.5		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9540P		KLO	9.5	9.7		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9541P		KLO	9.7	9.9		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9542P		KLO	9.9	10.1		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9543P		KLO	10.1	10.6		MEC	EM	C	6.3	700	370	55	60	500						20		RE	WG
R9544P		KLO	10.6	11.0		MEC	EM	C	6.3	700	370	55	45	500						20		RE	WG
R9546		KLO	32.0	37.5		MEC	EM	C	6.3	800	2200	15	40	500						60		RI	WG
R9547		KLO	24.0	27.8		MEC	EM	C	6.3	800	2200	15	60	500						60		RI	WG
R9556/3		KLO	6.9	7.1		MEC	EM	C	12.6	1100	1200	140	2200	750						60		RI	WG
R9559		KLO	1.0	5.4		MEC	EM	C	6.3	1200	370	55	100	500						35		RE	WG
R9571		KLA	2.7	3.0	50		EM	P	10.0	7200	25K	8800	15K							30		41	WG
R9585		KLO	0.5	3.0		MEC	EM	C	6.3	700	370	32	50	400								RE	WG
R9586		KLO	0.5	3.0		MEC	EM	C	6.3	700	370	32	50	400								RE	WG
R9602		KLO	22.0	26.0		MEC	EM	C	6.3	700	2200	15	60	500						60		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAT FREQ	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
			GHz						V	mA	V	mA	mW	V	V	V	dB	dB	MHz	MHz	Oer		
R9621		KLO	20.0	24.0		MEC	EM	C	6.3	800	2200	15	100	500						60		RI	WG
R9622		KLO	18.0	22.5		MEC	EM	C	6.3	800	2200	15	100	300						60		RI	WG
R9624		KLO	12.4	15.0		MEC	EM	C	6.3	800	2200	15	100	500						60		RI	WG
R9625		KLO	13.5	16.5			EM	C	6.3	800	2000	15	100	750	200					40		RI	WG
R9626		KLO	15.0	18.0			EM	C	6.3	800	2000	15	100	750	200					40		RI	WG
R9630/3		KLO	7.3	7.6		MEC	EM	C	12.6	1100	1200	140	2200	750						60		RI	WG
R9631		KLO	31.2	33.7		MEC	EM	P	6.3	800	2200	15	60	500						70		RI	WG
R9653		KLO	65.0	85.0		MEC	EM	C	6.3	1300	2500	30	20	500						100		RI	WG
R9655/3		KLO	7.6	7.8		MEC	EM	C	12.6	1100	1200	140	2200	750						60		RI	WG
R9674		KLO	26.5	40.0		MEC	EM	C	16.3	800	2500	20	200	500						60		RI	WG
R9675		KLO	18.0	26.5		MEC	EM	C	6.3	800	2500	20	250	500						60		RI	WG
R9676		KLO	12.0	18.0		MEC	EM	C	6.3	800	2500	20	300	500						60		RI	WG
R9678		KLO	12.0	18.0		MEC	EM	C	6.3	1000	400	40	40	500						20		RE	WG
R9685		MAG	39.5	40.3	4	FX	EM	P	6.3	4000	16K	25A	35K						80			IM	WG
R9689		KLO	5.0	11.7		MEC	EM	C	6.3	800	350	55	150	500								RE	
R9696		KLO	7.0	11.7		MEC	EM	C	6.3	780	350	55	60	500								RE	
R9701		KLO	5.4	8.2		MEC	EM	C	6.3	780	350	55	60	500								RE	
R9704		KLO	7.2	7.4		MEC	EM	C	12.6	1100	1200	140	2200	500						60		RI	WG
R9719		KLA	3.2	3.3	12	MEC	EM	P	9.0	3500	13K	900	2K				65		5			RI	WG
WX22762		MAG	8.5	9.6	10	MEC	WH	P	12.6	2400	16K	16A	70K									RI	WG
25157		KLO	7.0	10.3		MEC	EM	C	6.3	780	370	55	60	500						20		RE	WG
25181		KLO	5.4	8.2		MEC	EM	C	6.3	780	370	55	80	500						20		RE	WG
25181A		KLO	5.0	5.9		MEC	EM	C	6.3	780	370	55	50	500						20		RE	WG
25182		KLO	8.2	11.7		MEC	EM	C	6.3	780	370	55	60	500						20		RE	WG
25203		KLO	2.6	2.8		MEC	EM	C	6.3	1200	370	55	80	500						30		RE	WG
25204		KLO	2.9	3.2		MEC	EM	C	6.3	1200	370	55	80	500						30		RE	WG
25205		KLO	3.2	3.7		MEC	EM	C	6.3	1200	370	55	80	500						30		RE	WG
25206		KLO	3.6	3.9		MEC	EM	C	6.3	1200	370	55	80	500						30		RE	WG
25212		KLO	4.0	5.5		MEC	EM	C	6.3	1200	370	55	80	500						25		RE	WG
25221		KLO	3.3	4.9		MEC	EM	C	6.3	1200	370	55	80	500						25		RE	WG
25226		KLO	2.6	4.0		MEC	EM	C	6.3	1200	370	55	80	500								RE	
WX31108		MAG	16.5	16.5	10	FX	WH	P	12.6	2400	16K	16A	65K						8			IM	WG
WX31128		MAG	16.5	16.5	10	FX	WH	P	12.6	2400	16K	16A	65K						8			IM	WG
55008		MAG	34.5	35.2	5	FX	VV	P	5.0	3900	17K	18A	85W									IM	WG
55029		MAG	9.4	9.5	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55030		MAG	9.3	9.4	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55031		MAG	9.2	9.3	10	FX	AM	P	13.7	3500	21K	28A	225K						18			IM	WG
55031/01		MAG	9.2	9.3	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55031/02		MAG	9.3	9.3	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55032		MAG	9.0	9.2	10	FX	AM	P	13.7	3500	21K	28A	225K						18			IM	WG
55032/01		MAG	9.0	9.1	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55032/02		MAG	9.1	9.2	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG
55085-01		MAG	3.6	3.6	2	FX	VV	P	5.0	2900	30K	40A	450K									2500	CO
55085-02		MAG	3.5	3.6	2	FX	VV	P	5.0	2900	30K	40A	450K									2500	CO
55085-03		MAG	3.5	3.5	2	FX	VV	P	5.0	2900	30K	40A	450K									2500	CO
55085-04		MAG	3.4	3.5	2	FX	VV	P	5.0	2900	30K	40A	450K									2500	CO
55100-01		MAG	3.0	3.1	12	FX	VV	P	5.0	2600	30K	35A	475K									2300	CO
55100-02		MAG	3.0	3.0	12	FX	VV	P	5.0	2600	30K	35A	475K									2300	CO
55100-03		MAG	3.0	3.0	12	FX	VV	P	5.0	2600	30K	35A	475K									2300	CO
55100-04		MAG	2.9	3.0	12	FX	VV	P	5.0	2600	30K	35A	475K									2300	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersts	CAVITY	COUPLING
			MIN	MAX																			
52335		KLO	31.0	36.0		MEC	PH	C	6.3	800	2500	18	150	600						60		RI	WG
52340		TWA	3.8	4.2			AM	P	6.3	800	1500	55	8000	1500				37			600		WG

5. Characteristic Listing of Tube Types

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
QK5576	AMA		0.6	0.6	72			RA P		95A	75K	200A	10M								440		CO
QK1052	AMA		0.8	0.9				RA C					10K										CO
QK51012	AMA		1.2	1.4	250			RA P			21K	9000	100K				13				IM		WG
QK51181	AMA		1.2	1.3	8			RA P	2.8	50A	97K	99A	5M				11						WG
QK1093	AMA		1.3	1.4				RA C					1K										
QK1094	AMA		1.3	1.4				RA C					1K								IM		WG
QK5642	AMA		1.3	1.3	16	FX		RA P	7.0	70A	80K	125A	5M				11				IM		WG
QK5653	AMA		1.3	1.4				RA P			94K	98A	5M								IM		WG
7577	AMA		1.3	1.4	7			RA P	3.8	60A	97K	98A	5M								IM		WG
QK1200	AMA		1.7	1.7				RA C					10W										
QK1068	AMA		5					RA C					100W										
QK1119	AMA		2.2	2.4				RA C					50W										
QK1050	AMA		2.3	2.3				RA C					500										
QK5997A	= AMA		2.3	2.3	FX			RA C	6.3		1900	23	25W			20							CO
QK1051	AMA		2.3	2.3				RA C					25W										
QK1115	AMA		2.3	2.3				RA C					500W										
QK51262	AMA		2.4	2.5				RA C			22K	10A	100K								IM		WG
QK5783A	AMA		2.7	2.9	50			RA P			54K	66A	3M								IM		WG
QK51194	AMA		2.8	3.2	200			RA P			56K	23A	750K			12					IM		WG
QK51267	AMA		2.9	3.1	300			RA P			29K	3800	60K			16					IM		WG
QK51110	AMA		2.9	3.1	270			RA P			53K	22A	3M			12					IM		WG
8129	AMA		2.9	3.1	55			RA P			54K	66A	3M								IM		WG
QK1030	AMA		3.0	3.0	FX			RA C					15K										
QK1021	AMA		4.2	4.4				RA C					1000										
QK5807	AMA		5.4	5.8	17			RA P			50K	75A	3M								IM		WG
QK1225	AMA	X						RA C					50K										
QK5506	AMA	X			10	FX		RA P			40K	45A	1M			7			700		IM		WG
QK51350	AMA		8.9	9.6	130			RA P	1.6	6300	16K	1700	10K			10					IM		WG
QK51244	AMA		9.5	9.7	28			RA P			16K	4000	25K			14					IM		WG
QK51243	AMA		9.5	9.7	14			RA P			37K	26A	500K			14					IM		WG
SE223	BWO		0.5	1.0		VT		WJ C	6.3	900	150	18	20	100	20	2K			500		IM		CO
RW716	BWO		0.5	0.7		VT		WT C	6.3	5000	2200	350	350W			5K							CO
QKA1260	BWO		0.5	0.7				RA C			2100	500	400W	3400	700	5K					IM		WG
RW715	BWO		0.7	0.9		VT		WT C	6.3	5000	2200	350	350W			5K							CO
QKA1261	BWO		0.7	1.0				RA C			2100	500	400W	3400	700	5K					IM		WG
QK1065	BWO		0.9	1.1				RA C					50W										
RW714	BWO		0.9	1.1	VT			WT C	6.3	5000	2000	375	350W			5K					IM		CO
QKB913	BWO		1.0	2.0				RA C	6.3	1100	100	35	10	1500	150								CO
F2055	BWO		1.0	2.6				IT C	6.3	1000				125	2K								
SE214	BWO		1.0	2.6		VT		WJ C	6.3	900	200	18	30	100	30	2K			2K		IM		CO
VA183G	BWO		1.0	2.0		VT		VA C	6.3	1500	100	10	50			1K					IM		CO
SE214A	BWO		1.0	2.0		VT		WJ C	6.3	900	150	17	100	100	20	1K			1K		IM		CO
SE306	BWO		1.0	2.0		VT		SE C	6.3	900	150	17	100	100	20	1K					IM		CO
QKB786	= BWO		1.0	2.0		VT		RA C	6.3	1500	250	45	100	1500	200		30				IM		CO
F2508	BWO		1.0	2.0		VT		IT C	6.3	960	250	25	300	150	30						IM		CO
VA174G	BWO		1.0	2.0		VT		VA C	6.3	1250	100	30	800	150	30	1K					IM		CO
F2508A	BWO		1.0	2.0		VT		IT C	6.3	1080	250	25	800	150	30						IM		CO
F4028E	BWO		1.0	2.1				CS C			1500	70	1500										CO
QKA1250	BWO		1.0	1.4				RA C			2100	300	200W	3500	1K	5K					IM		WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR, etc VOLTS	CONTR. VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHz																				
			MIN	MAX																			
L3721	=	BWO	1.0	1.4	VT	LI P			6.3		1900	300	200W		700	4K							CO
Rw713		BWO	1.0	1.4	VT	WT C			6.3	3000	2000	350	250W			5K							CO
OK1103		BWO	1.0	1.4		RA C							400W										WG
OKA1250-1		BWO	1.0	1.4		RA C					2100	500	400W	3500	1K	5K					IM		CO
Rw718		BWO	1.1	1.4	VT	WT C			12.6	5000	3000	1000	1K			7K							CO
OK1098		BWO	1.2	1.3									250										WG
OKA1251		BWO	1.3	1.8		RA C					2100	300	200W	3500	1K	5K					IM		WG
SE219		BWO	1.4	2.5		WT C			6.3	900	150	17	100	100	20	1K				1K	IM		CO
Rw712		BWO	1.4	1.8	VT	WT C			6.3	3000	2000	350	250W			5K							CO
F4005C		BWO	1.6	3.2		CS C					1700	70	2000										CO
OK1156		BWO	1.7	2.4		RA C							20										CO
SE215		BWO	1.7	4.2	VT	WT C			6.3	900	200	15	30	100	20	2K					IM		CO
F2507	=	BWO	1.8	2.8	VT	IT C			6.3	1080	250	15	190	150	30	200							CO
OKA1252		BWO	1.8	2.5		RA C					2100	300	200W	3500	1K	5K					IM		WG
M5052		BWO	2.0	4.0		EC C			6.3	300	450		5			900	15	30					CO
OKB794		BWO	2.0	4.0		RA C					100		20	1500							IM		CO
OKB816A	=	BWO	2.0	4.0	VT	RA C			6.3	1300	250	45	70	1500	100		30						CO
WJ2018	=	BWO	2.0	4.0		WT C							14	70		2K							CO
SE215A		BWO	2.0	4.0	VT	WT C			6.3	900	200	15	75	100	20	2K				2K	IM		CO
SE305		BWO	2.0	4.0	VT	SE C			6.3	900	200	15	75	100	20	2K				2K	IM		WC
VA184M		BWO	2.0	4.0		VA C			6.3	1250		42	100			1K					IM		WG
WJ2024		BWO	2.0	4.0	VT	WT C			6.3	800	130	8	250		8	1K					IM		CO
F2509		BWO	2.0	4.0	VT	IT C			6.3	960	250	15	250	150	30						IM		CO
F2509A		BWO	2.0	4.0	VT	IT C			6.3	1080	250	15	250	150	30						IM		CO
OK518		BWO	2.0	4.0	VT	RA C			6.3	1300	250	20	1000		100	2K					IM		CO
OKB691		BWO	2.0	4.0	VT	RA C			6.3	1300	250	20	1000	1600	100						IM		CO
OKB708		BWO	2.0	4.1		RA C							1000										CO
OKB914	=	BWO	2.0	4.0	VT	RA C			6.3	1300	200	50	1000		150	1K					IM		CO
7783		BWO	2.0	4.0	VT	RA C			6.3	1300	250	45	1000		100	2K							CO
F4029D		BWO	2.0	4.0		CS C					1500	55	1500										CO
WJ2031-2	=	BWO	2.1	4.2		WT C						14	60			1K							CO
OKB1096		BWO	2.2	4.3		RA C							1000										CO
OKA995		BWO	2.2	3.2		RA C					1400	115	60W										CO
Rw710		BWO	2.2	2.7	VT	WT C			6.3	3000	2000	350	350W		125	2K							CO
F2056		BWO	2.3	4.5		IT C			6.3	1000			10										CO
N1034A		BWO	2.4	4.5	VT	EE C			6.3	2400	200	70	400		150	1K					IM		CO
N1034S		BWO	2.4	4.5	VT	EE C			6.3	2200	200	70	400		150	1K							CO
BW51		BWO	2.5	3.1	VT	GC C			8.0	2250	5000	350	150W		300						IM		CO
OKA1253		BWO	2.5	3.5		RA C					2100	300	180W	3500	1K	5K					IM		WG
L3724	=	BWO	2.5	3.6	VT	LI P			6.3		1900	300	180W		700	4K							CO
L3724A		BWO	2.5	3.5	VT	LI P			6.3	2000	1900	300	220W		700	4K							CO
OKA1253-2		BWO	2.5	3.5	VT	RA C					2100	300	235W	3500	1K	5K					IM		WG
OK625		BWO	2.5	3.3	VT	RA C			10.0	2000	1300	300	300W	850		5K					IM		CO
OK1175		BWO	2.5	3.6		RA C							400W										WG
OK1197		BWO	2.6	3.2		RA C							75W										CO
Rw709		BWO	2.6	3.5	VT	WT C			6.3	3000	2000	370	250W			5K							CO
Rw717		BWO	2.6	3.5	VT	WT C			6.3	4000	2000	650	600W			6K				1			CO
OK1099		BWO	2.7	2.9		RA C							200										CO
OKB924		BWO	2.7	3.2	VT	RA C			6.3	1300	100	45	500		800						IM		CO
OKB922		BWO	2.9	3.3		RA C							100										CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10%	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	REFLECTOR, etc. VOLTS	CONTROL VOLTS	HEAT VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
BW52	BWO		3.0	4.0		VT	GC C		8.0	2250	5000	350	150W	300								IM	CO
QKA659	BWO		3.2	4.4		VT	RA C		6.3	3000	2000	320	200W	1100	700	5K						IM	WG
RW708	BWO		3.2	3.9		VT	WT C		6.3	900	200	13	40	100	20	2K			325			IM	CO
SE221	BWO		3.5	6.8		VT	WJ C		6.3	900	2100	300	180W	3500	1K	5K						IM	WG
QKA1254	BWO		3.5	4.8			RA C																
L3725	= BWO		3.5	4.8		VT	LI P		6.3	1900	1900	300	180W	700	4K							IM	CO
VA160E	BWO		3.6	7.2		VT	VA C		6.3	1250	1500	38	20	1500		1K						IM	CO
QKB795	BWO		3.6	7.3		VT	RA C		6.3	100		29										IM	CO
F2512	= BWO		3.6	7.2		VT	IT C		6.3	1080	250	15	200	150	30							IM	CO
QK528	BWO		3.6	7.2		VT	RA C		6.3	1000	150	5	750	100	2K							IM	CO
SE211B	BWO		3.7	8.3		VT	WJ C		6.3	900	200	12	20	100	20	2K				5K		IM	CO
333H	= BWO		3.7	5.5		VT	HP C		6.3	1100	95	16	80	45								IM	CO
F2517	BWO		3.7	5.5		VT	IT C		6.3	980	250	20	250	150	30	1K						IM	CO
OK1044	BWO		3.8	4.0			RA C																
RW707	BWO		3.8	4.8		VT	WT C		6.3	3000	2000	320	200W			5K				1			CO
QKB709	BWO		3.9	7.5			RA C																
WJ2015	BWO		4.0	8.0		VT	WJ C		6.3	900	135	8	4		7	2K						IM	CO
OK1247	BWO		4.0	6.3			RA C																
SE211A	BWO		4.0	8.0		VT	WJ C		6.3	900	200	12	20	100	20	2K				4K		IM	CO
SE304	BWO		4.0	8.0		VT	SE C		6.3	600	200	12	20	100	20	2K				4K		IM	CO
QKB760A	= BWO		4.0	8.0		VT	RA C		6.3	1000	150	45	20	1500	100		30					IM	CO
OK1029	BWO		4.0	8.0			RA C																
190H	BWO		4.0	8.0			HP C				2000	25	30									IM	CO
WJ2019	= BWO		4.0	8.0			WJ C					12	30			2K							
VA1925	BWO		4.0	8.0		VT	VA C		6.3	1500	100	10	35			1K						IM	CO
WJ2005	= BWO		4.0	8.0			WJ C					14	40			2K							
VA160M	BWO		4.0	8.0			VA C		6.3	1250		41	50			1K						IM	CO
M5053	BWO		4.0	8.0			EC C		6.3	300	450		50			900	15	30					CO
WJ2034	= BWO		4.0	8.0			WJ C					14	60			2K							
WJ2025	BWO		4.0	8.0		VT	WJ C		6.3	750	100	8	70		7	2K			5			IM	CO
VA185M	BWO		4.0	8.0		VT	VA C		6.3	1500	100	10	100			1K						IM	CO
F2555	= BWO		4.0	8.0		VT	IT C		6.3	960	200	15	100		30	2K						IM	CO
Y25774E	BWO		4.0	7.5		VT	ST C		6.3	900	300	15	120	1500	200	1K			10			IM	CO
WJ2030	BWO		4.0	8.0		VT	WJ C		6.3	750	100	8	150		7	2K						IM	CO
F2510	= BWO		4.0	8.2		VT	IT C		6.3	1080	250	15	175	150	30							IM	CO
F2510A	BWO		4.0	8.2		VT	IT C		6.3	1080	250	15	175	150	30							IM	CO
QKB915	= BWO		4.0	8.0		VT	RA C		6.3	1000	150	35	250	150	150	1K		35				IM	CO
F4084	BWO		4.0	8.0			CS C				1500	40	300										CO
OK1097	BWO		4.2	8.4			RA C																
QKA1258-2	BWO		4.4	5.9			RA C				2100	300	220W	3500	1K	5K						IM	WG
L3729A	= BWO		4.4	5.9		VT	LI C				1900	300	220W	4000	700	2K							
F40077C063C	BWO		4.8	9.6			CS C				1500	40	1000										CO
QKA1255	BWO		4.8	6.5			RA C				2100	300	165W	3500	1K	5K						IM	WG
L3726	= BWO		4.8	6.6		VT	LI P		6.3		1900	275	165W	700	4K								WG
RW706	= BWO		4.8	6.0		VT	WT C		6.3	2500	2000	320	200W			5K				1			CO
VA160F	BWO		5.0	6.0			VA C		6.3	1250		35	50			340						IM	CO
QKB747	BWO		5.2	5.9			RA C																
QKB909	= BWO		5.3	5.9		VT	RA C		6.3	1000	130	30	50			720						IM	CO
335H	= BWO		5.3	7.6		VT	HP C		6.3	1100	85	15	80		45							IM	CO
SE217	BWO		5.3	6.0		VT	WJ C		6.3	1000	200	20	200	100	20	800				700		IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HEAT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
F2516	= BWO		5.3	10.3	10%	VT	IT C	6.3	1080	250	15	200	150	30							IM		CO
OKB728	BWO		5.4	5.9			RA C																
OKB734	BWO		5.4	5.9			RA C																
OKB994	BWO		5.4	5.9			RA C																
VA160N	BWO		5.4	5.9			VA C					45	400			800					IM		CO
F2521	BWO		5.4	5.9		VT	IT C	6.3	960	250	25	480	150	30							IM		CO
F2076	BWO		5.6	5.8			IT C	6.3	1000			400	100	20							IM		CO
RW705	BWO		5.8	7.2		VT	WT C	6.3	3000	2000	320	200W				2K				1			CO
RRW010	BWO		6.5	12.7		MEC	SH C				25	1000		200		2K							CO
OKA1256	BWO		6.5	8.5			RA C				2100	300	150W	3500	1K	5K					IM		WG
L3727	= BWO		6.5	8.5		VT	LI P	6.3			1900	275	150W	700	4K								WG
F2518	BWO		6.6	8.7		VT	IT C	6.3	970	250	12	150	150	30	1K						IM		CO
OKB796	BWO		6.7	11.4		VT	RA C	6.3			100		20	1500							IM		CO
OKB808	= BWO		6.7	12.0		VT	RA C	6.3	1600	150	45	100		150	2K		35				IM		CO
OK610	BWO		6.7	11.4		VT	RA C	6.3	1500	250	35	300		150	2K						IM		CO
SE229	BWO		7.0	12.4		VT	WJ C	6.3	900	200	12	10	100	20	2K					5K	IM		CO
VA450M	BWO		7.0	12.4			VA C	6.3	1250		28	20			1K						IM		CO
OKB1088	BWO		7.0	11.5			RA C						20										
M5153	= BWO		7.0	12.4			EC C	6.3	300	200	20	20			2K						IM		
M5166	= BWO		7.0	12.4			EC C	6.3	300	200	20	20			2K						IM		
WJ2001	BWO		7.0	12.4		VT	WJ C	6.3	900	200	12	25	100	20	2K					5K	IM		CO
VA193G	BWO		7.0	12.4			VA C	6.3	1250		38	40			1K						IM		CO
VA173M	BWO		7.0	12.4			VA C	6.3	1250											2K	IM		CO
SE301	BWO		7.0	9.1		VT	WJ C	6.3	900	200	25	100	100	20	2K						IM		CO
F2547	= BWO		7.0	11.0		VT	IT C	6.3	960	200	25	100		30	1K						IM		CO
N1010	BWO		7.0	11.5		VT	EE C	6.3	2300	300	50	130		250	2K						IM		CO
N1010A	BWO		7.0	11.5		VT	EE C	6.3	2300	300	50	130		250	2K						IM		CO
N1010S	BWO		7.0	11.5		VT	EE C	6.3	2300	300	50	130		250	2K						IM		CO
F2520	BWO		7.0	12.4		VT	IT C	6.3	960	250	12	150		150	30						IM		CO
F2520A	BWO		7.0	12.4		VT	IT C	6.3	1080	250	15	150		150	30						IM		CO
F4053	BWO		7.0	12.4			CS C				1500	25	300										CO
M5174	= BWO		7.0	11.0			EC C	6.3	300	700	20	2000		50	6K	30	20				IM		WG
M5175	BWO		7.0	11.0			EC C	6.3	300	900		2000		50	6K	30	20				IM		CO
OKB870	= BWO		7.2	12.4		VT	RA C	6.3	1700	150	45	100	1800	150			35				IM		CO
OKB931	= BWO		7.2	12.4			RA C	6.3			100	29	200	1250	100						IM		CO
RW704	= BWO		7.2	8.6		VT	WT C	6.3	2500	2000	290	175W			5K					1			CO
336H	BWO		7.3	10.0		VT	HP C	6.3	800	110	15	40		45							IM		CO
OKB710	BWO		7.4	12.0			RA C						20										CO
BW45	BWO		7.5	10.4		VT	GC C	6.3	2500	5000	375	100W									IM		WG
VA451M	BWO		8.0	12.4			VA C	6.3	1250		28	15				650					IM		CO
SBX2980	BWO		8.0	12.0			SP C	6.3	400	1100	8	15									IM		
OKB776	= BWO		8.0	12.4		VT	RA C	6.3	1800	150	45	20	1500	150			30				IM		WG
M5054	BWO		8.0	12.0			EC C	6.3	300	450		25				1K	15	30			IM		CO
VA161F	BWO		8.0	12.4		VT	VA C	6.3	2000	80	10	30		650							IM		WG
VA450C	BWO		8.0	12.4			VA C	6.3	1250		28	40				1K					IM		CO
191H	BWO		8.0	12.4			HP C				2000	25	50								IM		CO
VA193F	BWO		8.0	12.4			VA C	6.3	1250			28	50			1K					IM		CO
VA460M	BWO		8.0	12.4			VA C	6.3	1250			28	50			1K					IM		WG
YH1100	BWO		8.0	12.4		VT	PH C	6.3	1700	2100		35	50		150						IM		WG
WJ2006	= BWO		8.0	12.4			WJ C					12	50			2K							

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANGLE	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HEAT SINK VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
WJ2020	=	BWO	8.0	12.4				WJ C	6.3	1250		12	50		2K							IM	WG
VA175M		BWO	8.0	12.4				VA C	6.3	1250		38	80		1K							IM	WG
VA173T		BWO	8.0	12.4				VA C	6.3	1250		38	100		1K							IM	WG
VA175T		BWO	8.0	12.4				VA C	6.3	1250		38	100		1K							IM	WG
WJ2031	=	BWO	8.0	12.4				WJ C	6.3	1250		14	100		2K								
F2554		BWO	8.0	12.4				VT	6.3	960	150	12	100	30	2K							IM	CO
F2511		BWO	8.0	12.4				VT	6.3	960	250	12	130	150	30							IM	CO
BA9-20M		BWO	8.0	12.4				VT	6.3	1700	350	35	150	2200	150								WG
F4032B		BWO	8.0	16.0				CS C	6.3	750	150	8	175		7	1K						IM	CO
WJ2027		BWO	8.0	12.4				VT	6.3	750	150	8	175		7	1K						IM	CO
WJ2008		BWO	8.0	12.4				VT	6.3	800	130	10	225	7	2K							IM	CO
QKB916	=	BWO	8.0	12.4				VT	6.3	1800	150	35	250	150	1K		35					IM	CO
VA175G	=	BWO	8.0	12.4				VT	6.3	1250	100	40	500	100	1K							IM	WG
QK1087		BWO	8.0	9.7				RA C	6.3	1250		40	150W									IM	WG
VA161M		BWO	8.2	12.4				VA C	6.3	1250		40	20		650							IM	WG
VA194G		BWO	8.2	12.4				VA C	6.3	1250		20			650							IM	WG
SE209A		BWO	8.2	12.4				VT	6.3	900	200	12	20	100	20	2K				4K		IM	WG
SE303		BWO	8.2	12.4				VT	6.3	600	200	12	20	100	20	2K				4K		IM	WG
VA461M		BWO	8.2	12.4				VA C	6.3	1250		28	20		650							IM	WG
SE313		BWO	8.2	12.4				VT	6.3	600	200	12	50	100	20	2K						IM	WG
WJ2001-1		BWO	8.2	12.4				VT	6.3	900	200	12	50	100	20	2K						IM	WG
WJ2026		BWO	8.2	12.4				VT	6.3	750	125	8	100	10	2K							IM	CO
174H	=	BWO	8.2	12.4				HP C	6.3	820	1650	20	150									IM	CO
QK634		BWO	8.2	11.0				RA C	10.0	1400	2000	275	250W	1600	600	5K						IM	WG
171H		BWO	8.3	9.3				HP C			490	15	60									IM	CO
QK1201		BWO	8.4	9.3				RA C					60									IM	WG
357H		BWO	8.4	9.3				VT	6.3	800	220	35	200	45								IM	WG
QKA773		BWO	8.4	11.0				RA C			2150	300	150W	1600	600	5K						IM	WG
M5157	=	BWO	8.5	9.6				EC C	6.3	300	200	20	20		600							IM	WG
VA451N		BWO	8.5	9.6				VA C	6.3	1250		30			280							IM	CO
VA462N		BWO	8.5	9.6				VA C	6.3	1250		25	40		310							IM	WG
OPX1		BWO	8.5	12.5				VT	6.0	500	2000	25	50									IM	WG
VA450N		BWO	8.5	9.6				VA C	6.3	1250		25	50		600							IM	CO
QKB938	=	BWO	8.5	9.6				VT	6.3	1750	110	25	50		520							IM	CO
SE302		BWO	8.5	9.6				VT	6.3	900	100	25	100	100	20	2K				1K		IM	WG
QKB830	=	BWO	8.5	9.6				VT	6.3	700	400	45	250	500	100		25						WG
QKB720		BWO	8.5	9.6				RA C	6.3	75	250		500	100	800								
QKB775		BWO	8.5	9.6				RA C	6.3	75	250		1000	100	2K								
QK1137		BWO	8.5	11.0				RA C					150W									IM	WG
QKA1257		BWO	8.5	11.0				RA C			2100	300	150W	3500	1K	5K							
L3728	=	BWO	8.5	11.0				VT	6.3		1900	275	150W	700	4K								WG
QK1064		BWO	8.7	11.0				RA C					80										
WJ2017	=	BWO	8.7	11.0				WJ C				12	150		1K							IM	WG
372H		BWO	9.2	10.0				VT	6.3	800	220	35	350	45		800							
WJ2004	=	BWO	9.5	13.0				WJ C				10	10										
QKB1125		BWO	9.5	10.7				RA C	6.3	65	250		500	100	1K								WG
RW703		BWO	9.6	11.0				VT	6.3	2500	2000	320	150W		5K					2		IM	WG
339H	=	BWO	9.9	14.2				VT	6.3	640	145	15	40	45								IM	WG
SE220		BWO	10.0	15.5				VT	6.3	900	200	12	10	100	20	2K				5K		IM	WG
VA472M		BWO	10.0	15.5				VA C	6.3	1250		18	20		1K							IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, etc. VOLTS	CONTROL VOLTS	HEX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
M5158		BWO	10.0	20.0				EC C	6.3	300	200	20	20			3K					IM		
VA195G		BWO	10.0	15.5				VA C	6.3	1250		40				1K					IM	WG	
VA177M		BWO	10.0	15.0				VT VA C	6.3	1250	100	7	50		100	1K					IM	WG	
VA162F		BWO	10.0	20.0				VT VA C	6.3	1250	60	17			100	1K					IM	WG	
QKB107Z		BWO	10.6	13.0				RA C	6.3	30	130		200		100	1K							
QX1111		BWO	10.7	18.1				RA C					35										
RW702		BWO	10.8	13.0				VT WT C	6.3	2000	2000	320	130W		5K				2			WG	
BA16-10B		BWO	11.0	18.0				VT MU C	6.3	800	500	30	70	2700	150						IM		
M5154		BWO	12.0	18.0				EC C	6.3	300	200	20	20			2K							
M5055		BWO	12.0	18.0				EC C	6.3	300	450		25			1K	15	30				CO	
SE216		BWO	12.4	18.0				VT WJ C	6.3	900	200	12	10	100	20	2K			6K		IM	CO	
SE307		BWO	12.4	18.0				VT SE C	6.3	600	200	12	10	100	20	2K			5K		IM	WG	
112H		BWO	12.4	18.0				HP C			1000	15	20								IM	WG	
113H		BWO	12.4	18.0				HP C			1000	15	20								IM	CO	
326H		BWO	12.4	18.0				VT HP C	6.3	800	120	7	20		20						IM	WG	
VA470M		BWO	12.4	18.0				VA C	6.3	1250		18	20			1K					IM	WG	
192H		BWO	12.4	18.0				HP C			1950	14	40								IM	CO	
VA196G		BWO	12.4	18.0				VA C	6.3	1250			40			1K					IM	WG	
WJ2003		BWO	12.4	18.0				VT WJ C	6.3	900	200	12	40	100	20	2K			6K		IM	WG	
WJ2021		BWO	12.4	18.0				WJ C				12	40			2K							
VA162M		BWO	12.4	18.0				VA C	6.3	1250		25	50			1K					IM	WG	
WJ2028		BWO	12.4	18.0				VT WJ C	6.3	750	150	8	85		10	2K					IM	CO	
110H		BWO	12.4	18.0				VT HP C	6.3	500	240	15	100								IM	CO	
111H		BWO	12.4	18.0				VT HP C	6.3	500	240	15	100								IM	CO	
QKB890		BWO	12.4	18.0				VT RA C	6.3	1800	200	30	180	1500	150						IM	WG	
315H		BWO	12.5	17.5				VT HP C	6.3	800	180	11	20								IM	WG	
RW701		BWO	12.8	15.3				VT WT C	6.3	2000	2000	320	100W		5K				2			WG	
F4158		BWO	13.0	15.5				CS C			6000	60	5000								IM	WG	
SE308		BWO	14.0	17.0				VT SE C	6.3	600	200	8	10	100	20	800			3K		IM	WG	
WJ2029		BWO	14.0	17.0				VT WJ C	6.3	750	150	7	30		10	760					IM	CO	
VA470N		BWO	14.0	17.0				VA C	6.3	1250			50			900					IM	WG	
VA196N		BWO	14.0	17.0				VT VA C	6.3	1500	100	7	70			900					IM	WG	
WJ205		BWO	14.0	18.0				VT WJ C	7.5	3000	5000	350	90W	6000							IM	WG	
BWJ4		BWO	14.9	18.0				VT GC C	6.3	6000	2000	375	100W	4800		1K			3K		IM	WG	
RW700		BWO	15.0	18.0				VT WT C	6.3	2000	2000	300	100W		5K								
SBU4530		BWO	15.4	17.0				SP C	6.3	650	1300	23	15								IM		
C02012B		BWO	15.5	24.0				CS C			2700	40	400									WG	
F4033B		BWO	15.5	24.0				CS C			2700	40	400									WG	
QK1232		BWO	16.0	17.0				RA C					200		100	1K							
QKB1073		BWO	16.0	18.0				RA C	6.3	35	250												
QKB1272		BWO	17.0	18.0				RA C	6.3	35	250				100	1K							
SE311		BWO	18.0	26.5				WJ C				12	5			2K							
VA480M		BWO	18.0	26.5				VA C	6.3	1250			10			1K					IM	WG	
M5155		BWO	18.0	27.0				EC C	6.3	300	200	20	15		2K						IM		
VA198G		BWO	18.0	26.5				VA C	6.3	1250			20			1K					IM	WG	
SE218		BWO	18.0	26.5				VT WJ C	6.3	700	250	8	20	100	20	2K			8K		IM	WG	
VA163M		BWO	18.0	26.5				VA C	6.3	1250		17	25			1K					IM	WG	
QKB1112		BWO	18.0	26.6				RA C					35										
VA163G		BWO	18.0	26.5				VT VA C	6.3	1250	100	17	40		100	1K					IM	WG	
QKB891		BWO	18.0	26.5				VT RA C	6.3	1800	300	35	180	2500	150						IM	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM AMPL. VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
Y322/1E		BWO	18.0	26.5				ST C	6.3	500	450	20	200	2800	450	3K			40		950		WG
OK1091		BWO	22.0	25.0				RA C					40										WG
CO1308B		BWO	23.5	37.5				CS C			3500	45	500										WG
F4034B		BWO	23.5	37.5				CS C			3500	45	500										WG
OKB1067		BWO	24.0	26.0				RA C	6.3	35	300		200		100	2K							
OK1263		BWO	24.0	26.0				RA C					200										
SE312		BWO	26.5	40.0				WJ C	6.3	1250		10	5			2K							
VA490M		BWO	26.5	40.0				VA C	6.3	1250			5			1K							
VA199G		BWO	26.5	40.0				VA C	6.3	1250			10			1K							WG
VA164M		BWO	26.5	40.0				VA C	6.3	1250		19	10			1K							WG
SE222		BWO	26.5	40.0				WJ C	6.3	700	250	8	10	100	20	2K			14K				WG
Y333/1E		BWO	26.5	40.0				ST C	6.3	500	450	15	50	3000	450	3K			40		900		WG
RW060		BWO	26.5	42.0				SH C	6.3	1000		20	60		400	3K							WG
F4159		BWO	29.0	32.0				CS C			12K	50	400										WG
F4178		BWO	29.0	32.0				CS C			12K	50	1000										WG
RRW040		BWO	32.0	40.0				SH C	6.3	1000		20	150		200	2K							WG
VA490N		BWO	34.0	36.0				VA C	6.3	1250			20			1K							
SBV4370		BWO	34.0	40.0				SP C	6.3	1500	2500	20	20										WG
WJ282		BWO	34.5	36.5				WJ C	6.3	5000	24K	400	1K			24K							WG
F4110/CO70		BWO	37.0	50.0				CS C			3000	35	100										WG
RW060		BWO	40.0	61.0				SH C	6.3	1000		18	20		200	2K							WG
F4143		BWO	40.0	40.0				CS C	6.3	2000	3000	85	20W		200								WG
BA47F		BWO	43.0	52.0				OK C	6.3	1000	700	30	150		150	4K							WG
50Bw10		BWO	44.0	54.0				OK C	6.3	1000	700	40	120		210	4K							WG
BA50G		BWO	45.0	54.0				OK C	6.3	1000	700	30	150		150	4K							WG
BA47H		BWO	45.0	52.0				OK C	6.3	1000	1150	60	600		300	4K			5				WG
BA48H		BWO	45.0	50.5				OK C	6.3	1000	1150	60	700		300	4K			5				WG
BA50H		BWO	48.0	55.0				OK C	6.3	1000	1150	60	600		300	4K			5				WG
SBM4212		BWO	50.0	63.0				SP C	6.3	1500	3300	25	50										WG
BA55B		BWO	50.0	59.0				OK C	6.3	1000	700	30	120		150	4K							WG
381H		BWO	51.0	55.0				HP C			10K	45	5000										WG
BA54H		BWO	51.5	55.0				OK C	6.3	1000	1150	60	600		300	4K			5				WG
BA60C		BWO	54.0	65.0				OK C	6.3	1000	700	30	100		150	4K			5				WG
181H		BWO	54.0	56.0				HP C			12K	50	15W										WG
RW080		BWO	60.0	90.0				SH C	6.3	1000		18	5		400	3K							WG
F4076/CO40B		BWO	68.0	72.0				CS C			6000	70	10W										WG
CO40-30		BWO	68.0	77.0				CS C					30W										WG
F4157		BWO	68.0	77.0				CS C			6000	70	30W										CO
SBF4023		BWO	70.0	86.0				SP C	6.3	1500	3300	20	5										WG
F4150/CO40		BWO	73.0	77.0				CS C			6000	70	10W										WG
F4109/CO35		BWO	80.0	90.0				CS C			4000	35	1000										WG
SBF4221		BWO	86.0	98.0				SP C	6.3	1500	2900	17	5										WG
182H		BWO	90.0	99.0				HP C			14K	35	1000										WG
F4108/CO30		BWO	90.0	H1.0				CS C			4000	35	1000										WG
183H		BWO	94.0	99.0				HP C			12K	35	10W										WG
F4075/20B		BWO	H1.3	H1.4				CS C			6000	60	1000										WG
184H		BWO	H1.3	H1.5				HP C			20K	35	2000										WG
CO20-5		BWO	H1.3	H1.6				CS C					5000										WG
F4146		BWO	H1.4	H1.6				CS C			2000	60	1000										WG
F4074/CO10		BWO	H2.9	H3.2				CS C			6000	50	50										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1 mT	CAVITY	COUPLING
			MIN	MAX																			
CO-10-1		BWO H2.9 H3.2						CS C					1000										WG
F4114/CO0.9		BWO H3.1 H3.5						CS C			6000	50	15										WG
CO-09EA		BWO H3.1 H3.5						CS C					50										WG
F4112/CO.06		BWO H4.8 H5.2						CS C			6000	40	10										WG
CO-06EA		BWO H4.8 H5.2						CS C					30										
CO-05		BWO H5.7 H6.3						CS C					5								1M		WG
F4151		BWO H5.7 H6.3						CS C			10K	50	5										WG
OKS681		CFA 0.4 0.5						RA P					5M				10						WG
OKS1284		CFA 0.5 0.7						RA C			7000	500	2K				10						WG
SFD212		CFA L						SD P			9K	40A	150K				15		100				CO
OKS1319		CFA 1.2 1.4						RA P			10K	20A	100K				15						WG
SFD220		CFA 1.6 1.7			10			SD P			15K	20A	100K				20		1K		1M		WG
SFD511		CFA 2.8 3.2						SD C			6000	100	150W				10						CO
OKS973		CFA 2.8 2.9						RA P			50K	68A	3M				9						WG
OKS982		CFA 2.8 2.9						RA P			50K	68A	3M				9						WG
OKS622		CFA 2.9 3.1						RA P			54K	66A	3M				7						WG
OKS846		CFA 2.9 3.1						RA P			54K	66A	3M				7						WG
OKS1286		CFA 3.0 3.2						RA P			54K	42A	2M				9						WG
OKS1335		CFA 5.5 5.8						RA P			21K	4700	60K										WG
OKS912		CFA 5.5 5.8						RA P			40K	13A	250K				11						WG
OKS1130		CFA 5.5 5.6						RA P			50K	75A	3M				15						WG
OKS1347		CFA 5.5 5.8						RA P			11K	650	2K				7						WG
L3913		CFA 7.1 8.2						LI P	10.0		7500	500	750W	16K	1K		23						WG
L3652		CFA 8.5 10.5						LI P	6.3					13K	1K		23						WG
L3652C		CFA 8.5 10.5						LI C	6.3		2500	5	750W	13K	1K		23						WG
L3765		CFA 8.8 10.5						LI C			31K	40A	500K				17		200		1M		WG
SFD218		CFA 9.2 9.6		25				SD P			35K	55A	750K				16		300		1M		WG
SFD217		CFA 9.2 9.6		3				SD P					250W				18						WG
L5031		CFA 15.5 17.5						LI C									20						
3KM50000PA		KLA 0.2 0.4						MEC EI C	7.5	40A	23K	2750	24K		500		36				1M	3E	CO
3KM3000LA		KLA 0.3 0.5						MEC EI C	26.0	12A	30K	9000	100K									3I	CO
3KM3LB		KLA 0.4 0.5						MEC EI C	5.0	31A	9K	590	2K									3E	CO
4KM50LB		KLA 0.4 0.5						MEC EI C	7.5	40A	17K	1900	10K				33		3			4E	CO
4KM50000LA3		KLA 0.4 0.6						MEC EI C	7.5	40A	17K	1800	10K		500		30		5			4E	CO
4KM50000LA5		KLA 0.4 0.6						EI C	7.5	20A	20K	2500	10K		500		50		4			4I	CO
K365		KLA 0.4 0.6						MEC EE C	7.5	40A	20K	2500	11K		500		50		6			4E	CO
3K50000LA		KLA 0.4 0.6						MEC EI C	8.0	40A	20K	2500	12K				23					3I	CO
YK1000		KLA 0.4 0.6						MEC PH C	7.5	32A	18K	2000	14K	18K			30					4E	
3KM3000LA		KLA 0.4 0.6		60				MEC EI P	5.0	31A	20K	2800	20K		15K		31					3E	CO
4KM170.000LA		KLA 0.4 0.5						MEC EI C	11.0	23A	35K	5300	75K		400		45					4E	CO
X602K		KLA 0.4 0.5		22				EI P	11.0	23A	50K	9000	150K		1K		45					4E	CO
X626AC		KLA 0.4 0.4		600				MEC EI P	7.5	95A	110K	36A	1M		500		30					3E	WG
VAB42		= KLA 0.4 0.4		650				MEC VA P	30.0	25A	120K	2000	1M				40		3			4I	SP
L3403		KLA 0.4 0.4		600				MEC LI P	32.0	22A	120K	37A	1M				35						
L3694		KLA 0.4 0.4						MEC LI P	32.0	22A	120K	37A	1M				35						
X841D		KLA 0.4 0.4		600				FX EI P	30.0	28A	115K	67A	2M				33			50		6I	CO
VAB12C		KLA 0.4 0.4		30				FX VA P	65.0	14A	155K	160A	10M				50			50		5I	WG
VAB12D		KLA 0.4 0.4		70				FX VA P			220K	255A	15M										

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM VOLTS	I _k	P _o	COLLECTOR, REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
L3775		KLA	0.4	0.4		MEC	LI	P	32.0	56A	250K	375A	30M				36			10			
L5024		KLA	0.4	0.4		MEC	LI	P			250K	380A	30M				40						
K3004		KLA	0.5	0.6		MEC	EE	C	5.5	42A	12K	3000	8000				38					4E	CO
K383		KLA	0.5	0.6		MEC	EE	C	5.5	42A	12K	2000	6K	9000			36			8		4E	CO
4KM70LAM		KLA	0.5	0.6		MEC	EI	C	26.0	12A	13K	2800	12K				30					4E	CO
K370		KLA	0.5	0.6		MEC	EE	C	5.5	42A	14K	3000	12K				40					4E	CO
YK1001		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K				30					4E	
YK1002		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K				30					4E	
YK1003		KLA	0.5	0.9		MEC	PH	C	7.5	32A	18K	1900	14K				30					4E	
6237		= KLA	0.5	0.5		FX	GE	C	5.5	35A	18K	3000	15K				27			6		500	3I
6238		= KLA	0.5	0.6		FX	GE	C	5.5	35A	18K	3000	15K				27			6		500	3I
M4101A		KLA	0.5	0.5		MEC	TO	C	7.5	34A	18K	2530	20K				42					150	4E
M4640		KLA	0.5	0.7		MEC	TO	C	7.5	34A	20K	2600	20K				42					150	4E
4KM100LA		KLA	0.5	0.6		MEC	EI	C	26.0	12A	16K	3800	25K				30			8		4E	CO
K3014		KLA	0.5	0.6		MEC	EE	C	7.0	50A	20K	6000	25K				42					4E	CO
YK1060		KLA	0.5	0.9		MEC	PH	C	7.5	32A	24K	3200	27K				30					4E	
YK1061		KLA	0.5	0.9		MEC	PH	C	7.5	32A	24K	3200	27K				30					4E	
YK1062		KLA	0.5	0.9		MEC	PH	C	7.5	32A	24K	3200	27K				30					4E	
K376		KLA	0.5	0.6		MEC	EE	C	26.0	12A	20K	6000	30K				42			8		4E	CO
TV890		KLA	0.5	0.6		MEC	TV	C	6.5	17A	18K	5000	30K				35			8		41	CO
VA890		KLA	0.5	0.6		MEC	VA	C	6.5	17A	20K	5500	30K				35			8		41	CO
F2008		KLA	0.5	0.6		MEC	CS	P			18K	4800	30K				30					4E	
K3017		KLA	0.5	0.6		MEC	EE	C	8.5	44A	23K	7000	45K				40					4E	CO
4KM150LA		KLA	0.5	0.6		MEC	EI	C	26.0	12A	20K	5400	50K				30			8		4E	CO
4KMV150LA		KLA	0.5	0.6			ST	C	26.0	11A	23K	6500	50K				30		40			4E	CO
VA893		KLA	0.5	0.6		MEC	VA	C	6.5	17A	25K	8000	50K				35			8		41	CO
M4620		KLA	0.5	0.5		MEC	TO	C	10.0	48A	22K	6300	50K				45					250	4E
K3005		KLA	0.6	0.7		MEC	EE	C	5.5	42A	12K	3000	8000				38					4E	CO
4KM3000LR		KLA	0.6	1.0		MEC	EI	C	5.0	31A	10K	750	2K				30			7		4E	CO
K384		KLA	0.6	0.7		MEC	EE	C	5.5	42A	12K	2000	6K	9000			36					4E	CO
4KM50000LF		KLA	0.6	0.8		MEC	EI	C	7.5	40A	18K	2000	10K				30			7		4E	CO
4KM50000LQ		KLA	0.6	1.0		MEC	EI	C	7.5	40A	17K	1800	10K				30			5		4E	CO
3K50000LF		KLA	0.6	0.7		MEC	EE	C	8.0	40A	20K	2500	12K				23					31	CO
K371		KLA	0.6	0.7		MEC	EE	C	5.5	42A	14K	3000	12K				40					4E	CO
YK1004		KLA	0.6	0.8		MEC	PH	C	7.5	32A	18K	2000	14K				30					4E	
6239		= KLA	0.6	0.7		FX	GE	C	5.5	35A	18K	3000	15K				27			6		500	3I
6240		= KLA	0.6	0.7		FX	GE	C	5.5	35A	18K	3000	15K				27			6		500	3I
4KM100LF		KLA	0.6	0.7			ST	C	26.0	11A	19K	6000	25K				44		40			4E	CO
K377		KLA	0.6	0.7		MEC	EE	C	26.0	12A	20K	6000	25K				44			8		4E	CO
K3015		KLA	0.6	0.7		MEC	EE	C	7.0	50A	20K	6000	25K				42					4E	CO
TV891		KLA	0.6	0.6		MEC	TV	C	6.5	17A	18K	5000	30K				35			8		41	CO
VA891		KLA	0.6	0.7		MEC	VA	C	6.5	17A	20K	5500	30K				35			8		41	CO
TV892A		KLA	0.6	0.7		MEC	TV	C	6.5	17A	18K	5000	30K				35			8		41	CO
K3018		KLA	0.6	0.7	15	MEC	EE	C	8.5	44A	23K	7000	45K				40					4E	CO
4KMV150LF		KLA	0.6	0.7			ST	C	26.0	11A	23K	6500	50K				40			40		4E	CO
VA894		KLA	0.6	0.7		MEC	VA	C	6.5	17A	25K	8000	50K				35			8		41	CO
4KMP10000LF		KLA	0.6	0.6	100	MEC	EI	P	11.0	22A	65K	16A	400K				57			10		350	4E
K347A		KLA	0.6	0.6	24	MEC	EE	P	7.0	35A	80K	20A	600K				33					3E	CO
K3006		KLA	0.7	0.9		MEC	EE	C	5.5	42A	12K	3000	8000				38					4E	CO
4KM3000LQ		KLA	0.7	1.0		MEC	EI	C	5.0	33A	10K	750	2K				25			7		4E	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REF. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
3K3000LQ		KLA	0.7	1.0				MEC EI C	5.0	31A	9000	750	3K				25					31 CO	
K385		KLA	0.7	0.9				MEC EE C	5.5	42A	12K	2000	6K	9000			36					4E CO	
4K50000LQ		KLA	0.7	1.0				MEC EI C	8.0	40A	20K	2500	11K		500		58					4E CO	
3K50000LQ		KLA	0.7	1.0				MEC EI C	8.0	40A	20K	2500	12K				23					31 CO	
K372		KLA	0.7	0.9				MEC EE C	5.5	42A	14K	3000	12K				40					4E CO	
6241								FX GE C	5.5	35A	18K	3000	15K				27			6	500	31 WG	
VA833C								MEC VA C	6.5	17A	13K	3000	17K				40		40	10		41 CO	
4KH100LH		KLA	0.7	0.9				ST C	26.0	11A	19K	6000	25K									41 CO	
K3016		KLA	0.7	0.9				MEC EE C	7.0	50A	20K	6000	25K				42					4E CO	
VA892		KLA	0.7	0.9				MEC VA C	6.5	17A	20K	5500	30K				35			8		41 CO	
K3019		KLA	0.7	0.9				MEC EE C	8.5	44A	23K	7000	45K				40					4E CO	
4KNV150LH		KLA	0.7	0.9				ST C	26.0	11A	23K	6500	50K						40			41 CO	
VA895		KLA	0.7	0.9				MEC VA C	6.5	17A	25K	8000	50K				35			8		41 CO	
4KM50000LR		KLA	0.8	1.0				MEC EI C	7.5	40A	17K	1900	10K		500		30			7		4E CO	
TV2151		KLA	0.8	1.0				MEC TV C	6.0	16A	13K	3000	10K				40			10		41 CO	
K386		KLA	0.8	1.0				MEC EE C	5.5	42A	14K	3000	12K	12K			40					4E CO	
6242								FX GE C	5.5	35A	18K	3000	15K				27			6	500	31 WG	
5K210.000LQ		KLA	0.8	1.0				MEC EI C	15.0	18A	25K	8A	75K				44			10		5E WG	
VA853		KLA	0.8	1.0				MEC VA P	7.0	18A	28K	8000	75K				60			9		51 WG	
SAL415		KLA	0.9	1.2	250			SP P	4.2	36A	12K	2000	6K				24						
8493		KLA	0.9	1.2	250			MEC SP P	4.2	35A	20K	10A	12K		600		27			4			
3K2500LX		KLA	1.0	1.2				MEC EI C	7.5	5800	7000	600	1K				28					31 CO	
Z211/1G		KLA	1.0	1.2	300			ST C	12.6	1800	5000	2500	7K	15K			33				600	3E CO	
SAL89								MEC SP P	4.2	40A	20K	8500	30K				30			10		31 CO	
SAL219								MEC SP P	4.2	35A	23K	8000	37K				21					31 CO	
VA840B		KLA	1.0	1.2	260			MEC VA P	4.2	18A	30K	10A	37K				40					41 CO	
3KM4000LT		KLA	1.0	1.2				MEC EI P	7.5	5500	26K	4200	40K				33					3E CO	
L3486		KLA	1.2	1.4	680	VT		LI P	16.0	8300	45	22A	250U				30						
L3227		KLA	1.2	1.4	20	VT		LI P	16.0	8000	136K	100A	5000				30						
X3002		KLA	1.2	1.4	300			EI P	7.5	5500	13K	1120	4K		50		23					31 CO	
L3876		KLA	1.2	1.4				MEC LI C			43K	30A	400K				38						
X780		KLA	1.2	1.4	600			MEC EI P	7.0	90A	115K	59A	2M				35					41 WG	
L3035		KLA	1.2	1.4	30			MEC LI P	16.0	8000	115K	78A	2M				36				1M	31 WG	
L3401		KLA	1.2	1.4	600			MEC LI P	24.0	15A	140K	120A	5M				35						
L3938		KLA	1.2	1.4	300			LI P	24.0	15A	135K	115A	5M				35						
X3039		KLA	1.2	1.4				EI C			180K	167A	10M				33			100		71 WG	
L3250		KLA	1.2	1.4	15			MEC LI P	16.0	8200	250K	200	10M				36					31 WG	
L3323		KLA	1.2	1.4	20			LI P	17.0	20A	185K	190A	10M				36			100			
L3707		KLA	1.2	1.3				MEC LI P	13.0	25A	225K	200A	10M				36			100			
Z5010A		KLA	1.2	1.3				MEC GE P	16.0	16A	250K	120A	10M				30					500	31 WG
SAL166		KLA	1.2	1.3	48	FX		SP P			195K	240A	12M				34			100			
TV2001		KLA	1.2	1.4				FX TV P	25.0	24A	230K	220A	20M				50						
TV2022		KLA	1.2	1.4				FX TV P	25.0	24A	230K	220A	20M				50					51 WG	
L3661		KLA	1.2	1.4	15	FX		LI P	17.0	20A	265K	260A	20M				36						
L3702		KLA	1.2	1.3				MEC LI P	31.0	25A	310K	350A	30M				33			60			
L3823		KLA	1.2	1.3				MEC LI P	30.0	18A	300K	340A	30M				36			100			
TV2023		KLA	1.2	1.4				FX TV P	25.0	35A	300K	330A	40M				50					51 WG	
L3257		KLA	1.3	1.3	3			LI P	16.0	8000		136K	100A	4000			31			10			
L3739		KLA	1.3	1.3				FX LI P			40K	17A	200K				30						
L3943		KLA	1.3	1.3				FX LI P			140K	105A	5M				36						

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
L3660		KLA	1.3	1.3	20	FX	L1	P	17.0	20A	180K	175A	10M				33						WG
L3944		KLA	1.3	1.3	15	FX	L1	P	16.0	7600	250K	175A	10M				30			14			WG
SAL321		KLA	1.3	1.3	26	FX	SP	P	13.5	48A	209A	272A	20M				40						4E CO
F2047		KLA	1.4	1.4		FX	CS	P	7.7	12A	12K	2600	10K				25						31 CO
3K2500SG		KLA	1.7	2.4		MEC	EI	C	7.5	5500	7000	600	1K										
4K35J			1.7	2.4		MEC	EI	C	6.0	4500	6000	540	1K				45			6			1M 41 CO
4K35L			1.7	2.4		MEC	EI	C	6.0	4500	6000	540	1K				37			13			1M 41 CO
VA8029			1.7	2.4		MEC	VA	C	6.3	7500	7000	600	1K				43			6			1M 41 CO
4K55L-1			1.7	2.4		MEC	EI	C	6.0	4500	8600	800	2K				40			6			1M 41 CO
4KM505J			1.7	2.4		MEC	EI	C	7.5	12A	18K	1800	10K				43			12			41 WG
5KM505J			1.7	2.4		MEC	EI	C	7.5	12A	18K	1750	10K				43			10			51 WG
LD-624			1.7	1.8		MEC	NE	C	3.5	16A	16K	2250	10K				36			16			IN WG
VA800E			1.7	2.4		MEC	VA	C	3.5	17A	20K	2350	12K				40			12			41 WG
4KM705J			1.7	2.4		MEC	EI	C	7.5	12A	21K	2450	20K				43			12			41 WG
5KM705F			1.7	1.8		MEC	EI	C	7.5	12A	18K	3750	20K				43			10			51 WG
LD-659			1.7	1.8		MEC	NE	C	3.5	16A	18K	2800	21K				46			8			IN WG
VA858A			1.7	2.0		MEC	VA	C	10.0	11A	35K	10A	122K		550		65			20			41 WG
TV2102									6.3	7000	25K	8000	25K				35			61			WG
TV2103									6.3	7000	25K	8000	35K				35			61			WG
TV2016									25.0	24A	225K	225A	20M				40						51 WG
5KT05G			2.0	2.1		MEC	EI	C	7.5	12A	20K	2425	24K				50			15			51 WG
VA858B			2.0	2.4		MEC	VA	C	10.0	11A	35K	10A	122K		550		65			20			41 WG
X3065			2.1	2.1		FX	EI	C	6.3	1000	3500	1.4A	200W				30			7			41 CO
VA800C			2.1	2.4		MEC	VA	C	4.0	30K	20K	2350	11K				40			8			41 WG
5KM3005I			2.1	2.4		EI	C		13.0	5400	38K	7900	100K				55			15			51 WG
X3060			2.1	2.4		MEC	EI	C	13.0	5000	36K	6800	100K				50			15			51 WG
L3910			2.3	2.3		FX	L1	C	5.0	1000	1400	40	20W				30			4			CO
L3910B			2.3	2.3		FX	L1	C			1600	48	20W				20			4			CO
X3064			2.3	2.3		FX	EI	C	6.3	500	3000	120	100W				30			30			71 CO
L5044			2.3	2.3		FX	L1	C			2700	105	100W				20			5			CO
4K35K			2.4	2.7		MEC	EI	C	6.0	4500	7000	480	1K				47			7			1M 41 CO
VA802C			2.4	2.7		MEC	VA	C	6.0	8000	8000	600	1K										1M 41 CO
VA835A			2.4	2.7		MEC	VA	C	3.5	18A	20K	2350	10K				40			18			41 WG
X700			2.4	2.9	500	MEC	EI	P	7.5	5500	21K	2770	20K		200		40						41 WG
SAS28			2.6	2.7		FX	SP	C	7.5	11A	4000	350	150W				28						31 CO
4KM505K			2.6	2.7		MEC	EI	C	7.5	12A	18K	1800	10K				40			11			41 WG
SAS60A			2.7	3.3		MEC	SP	C	6.3	2000	900	300	15W		100		25						31 CO
SAS60B			2.7	2.9	22	MEC	SP	P	6.3	2000	1400	650	30W		100		30			8			31 CO
TV802D			2.7	3.1		MEC	TV	C	6.0	7500	7500	450	1K				40			7			41 CO
SAS61			2.7	2.9	40	MEC	SP	P	6.3	6000	15K	5500	10K				30			17			31 CO
VA835B			2.7	3.0		MEC	VA	P	3.5	18A	20K	2350	10K				40			18			41 WG
R9571			2.7	3.0	50	EM	P		10.0	7200	25K	8800	15K				55			30			41 WG
TV2107			2.7	3.1		TV	P				29K	10A	35K				20			20			41 WG
VA87B			2.7	2.8	10	MEC	VA	P	7.5	32A	120K	70A	2M				60			33			41 WG
HK-3			2.7	2.8	20	MEC	KK	P	7.5	38A	140K	110A	4M				40						41 WG
TV2013			2.7	3.1		FX	TV	P	25.0	24A	120K	85A	4M				50			15			51 WG
VA820B			2.7	2.8	20	FX	VA	P	7.5	33A	135K	105A	5M				51			25			41 WG
VA839			2.7	2.9	20	FX	VA	P	7.5	33A	150K	125A	5M				39			180			1M WG
TV2012			2.7	3.1	42	TV	P				130K	95A	5M				50			15			WG
TV2017			2.7	3.1		MEC	TV	P	22.5	22A	135K	105A	5M				35			60			51 WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
TV2020		KLA	2.7	3.1	FX	TV P		TV P	25.0	24A	135K	105A	5M			35		100		5I	WG	
L3735		KLA	2.7	2.8	MEC	LI P		LI P			140K	119A	5M			50		100				
TV2019	=	KLA	2.7	3.1	42	TV P		TV P			170K	150A	10M			50		15				
TV2011	=	KLA	2.7	3.1	20	TV P		TV P	25.0	24A	250K	220A	20M			50		15			WG	
TV2014	=	KLA	2.7	3.1	20	TV P		TV P			250K	250A	25M			50		15				
TV2028		KLA	2.7	3.1	FX	TV P		TV P	25.0	24A	240K	235A	25M			50		15		5I	WG	
L3668H		KLA	2.8	2.8	FX	LI		LI			26K	4200	35K			30		15				
VA87C	=	KLA	2.8	2.9	10	MEC	VA P	7.5	32A	120K	70A	2M				60		33		4I	WG	
VA820C	=	KLA	2.8	2.9	20	FX	VA P	7.5	33A	135K	105A	5M				51		90		4I	WG	
TV2018		KLA	2.8	3.3	FX	TV P		TV P	22.5	22A	135K	105A	5M			35		100		5I	WG	
L3843		KLA	2.8	2.8	FX	LI P		LI P	17.0	20A	160K	128A	5M			40						
L3733		KLA	2.8	2.8	20	LI P		LI P	16.0	8250	200K	172A	10M			36				IM	WG	
L3768		KLA	2.8	2.8	20	FX	LI P	1.7	200K	200K	172A	10M						20	1000	5E	CO	
SAS159		KLA	2.8	2.8	9	FX	SP P	18.0	13A	250K	250A	21M			50				IM		WG	
L3980		KLA	2.8	2.8	10	FX	LI P	15.0	14A	250K	250A	21M										
L3989		KLA	2.8	2.8	10	FX	LI P	15.0	14A	250K	250A	21M										
8568		KLA	2.8	2.8	10	FX	RC P	15.0	14A	260K	270A	21M				53				5I	WG	
X3051		KLA	2.8	2.8	11	FX	EL P	15.0	15A	250K	250A	24M				50				1M	WG	
F2049		KLA	2.8	2.8	FX	CS P		CS P	23.0	11A	280K	250A	30M			54				5E	CO	
L3742		KLA	2.9	3.1	FX	LI P		LI P			80K	35A	1M			35						
L3617		KLA	2.9	2.9	30	FX	LI P	16.0	8A	160K	128A	5M				40						
VA820D		KLA	2.9	2.9	20	FX	VA P	7.5	33A	150K	140A	6M				50		20		5I	WG	
SAS1592		KLA	2.9		9	FX	SP P			250K	250A	21M				49						
L3618		KLA	2.9	2.9	20	FX	LI P	16.0	14A	285K	285A	25M				50						
F2042		KLA	2.9	2.9	FX	CS P		CS P	23.0	11A	280K	250A	30M			54				5E	CO	
F2011		KLA	3.0	3.0	FX	CS P		CS P			40K	15A	50K					170	1M		WG	
VA811		KLA	3.0	3.1	40	FX	VA P	7.5	32A	105K	68A	1M				39						
F2015		KLA	3.0	3.0	FX	CS P		CS P			125K	105A	5M									
K352		KLA	3.0	3.0	15	FX	EE P	3.6	86A	210K	100A	6M	210K			32				3I	WG	
K352B		KLA	3.0	3.0	15	FX	EE P	3.6	86A	210K	100A	6M	210K			32				3I	WG	
K211		KLA	3.0	3.0	15	FX	EE P	3.8	86A	210K	105A	7M	210K			32			1M	3I	WG	
K390		KLA	3.0	3.0	15	FX	EE P	3.6	86A	205K	105A	8M	205K			42				4I	WG	
F2043		KLA	3.0	3.0	FX	CS P		CS P	9.0	70A	250K	230A	20M			40				4E	CO	
F2040		KLA	3.0	3.0	CS	CS P		CS P			260K	265A	25M			50						
MA2600	=	KLA	3.1	3.5	250	MEC	MA P	7.0	17A	16K	1940	10K				43					WG	
L3975		KLA	3.1		LI			LI			85K	28A	1M			30		90				
R9719		KLA	3.2	3.3	12	MEC	EM P	9.0	3500	13K	900	2K				65		8		R1	WG	
VA816J	=	KLA	3.4	3.6	40	MEC	VA P	7.5	33A	115K	80A	2M								5I	WG	
SAC41		KLA	3.7	4.2	VT	SP C		SP C	6.3	200	750	200	7000			25						
SAC246		KLA	C		20	MEC	SP P	6.3	2800	9000	950	450W				30				3I	CO	
SAC4890		KLA	C		73	FX	SP P			85K	50A	1M				45		250				
SAC4900		KLA	C		50	FX	SP P			100K	60A	1M				50		200				
TV2024		KLA	C		FX	TV P		TV P	8.0	25A	130K	95A	5M			50		20		5I	WG	
TV2053		KLA	C		TV	TV P		TV P	8.0	25A		5M										
SAC4920		KLA	C		10	FX	SP P			145K	115A	5M				46		500				
SAC4910		KLA	C		10	FX	SP P			150K	120A	6M				35		380				
SAC259	=	KLA	4.0	8.2	280	MEC	SP P	6.3	750	7500	250	500W						5		1M	3I	WG
SAC225	=	KLA	4.2	6.8	MEC	SP C		SP C	4.8	56A	130K	98A	3M			35				3I	WG	
4X1CB	=	KLA	4.4	5.0	MEC	EI C		EI C	6.5	7500	4500	220	200W			35		7		4I	WG	
4X3CB	=	KLA	4.4	5.0	MEC	EI C		EI C	6.5	7500	7500	470	1K			46		8		1M	4I	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHz																			
			MIN	MAX																		
VA834B		KLA	4.4	5.0		MEC	VA C		6.5	7800	7500	470	1K			51		17	1M	41	WG	
VA888		KLA	4.4	5.0		MEC	VA C		6.5	7800	8500	600	1K			40		12	1M	41	WG	
L3949		KLA	4.4	5.0			LI				8000	500	1K			40		5				
VA804	=	KLA	4.4	5.9		MEC	CV C		6.0	124	10K	1000	2K	150		50		8	41	WG		
VA846A	=	KLA	4.4	4.6		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
5K50CB																						
VA908		KLA	4.4	5.0		MEC	EI C		10.0	3000	15K	2000	10K			60		20	51	WG		
F2006		KLA	4.4	5.0		MEC	VA C		8.0	7000	18K	3000	10K			55		4	41	WG		
VA877A		KLA	4.4	5.0		MEC	VA C		8.5	7500	16K	2500	12K			62		34				
SAC4092		KLA	4.4	5.0		MEC	SP C		10.0	5000	18K	2300	15K			50		25				
SAC406		KLA	4.4	6.0		MEC	SP C		6.3	13A	20K	2870	20K			50		20	41	WG		
VA846B	=	KLA	4.6	4.7		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846C	=	KLA	4.7	4.8		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846D	=	KLA	4.8	5.0		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846E	=	KLA	5.0	5.2		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846F	=	KLA	5.2	5.3		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846G	=	KLA	5.3	5.4		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA808	=	KLA	5.3	5.9	150	FX	VA P		6.3	2500	23K	3300	24K			57		13	1M	41	WG	
SAC45A		KLA	5.4	5.9		MEC	SP C		6.3	1400	1100	175	6000			16		515	3E	CO		
SAC46		KLA	5.4	5.9	20	MEC	SP C		6.3	2800	9000	670	3000			34		515	3E	CO		
VA834D		KLA	5.4	5.8		MEC	VA C		6.5	7400	8000	500	1K			57		14	1M	41	WG	
VA846H	=	KLA	5.4	5.6		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
SAC285A		KLA	5.4	5.9	12	SP	P		6.3	4000	33K	2400	20K			43		515	3E	WG		
SAC47		KLA	5.4	5.9	16	MEC	SP C		6.3	2000	20K	8500	27K			30		515	3E	WG		
VA912		KLA	5.4	5.9		MEC	VA P		6.3	2100	18K	8500	35K			21		25	31	WG		
SAC167		KLA	5.4	5.9	75	MEC	SP P		5.0	35A	95K	59A	1M			47		100	1800	5E	WG	
SAC42		KLA	5.4	5.9	20	SP	P				135K	112A	3M			24		25				
VA846J	=	KLA	5.6	5.8		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
QKL1379		KLA	5.6	5.8		MEC	RA C		6.0	5000	13K	1200	5K			47		16				
X3052		KLA	5.7	6.4		MEC	EI C		11.0	3400	20K	3000	20K			45		40	51	WG		
VA846K	=	KLA	5.8	5.9		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
VA846L	=	KLA	5.8	6.0		MEC	CV C		3.4	20A	14K	1400	5K			55		8	41	WG		
SAC4170		KLA	5.8			FX	SP C		10.0	5000	20K	2900	20K			50		15				
VA861		KLA	5.9	6.4		MEC	VA C		5.5	5000	7500	550	1K			48		11	1M	41	WG	
VA805	=	KLA	5.9	6.4		MEC	VA C		6.5	10A	9000	1000	2K			55		10	41	WG		
VA936		KLA	5.9	6.4		MEC	VA C		7.5	6000	9000	900	3K			50		50	51	WG		
X3054		KLA	5.9	6.4		MEC	EI C		5.8	3700	8500	850	3K			56		50	51	WG		
VA667		KLA	5.9	6.4		MEC	VA C		8.0	18K	1730	10K		185		57		15	41	WG		
TV884		KLA	5.9	6.4		MEC	TV C		8.0	8000	18K	3000	10K			50		10	51	WG		
SAC4173		KLA	5.9	6.4		MEC	SP C		10.0	5000	18K	2300	14K			50		40				
VA884B		KLA	5.9	6.4		MEC	VA C		8.0	7000	20K	3500	20K			50		50	51	WG		
VA860		KLA	5.9	6.5		MEC	VA C		9.0	7000	22K	4500	22K			52		35	41	WG		
SAC417		KLA	6.0	8.0		MEC	SP C		6.3	13A	17K	2200	10K			50		18				
M4627D		KLA	6.4	6.4		MEC	TO C		11.0	7000	12K	1750	5500	12K	30	33		2100	41	WG		
M4627A		KLA	6.4	6.4		MEC	TO C		11.0	7000	10K	1450	3K	10K	40	30		1800	41	WG		
SAC4175		KLA	6.4			FX	SP C		10.0	5000	15K	1900	10K			60		30				
SAX4181		KLA	7.0	8.0		MEC	SP P		5.5	8500	21K	3100	25K			68		55				
VA866		KLA	7.1	8.5		MEC	VA C		5.5	5000	8K	550	1K			60		20	1M	WG		
VA856A	=	KLA	7.1	7.4		MEC	VA C		8.5	2580	11K	1100	2K			60		11	41	WG		
VA903		KLA	7.1	8.5		MEC	VA C		5.5	5000	10K	800	2K			45			1M	41	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIUM VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																				
			CHZ	X10 ⁴																				
VA881		KLA	7.1	8.5		MEC	VA C		5.5	5000	14K	1400	6K				45				1M	41	WG	
VA823	=	KLA	7.1	10.0		VA C			6.0	5400	15K	1600	8K				49						WG	
VA885		KLA	7.1	8.4		MEC	VA C				16K	2300	10K				50				1M	41	WG	
VA863		KLA	7.1	8.5		FX	VA C		6.0	5400	18K	2250	12K				63				35	4E	WG	
VA876		KLA	7.1	8.5		MEC	VA C				25K	4000	17K				50					51	WG	
VA849		KLA	7.1	8.5		MEC	VA C		10.5	5000	26K	3400	25K		120		54					41	WG	
VA873	=	KLA	7.1	8.5		MEC	VA C		9.0	7000	28K	6000	60K				55				1M	41	WG	
VA879A		KLA	7.1	8.5		MEC	VA C				45K	10A	100K				43				30	41	WG	
VA879		KLA	7.1	8.5		VA C			9.5	8400	41K	6600	115K								40			
X3050		KLA	7.2	8.4		MEC	EL C		11.0	3400	20K	3000	20K				43				50	51	WG	
VA856B		KLA	7.4	7.7		MEC	VA C		8.5	2580	11K	1100	2K				60				11	41	WG	
SAX4182	=	KLA	7.4			FX	SP C		10.0	5000	20K	2900	20K				50				20			
VA806V	=	KLA	7.5	7.6		FX	VA C		10.0	2200	10K	800	2K				53				41	WG		
VA823A		KLA	7.5	7.5		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
VA806T	=	KLA	7.6	7.6		FX	VA C		10.0	2000	10K	900	1K				52					41	WG	
VA806S	=	KLA	7.6	7.7		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA806J	=	KLA	7.6	7.6		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA823B		KLA	7.6	7.6		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
VA806R	=	KLA	7.7	7.8		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA856C	=	KLA	7.7	8.1		MEC	VA C		8.5	2580	11K	1100	2K				60				11	41	WG	
VA823C		KLA	7.7	7.7		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
VA806P	=	KLA	7.8	7.8		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA806Q	=	KLA	7.8	7.8		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA823D		KLA	7.8	7.8		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
SAX4570		KLA	7.8			FX	SP C		10.0	10A	38K	7400	100K				50				15			
VA806N	=	KLA	7.9	7.9		FX	VA C		10.0	2000	10K	900	1K				52					41	WG	
VA806M	=	KLA	7.9	8.0		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA925		KLA	7.9	8.4		MEC	VA C		7.5	7500	13K	1650	8K				54				55			
SAX4705		KLA	7.9	8.4		MEC	SP C		10.0	5000	14K	1700	8K				45							
VA823E		KLA	7.9	7.9		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
VA806K	=	KLA	8.0	8.0		FX	VA C		10.0	2000	10K	900	1K				52					41	WG	
VA806J	=	KLA	8.0	8.1		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA806L	=	KLA	8.0	8.0		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
SY41		KLA	8.0	9.0		MEC	FE C				13K	700	3K				47				16	1700	41	WG
VA823F		KLA	8.0	8.0		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
SAX418		KLA	8.0	10.5		MEC	SP C		5.0	10A	18K	2400	10K				50				10	41	WG	
SAX4184		KLA	8.0			FX	SP C		10.0	5000	20K	2900	20K				50				20			
SAX4188		KLA	8.0			FX	SP C		10.0	5500	20K	2900	20K				50				20			
X3066		KLA	8.0	8.0		FX	EL C		13.0	5000	36K	6800	100K				50				320	51	WG	
VA838		KLA	8.0	14.0	400	MEC	VA P		7.0	18A	48K	21A	320K								1M	51	CO	
VA806H	=	KLA	8.1	8.2		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA856D	=	KLA	8.1	8.5		MEC	VA C		8.5	2580	11K	1100	2K				60				11	41	WG	
VA823G	=	KLA	8.1	8.1		FX	VA C		6.0	6000	15K	1500	9K				43				22	41	WG	
173H	=	KLA	X			FX	HP C		4.2	2000	2800	133	100W				30					1M	31	WG
SAX240	=	KLA	X			SP	C		6.3	2800	6250	195	200W				30				10	1M	31	WG
SAX4410		KLA	X		12	SP	P		5.6	2000	25K	2000	15K				60							
VA401	=	KLA	8.2	12.4		FX	VA C		6.3	2000	2000	350	60W				30				18	31	WG	
VA806E	=	KLA	8.2	8.3		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA806F	=	KLA	8.2	8.2		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	
VA806G	=	KLA	8.2	8.2		FX	VA C		10.0	2200	10K	800	2K				53					41	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, V	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MHz																				
			MIN	MAX																			
VA8234		KLA	8.2	8.2		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
SAX4183		KLA	8.2			FX	SP C	SP C	10.0	5000	20K	2900	20K				50		20				
VA806D	=	KLA	8.3	8.4		FX	VA C	VA C	10.0	2200	10K	800	2K				53				41	WG	
VA823J		KLA	8.3	8.3		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA806C	=	KLA	8.4	8.4		FX	VA C	VA C	10.0	2000	10K	900	1K				51				41	WG	
VA806A	=	KLA	8.4	8.5		FX	VA C	VA C	10.0	2200	10K	800	2K				53				41	WG	
VA806B	=	KLA	8.4	8.4		FX	VA C	VA C	10.0	2200	10K	800	2K				53				41	WG	
VA823K		KLA	8.4	8.4		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA823L		KLA	8.5	8.5		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA922		KLA	8.6	11.3		MEC	VA C	VA C	5.5	4700	8200	600	1K				50		8		51	VG	
VA823M		KLA	8.6	8.6		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA823N		KLA	8.7	8.7		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA823P		KLA	8.8	8.8		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
SAX191		KLA	8.8	9.2	52	FX	SP P	SP P	5.0	30A	85K	50A	1M				43		370		71	WG	
VA823Q		KLA	8.9	8.9		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA874B		KLA	9.0	9.6	49	VA P	VA P	VA P	9.0	2100	40K	7900	600W				54		40		IM	WG	
VA822A	=	KLA	9.0	9.2		MEC	VA C	VA C	6.0	6000	8750	750	1K				52		20		IM	WG	
VA872A		KLA	9.0	10.4		MEC	VA C	VA C	6.0	6000	8000	700	1K				50		15		41	WG	
TV84B		KLA	9.0	10.8		MEC	TV C	TV C	8.5	2500	10K	1000	2K				56		14		41	WG	
VA84B		KLA	9.0	10.8		MEC	VA C	VA C	8.5	2500	10K	1200	2K				56		14		IM	WG	
VA927		KLA	9.0	10.0		MEC	VA P	VA P	8.0	8000	28K	4200	40K				61		20				
V24E		KLA	9.0	10.0		MEC	VA P	VA P	8.0	8000	36K	6000	50K				55		35		51	WG	
V24C		KLA	9.0	9.6	23	MEC	VA P	VA P	6.3	2100	38K	7000	64K				56		23		IM	WG	
VA874		KLA	9.0	9.6	50	MEC	VA P	VA P	6.3	2100	43K	8000	200K				50		100		IM	WG	
VA823R		KLA	9.1	9.1		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA909		KLA	9.2	10.6		MEC	VA P	VA P	6.0	3000	5000	300	300W				45		15		41	WG	
VA822B	=	KLA	9.2	9.4		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
VA870		KLA	9.2	10.0	400	VA P	VA P	VA P	6.5	5000	12K	850	1K				50		14		IM	WG	
VA932		KLA	9.2	10.6		MEC	VA P	VA P	5.0	2000	8500	650	1K				60		5				
TV851		KLA	9.2	10.6		TV C	TV C	TV C	8.5	2600	11K	940	2K				32					WG	
VA854	=	KLA	9.2	10.5		MEC	VA P	VA P	9.5	2000	10K	1000	2K				45				IM	WG	
VA845	=	KLA	9.3	9.6	12	MEC	VA P	VA P	9.5	2000	16K	1550	5K				55		16		IM	WG	
V82B		KLA	9.3	9.3	250	FX	VA P	VA P	6.3	1500	18K	2900	7K				55		15		IM	WG	
VA823S		KLA	9.3	9.3		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA822C	=	KLA	9.4	9.6		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
VA896		KLA	9.5	10.6		MEC	VA C	VA C	6.0	5500	5000	300	230W				47				IM	WG	
VA823T		KLA	9.5	9.5		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA822D	=	KLA	9.6	9.8		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
VA864		KLA	9.6	10.6		MEC	VA C	VA C	6.0	6000	17K	1800	10K				50				51	WG	
VA823U		KLA	9.7	9.7		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA824B	=	KLA	9.8	9.8		MEC	CV C	CV C	6.3	800	1000	90	2000				8				21	WG	
VA822E	=	KLA	9.8	10.0		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
VA823V		KLA	9.9	9.9		FX	VA C	VA C	6.0	6000	15K	1500	9K				43		22		41	WG	
VA869A		KLA	10.0	10.2	400	MEC	VA P	VA P	6.0	2100	7000	525	730W				52				IM	WG	
VA822F	=	KLA	10.0	10.2		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
VA851		KLA	10.0	16.5		MEC	VA C	VA C	8.5	2600	11K	900	3K				32				31	WG	
VA923		KLA	10.0	11.0		MEC	VA P	VA P	7.5	7000	42K	8000	125K				50						
VA822G	=	KLA	10.2	10.5		MEC	VA C	VA C	6.0	6000	8500	740	1K				52		20		IM	WG	
QKL1066		KLA	10.2	10.6		MEC	RA C	RA C	8.5	3000	10K	900	2K				53		8			WG	
QKL1219		KLA	10.4	10.4		MEC	RA C	RA C	8.5	2700	11K	800	2K				27		10			WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR V _{dc} VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
VA822-H	=	KLA 10.5	10.8		100%	MEC	VA C		6.0	6000	8500	740	1K			52			20	IM 41	WG	
SAX4186		KLA 10.5					SP P		5.5	8500	39K	7600	100K			55			30			
SAX5186		KLA 10.5					SP P		5.5	8500	39K	7600	100K			55			30			
SAX5180		KLA 10.6				FX	SP C		5.5	8500	20K	2900	15K			55			25			
SAX4187		KLA 10.6					SP P		5.5	8500	32K	5700	65K			55			30			
SAX5187		KLA 10.6					SP P		5.5	8500	32K	5700	65K			55			30			
VA822-J	=	KLA 10.8	11.0			MEC	VA C		6.0	6000	8500	740	1K			52			20	IM 41	WG	
VA882		KLA 12.4	18.0			MEC	VA C		4.5	5000	10K	750	2K			60			30			
VA4038	=	KLA 13.3	13.5			FX	VA C		6.3	2000	1500	250	5000			25			30			
VA408A		KLA 13.5	13.5			FX	VA C		13.0	900	4300		50W			45				IM 41	WG	
VA930		KLA 15.5	16.0			MEC	VA P		5.5	2500	3000	700	1K			50			20			
VA882A		KLA 15.6	15.8			MEC	VA C				8500	500	1K			50			50			
VA934		KLA 18.0	18.0			MEC	VA C				23K	3500	20K			50				51	WG	
SMS27		KLM 2.6	2.7			MEC	SP C		6.3	4000	1250	70	300	100		10				IN	CO	
SMC111		KLM 4.5	4.6			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11A		KLM 4.6	4.7			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11J		KLM 4.6	4.6			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11M		KLM 4.7	4.7			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11G		KLM 4.8	4.8			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11L		KLM 4.8	4.9			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11B		KLM 4.9	4.9			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11F		KLM 4.9	5.0			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11S		KLM 4.9	4.9			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11C		KLM 5.0	5.0			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11D		KLM 5.0	5.0			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
SMC11N		KLM 5.6	5.7			MEC	SP C		6.3	1100	1000	35	400			6				IN	CO	
V-45		KLM 9.0	10.0			MEC	VA C		6.3	1000	1000	80	1500			6				IN	WG	
SMX32		KLM 9.0	10.5			MEC	SP C		6.3	1600	1000	150	2200			2				31	WG	
ZV1012		KLO 0.5	3.0	30	MEC	PO P			6.3	600	350			700	150					RE	CO	
7506		KLO 0.5	3.0	30	MEC	PO P			6.3	600	350			700	150					RE	CO	
R9585		KLO 0.5	3.0		MEC	EM C			6.3	700	370	32	50	400						RE	CO	
R9586		KLO 0.5	3.0		MEC	EM C			6.3	700	370	32	50	400						RE	CO	
ZV1012		KLO 0.5	3.0		MEC	PO C			6.3	600	350	35	510	700	20				3		RE	CO
7506		KLO 0.5	3.0		MEC	PO C			6.3	600	350	35	510	700	20				3		RE	CO
V190C/1M		KLO 0.5	1.2		MEC	ST C			6.3	1000	400	70	2000	400	20				8	1200	RE	CO
5777		KLO 0.6	2.4		MEC	RA C			6.3	985	400	160	625	5						RE	CO	
68M6		KLO 0.6	3.8		MEC	P			6.3	650	350	29	175	700					6		RE	CO
68M6A		KLO 0.6	3.8		MEC	P			6.3	650	320	29	175	700					6		RE	CO
5837		KLO 0.6	3.8			LI C			6.3	675	350	29	220	700	150				8		RE	CO
ZV1010		KLO 0.7	3.0	30	MEC	PO P			6.3	600	350			700	150					RE	CO	
7505		KLO 0.7	3.0	30	MEC	PO P			6.3	600	350			700	150					RE	CO	
ZV1010		KLO 0.7	3.0		MEC	PO C			6.3	600	350	35	575	700	20				6		RE	CO
7505		KLO 0.7	3.0		MEC	PO C			6.3	600	350	35	575	700	20				6		RE	CO
SRL17		KLO 0.8	1.0		MEC	SP C			6.3	1500	1000	90	3000	1500	200				9		RI	CO
QK1027		KLO 0.9	1.2			RA C			6.3	600	450			700	150					RE	CO	
ZV1021		KLO 1.0	4.0	30	MEC	PO P			6.3	1200	370	55	100	500					35		RE	CO
R9559		KLO 1.0	5.4		MEC	EM C			6.3	700	300	45	150	500						RE	CO	
RK6112A		KLO 1.0	4.0		MEC	EM C			6.3	700	300	45	150	500						RE	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
2V1021		KLO	1.0	4.0		MEC	PO C		6.3	600	450	35	375	700	20					5		RE CO	
5981	*	KLO	1.2	1.5		MEC			6.3	455	250	50	134	220						6		RI CO	
OK1053		KLO	1.2	1.4			RA C		17.0	2000	115K	10W	2M							100	1M	WG	
L3270		KLO	1.2	1.4	30	FX	SP C		6.3	400	1050	75	1000									2I WG	
SOU4040	=	KLO	1.3	1.8																			
5836	*	KLO	1.4	6.5			LI C		6.3	675	350	35	300	700	150					6		RE CO	
2V1009		KLO	1.5	6.0	30	MEC	PO P		6.3	600	350			700	150							RE CO	
7049		KLO	1.5	6.0	30	MEC	PO P		6.3	600	350			700	150							RE CO	
2V1009		KLO	1.5	6.0		MEC	PO C		6.3	600	350	35	250	700	20					6		RE CO	
7049		KLO	1.5	6.0		MEC	PO C		6.3	600	350	35	250	700	20					6		RE CO	
6BL6		KLO	1.6	6.5		MEC	P		6.3	750	325	28	250	220						6		RE CO	
2220/1G		KLO	1.7	2.1			ST C		6.3	750	400	55	250	350	150					8		RE CO	
2V311		KLO	1.7	1.8		MEC	TO C		6.3	800	900	110	1200	850						16		RI CO	
SRL7F		KLO	1.7	1.9		MEC	SP C		6.3	2000	1000	220	10W	1000	50					20		RI CO	
2K28		KLO	1.8	4.0		MEC	RA C				300	30	100	250								EX	
RKK6133		KLO	1.8	4.0		MEC	RA P				300	30	100	250								EX	
2V312		KLO	1.8	2.0		MEC	TO C		6.3	800	900	110	1200	850						16		RI CO	
SRL7C		KLO	1.8	2.1		MEC	SP C		6.3	2000	1000	220	10W	1000						20		RI CO	
2V313		KLO	1.9	2.1		MEC	TO C		6.3	800	900	110	1200	850						16		RI CO	
SRL7G		KLO	1.9	2.2		MEC	SP C		6.3	2000	1000	220	10W	1000	50					20		RI CO	
2V314		KLO	2.1	2.3		MEC	TO C		6.3	800	900	110	1200	850						16		RI CO	
2V32		KLO	2.1	2.3		MEC	TO C		6.3	800	1000	110	3500	1000						35		RI CO	
OKK1184		KLO	2.2	2.4		MEC	RA C					50										RI CO	
SRL7H		KLO	2.2	2.4		MEC	SP C		6.3	2000	1000	220	10W	1000	50					20		RI CO	
2V315		KLO	2.3	2.5		MEC	TO C		6.3	800	900	110	1200	850						16		RI CO	
2V10		KLO	2.4	2.6		MEC	TO C		6.3	440	330	35	80	400						20		RI CO	
TV2110		KLO	2.4	2.4		FX	TV C		6.3	20A	19K	5300	25K							20		RI CO	
3V31		KLO	2.5	2.7		MEC	TO C		6.3	800	900	110	1000	850						15		RI CO	
VA298		KLO	2.5	8.4		MEC	VA C		6.3	750	800	85	2000	1000						25		RE WG	
VA299		KLO	2.5	8.4		MEC	VA C		6.3	750	800	85	2000	1000						25		RE WG	
25203		KLO	2.6	2.8		MEC	EM C		6.3	1200	370	55	80	500						30		RE WG	
25226		KLO	2.6	4.0		MEC	EM C		6.3	1200	370	55	80	500								RE	
2K41		KLO	2.7	3.5			SP C		6.3	1000	500	25	100	200								RI	
726C		KLO	2.7	2.9		MEC			6.3	440	330	35	100	400						30		RI CO	
V233A/1K		KLO	2.7	4.2			ST C		6.3	300	400	65	300	400	40					2	1200	EX CO	
V235A/1K		KLO	2.7	4.0			ST C		6.3	300	400	65	550	400	40					2	1200	EX CO	
L3647		KLO	2.8	2.8	100		LI P				140K	119A	5M							100		RE WG	
25204		KLO	2.9	3.2		MEC	EM C		6.3	1200	370	55	80	500						30		RI WG	
CV238		KLO	2.9	3.1		MEC	EM C		4.0	1300	300	40	150	500						30		RI CO	
726B		KLO	2.9	3.2		MEC			6.3	440	330	30	150	250								RI CO	
F2021		KLO	2.9	3.5			CS C		6.3	1000	500	30	200	300						10		RI WG	
F2025		KLO	2.9	3.5			CS C		6.3	1000	500	30	200	300						10		RI CO	
F2030		KLO	2.9	3.5			CS C		6.3	1000	500	30	200	300						10		RI WG	
F2031		KLO	2.9	3.5			CS C		6.3	1000	500	30	200	300						10		RI WG	
2V1011		KLO	3.0	11.0	20	MEC	PO P		6.3	600	1250			800	150							RE CO	
8052		KLO	3.0	11.0	20	MEC	PO P		6.3	600	1250			800	150							RE CO	
V231C/1K		KLO	3.0	3.3			ST C		6.3	250	400	65	200	400	36					16	1200	EX WG	
2V1011		KLO	3.0	11.0		MEC	PO C		6.3	600	1250	28	375	800	20					20		RE CO	
8052		KLO	3.0	11.0		MEC	PO C		6.3	600	1250	28	375	800	20					20		RE CO	
25205		KLO	3.2	3.7		MEC	EM C		6.3	1200	370	55	80	500						30		RE WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
25221		KLO	3.3	4.9		MEC	EM C		6.3	1200	370	55	80	500						25		RE WG	
2442		KLO	3.3	4.2			SP C		6.3	1000	1250	50	700	750						10		R1 WG	
4V62		KLO	3.3	3.6			KK C		6.3	800	825	85	1200	1000								R1 WG	
2K29		KLO	3.4	4.0			RA C		6.3	300	300	25	110	150						35		R1 WC	
F2022		KLO	3.4	3.8			CS C		6.3	1000	850	67	1600	435						25		R1 WG	
F2026		KLO	3.4	3.8			CS C		6.3	1000	850	67	1600	435						25		R1 CO	
F2032		KLO	3.4	3.8			CS C		6.3	1000	850	67	1600	435						25		R1 WG	
Z237/1KW		KLO	3.5	3.5			ST C		6.3	650	300	50	125	150	40					25	1200	RE WG	
TK75		KLO	3.5	4.2			TE C		6.3	1550	500	46	650	415						60		R1 CO	
TK76		KLO	3.5	4.3			TE C		6.3	1550	500	46	890	825						16		R1 CO	
V238A/1K		KLO	3.5	4.3			ST C		6.3	250	400	50	1000	400	40					2	1200	EX CO	
25206		KLO	3.6	3.9			EM C		6.3	1200	370	55	80	500						30		RE WG	
QKK1312		KLO	3.6	4.3			RA C		6.3	675	325	25	100	250								EX WG	
4V27		KLO	3.6	4.3			NE C		6.3	1000	310	50	180	500						60		WG	
RK25		KLO	3.6	4.5			SH C		6.3	260	300	50	250	300	40								
V237C/2K		KLO	3.6	3.8			ST C		6.3	250	300	50	350	300	40					11	1200	EX WG	
V237C/1K		KLO	3.6	3.8			ST C		6.3	250	300	50	350	300	40					7	1200	EX WG	
2454C		KLO	3.6	3.9			KK C		6.3	440	430	25	500	500								R1 CO	
Z239/1G		KLO	3.6	4.2			ST C		6.3	1000	1100	60	1200	250						36		SP	
Z239/1GW		KLO	3.6	4.2			ST C		6.3	1000	1100	60	1200	250								SP	
4V32		KLO	3.6	4.2			TO C		6.3	800	1000	110	1500	1000						30		R1 CO	
QKK1187		KLO	3.7	4.1			RA C		6.3	400	300	28	180	300						49		R1 CO	
TK6		KLO	3.7	4.3			TE C		6.3	380	300	28	250	325						27		R1 CO	
TK8		KLO	3.7	4.3			TE C		6.3	380	300	28	250	325						12		EX WG	
NVF41A		KLO	3.7	4.1			NC C		6.3	730	400	60	700	400	350								
1K125CA		KLO	3.7	4.4			E1 C		6.3	1500	1200	110	1250							25		R1 WG	
QKK1288		KLO	3.7	4.2			RA C		6.3	750	1500	68	1500	350						40		R1 SP	
QKK381		KLO	3.8	4.5			RA C		6.3	300	300	50										R1 SP	
RK6236		KLO	3.8	8.0			P		6.3	250	300	50	250	300	40							EX	
V239C/2K		KLO	3.8	4.0			ST C		6.3	250	300	50	250	300	40					11	1200	EX WG	
V239C/1K		KLO	3.8	4.0			ST C		6.3	250	300	50	350	300	40					7	1200	EX WG	
F2023		KLO	3.8	4.0			CS C		6.3	1000	850	67	1500	450						25		R1 WG	
F2027		KLO	3.8	4.0			CS C		6.3	1000	850	67	1500	450						25		R1 CO	
F2033		KLO	3.8	4.0			CS C		6.3	1000	850	67	1500	450						25		R1 WG	
2454B		KLO	3.9	4.1			KK C		6.3	440	430	25	500	500								R1 CO	
R5081		KLO	3.9	4.2			EM C		6.3	900	800	150	4000	550						40		R1 WG	
QK1233		KLO	4.0	11.0			RA C		6.3	1200	370	55	80	500						25		RE WG	
25212		KLO	4.0	5.5			EM C		6.3	580	1250	20	100	200								EX CO	
5721		KLO	4.0	11.0			ST C		6.3	250	300	50	250	300	40					11	1200	EX WG	
V241C/2K		KLO	4.0	4.2			ST C		6.3	250	300	50	350	300	40					7	1200	WG	
V241C/1K		KLO	4.0	4.2			KK C		6.3	440	430	25	500	500								R1 CO	
2K54A		KLO	4.0	4.3			NC C		6.3	730	400	60	700	400	350					12		EX WG	
NVF41B		KLO	4.0	4.3			CS C		6.3	1000	850	67	1300	400						26		R1 WG	
F2024		KLO	4.0	4.2			CS C		6.3	1000	850	67	1300	400						26		R1 CO	
F2028		KLO	4.0	4.2			CS C		6.3	1000	850	67	1300	400									
V243A/2F5		KLO	4.1	4.6			ST C		6.3	250	250	65	750	275	40							EX CO	
2K54DA		KLO	4.2	4.4			NE C		6.3	450	250	12	50							35		IN CO	
4V551		KLO	4.2	4.5			KK C		6.3	440	330	30	100	350								R1 CO	
2K22		KLO	4.2	5.0			RA C		6.3	300	25	115	235							35		R1 WC	
2K540		KLO	4.2	4.4			KK C		6.3	440	430	25	350	500								R1 CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
2K43		KLO	4.2	5.7				SP C	6.3	1000	1250	50	400	750						15		RI	
QK1313		KLO	4.3	5.0				MEC RA C	6.3	900	300	26	150	280						25		RI WG	
R6015		KLO	4.3	4.8				MEC EM C	6.3	900	350	70	150	250						20		RI WG	
1K75CLA		= KLO	4.3	4.4				FX EI C	6.3	1200	550	35	240	90						50		RE	
1K75CS		= KLO	4.3	4.3				FX EI C	6.3	1200	700	55	325	85						90		RE	
1K75CH		= KLO	4.3	4.3				FX EI C	6.3	1250	850	100	1000	500						30		RI CO	
1K75CK		= KLO	4.3	4.3				FX EI C	6.3	1250	850	100	1000	500						30		RI WG	
V245C/1K		KLO	4.4	4.6				ST C	6.3	300	300	65	200	300	40					8		1200 EX WG	
V246A/2K		KLO	4.4	4.8				ST C	6.3	300	230	40	250	250	40					30		1300 EX CO	
QK11289		KLO	4.4	4.5				MEC RA C	6.3	750	750	68	1500	350						40		SP	
TV2125CB		KLO	4.4	5.0				MEC TV C	6.3	1250	1000	110	1800	750								RI WG	
VA244J		KLO	4.4	4.8				MEC VA C	6.3	750	800	80	1930	1000						64		RI WG	
1K125CB		= KLO	4.4	5.0				MEC EI C	6.3	1250	1000	110	2500	750						40		RI WG	
R6010		KLO	4.4	4.8				MEC EM C	6.3	900	800	150	3700	550						50		RI WG	
5V552		KLO	4.5	4.8				MEC KK C	6.3	440	330	30	100	500								RI CO	
V247C/1K		KLO	4.6	4.8				ST C	6.3	300	300	65	200	300	40					8		1200 EX WG	
NV51A		KLO	4.7	5.1				MEC NC C	4.8	730	400	60	700	400	350					12		EX WG	
5V553		KLO	4.8	5.1				MEC KK C	6.3	440	330	30	100	500								RI CO	
V249C/1K		KLO	4.8	5.0				ST C	6.3	300	300	65	200	315	40					8		1200 EX WG	
VA244G		KLO	4.8	5.1				MEC VA C	6.3	750	800	80	1930	1000						64		RI WG	
TV220J		KLO	4.9	5.2				MEC TV C	6.3	800	775	80	700	1000								RI WG	
QK11078		KLO	5.0	5.7				MEC RA C	6.3	2000	15K	40	50	450	400					20		RE WG	
25181A		KLO	5.0	5.9				MEC EM C	6.3	780	370	55	50	500								RE	
R9689		KLO	5.0	11.7				MEC EM C	6.3	800	350	55	150	500								RE	
R5222		KLO	5.0	11.7				MEC EM C	6.3	700	370	55	200	500								RE	
SOC87		KLO	5.0	5.0				FX SP C	6.3	1000	300	80	4500							4		21	
SOC86		= KLO	5.0	5.0				FX SP C	6.3	1000	1000	120	10W	60						6		31	
RK6037		KLO	5.1	5.4				TH RA C	6.3	440	300	37	30	160						40		RI SP	
TV2412		KLO	5.1	5.9				MEC TV C	6.3	440	350	35	70	350								RI WG	
QK412		KLO	5.1	5.9				MEC RA C	6.3	440	300	25	90	205						35		RI WC	
6115A		KLO	5.1	5.9				MEC KK C	6.3	440	330	32	100	350								RI CO	
6584		KLO	5.1	5.9				MEC BE C	6.3	500	300	32	120	175						35		RI CO	
TK69		KLO	5.1	5.9				MEC BE C	6.3	500	300	300	135							40		RI CO	
TV244H		KLO	5.1	5.8				MEC TV C	6.3	750	800	80	700									RI WG	
VA244H		KLO	5.1	5.8				MEC VA C	6.3	750	800	80	1930	1000						64		RI WG	
TV221H		KLO	5.2	5.6				MEC TV C	6.3	450	330	35	20	1000								RI WG	
VA221H		= KLO	5.2	5.6				MEC VA C	6.3	450	330	35	42	1000						32		RE WG	
QK1118		KLO	5.2	5.9				RA C	6.3	750	3100	20	1000	380								21	
SOC258		KLO	5.2	6.2				MEC SP C	6.3	800	750	70	1000	380						43		RI WG	
LK4008		KLO	5.3	6.3				MEC LI C	6.3	800	750	70	1000	390								RI WG	
LK4009		KLO	5.3	6.6				MEC LI C	6.3	800	750	70	1000	390								RI CO	
TK98		KLO	5.4	6.0				MEC BE C	6.3	780	350	55	60	500								RE	
R9701		KLO	5.4	8.2				MEC EM C	6.3	780	370	55	80	500								RE WG	
25181		KLO	5.4	8.2				MEC EM C	6.3	780	370	55	80	500						20		RI CO	
TK80		KLO	5.4	5.9				MEC BE C	6.3	500	300	32	85	185						35		RI CO	
VA118A		KLO	5.4	5.9				MEC VA C	6.3	800	775	50	100	1000						28		RI WG	
TK108		KLO	5.4	5.9				MEC BE C	6.3	500	300	32	150	185						35		RI CO	
TV244K		KLO	5.4	5.9				MEC TV C	6.3	750	800	80	1000									RI WG	
VA305A		KLO	5.4	5.9				MEC VA C	6.3	800	900	900	1200	550						35		RI WG	
SRC6401		KLO	5.4	5.9				MEC SP C	6.3	800	900	90	1700	550						35		RI	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR V _{cc}	CONTROL V _{cc}	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA264K		KLO	5.4	5.9		MEC VA C			6.3	750	800	80	1330	1000						64		RI WG	
VA521		KLO	5.5	7.0		MEC VA C					4000	30	1000									21 WG	
QK1079		KLO	5.6	6.5		MEC RA C			6.3	2000	15K	40	50	450	400							RI WG	
2K44		KLO	5.7	7.5		SP C			6.3	1000	1250	50	400	750						15		RI WG	
TV221K		KLO	5.8	6.2		MEC TV C			6.3	400	330	35	25									RI WG	
VA221K																							
6V26		KLO	5.8	6.2		MEC VA C			6.3	440	330	35	40	500						40		RE WG	
QK1404		KLO	5.8	6.5		MEC KK C			6.3	440	330	35	100	350		2K	30					CO	
R6		KLO	5.8	6.5		MEC RA C					300			100									
V265A/1M		KLO	5.8	5.9		MEC ST C			6.3	1000	400	70	175	500						60		IM EX WG	
TV244A		KLO	5.8	7.5		MEC SH C			6.3	250	500	60	200	420	50								
V261C/1M		KLO	5.8	6.6		MEC TV C			6.3	800	750	80	700	1000								RI WG	
LK4010		KLO	5.8	6.4		ST C			6.3	250	600	65	750	550	50					17		IM EX WG	
VA244A		KLO	5.8	7.1		MEC LI C			6.3	800	750	70	1000	390						43		RI WG	
6V241		KLO	5.8	6.6		MEC VA C			6.3	750	800	80	1100	475						65		RI WG	
6V271		KLO	5.8	6.6		MEC NE C			6.3	750	750	75	1300	375						60		IN WG	
VA300		KLO	5.8	6.6		MEC NE C			6.3	750	750	75	1300	375						60		IN WG	
TV221F		KLO	5.9	7.9		MEC VA C			6.3	500	150	35	10	500						20		RE CO	
VA248		KLO	5.9	6.2		MEC TV C			6.3	400	330	35	25									RI WG	
QK1461		KLO	5.9	7.1		FX VA C			6.3	1200	385	53	50	500						50		RI WG	
QK1549		KLO	5.9	6.4		MEC RA C			6.3	800	775	80	700	1000						40		RI WG	
VA113		KLO	5.9	6.6		MEC RA C			6.3	800	750	26	150	280						25		RI WG	
X1095		KLO	5.9	6.3		MEC EI C			6.3	850	600	50	400	225						100		RE	
TV220F		KLO	5.9	6.2		MEC TV C			6.3	800	775	80	700	1000								RI WG	
TV222F		KLO	5.9	6.2		MEC TV C			6.3	800	775	80	700	1000								RI WG	
K56-1000F																							
6V301		KLO	5.9	6.2		MEC MU C			6.3	800	750	65	1000	350								RI WG	
6V431		KLO	5.9	6.2		MEC TO C			6.3	800	900	110	1000	850						45		RI WG	
VA220F		KLO	5.9	6.2		MEC TO C			6.3	800	900	110	1000	850						45		RI WG	
VA222F		KLO	5.9	6.2		MEC VA C			6.3	800	775	80	1000	1000						28		RE WG	
TV259A		KLO	5.9	6.2		MEC VA C			6.3	800	775	80	1000	1000						28		RI WG	
YK1077		KLO	5.9	6.5		MEC TV C			6.3	700	750	77	1000									RI WG	
TV2213		KLO	5.9	6.2		MEC MU C			6.3	800	750	70	1000	350						28		RI WG	
LK720F		KLO	5.9	7.8		MEC TV C			6.3	800	750	80	1000									RI WG	
LK722F		KLO	5.9	6.2		MEC LI C			6.3	900	750	80	1100	1000					10			RI WG	
		KLO	5.9	6.2		MEC LI C			6.3	900	750	80	1100	1000						60		RI WG	
6V201		KLO	5.9	6.2		MEC NE C			6.3	760	750	70	1200	330						35		IN WG	
6V221		KLO	5.9	6.2		MEC NE C			6.3	760	750	70	1200	330						35		IN WG	
6V251		KLO	5.9	6.2		MEC NE C			6.3	760	750	70	1200	330						35		IN WG	
QK1965		KLO	5.9	6.4		MEC RA C			6.3	760	750	68	1300	360						35		RI SP	
6V32		KLO	5.9	6.4		MEC TO C			6.3	800	1000	110	1500	1000						60		RI WG	
VA259A		KLO	5.9	6.5		MEC VA C			6.3	750	800	80	1700	1000						55		RI WG	
QK1754A		KLO	5.9	6.4		MEC RA C			6.3	750	750	68	2500	350						40		RI SP	
VA299A		KLO	5.9	6.5		MEC VA C			6.3	750	750	81	2900	400						40		WG	
6V211		KLO	6.0	6.3		MEC NE C			6.3	440	300	23	35	100						45		IN WG	
6V264MR		KLO	6.1	6.5		MEC NE C			6.3	450	300	25	100	100						55		IN CO	
6V26AR		KLO	6.1	6.5		MEC NE C			6.3	450	300	25	100	100						35		IN CO	
TV220E		KLO	6.1	6.4		MEC TV C			6.3	800	750	80	700	1000								RI WG	
TV222E		KLO	6.1	6.4		MEC TV C			6.3	800	775	80	700	1000								RI WG	
K56-1000E		KLO	6.1	6.4		MEC MU C			6.3	800	750	65	1000	350								RI WG	
6V302		KLO	6.1	6.4		MEC TO C			6.3	800	900	110	1000	850						45		RI WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR	CONTROL	HEAT SINK	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																			
6V432	KLO	6.1	6.4	6.3	800	900	110	1000	850	45	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
VA222E	KLO	6.1	6.4	6.3	800	775	80	1000	1000	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK841B	KLO	6.1	6.4	6.3	800	750	80	1000	400	43	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
YK1076	KLO	6.1	6.4	6.3	800	750	70	1000	350	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK720E	KLO	6.1	6.4	6.3	900	750	80	1100	1000	10	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK722E	KLO	6.1	6.4	6.3	900	750	80	1100	1000	60	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V202	KLO	6.1	6.4	6.3	760	750	70	1200	330	35	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V222	KLO	6.1	6.4	6.3	760	750	70	1200	330	35	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V252	KLO	6.1	6.4	6.3	760	750	70	1200	330	35	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
K366E	KLO	6.1	6.4	6.3	800	750	80	1200	400	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
KY366E	KLO	6.1	6.4	6.3	800	750	80	1200	1000	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
K367E	KLO	6.1	6.4	6.3	800	750	75	1200	350	30	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
KY367E	KLO	6.1	6.4	6.3	800	750	80	1200	1000	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
* 2K26	KLO	6.2	7.1	6.3	440	330	35	100	350	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO
5976	KLO	6.2	7.4	6.3	440	330	35	110	350	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO
6V200	KLO	6.2	6.3	6.3	760	750	70	400	130	50	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V23	KLO	6.2	6.3	6.3	760	750	70	500	130	50	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
YK1030	KLO	6.2	7.2	6.3	1550	750	90	2100	610	44	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV221E	KLO	6.3	6.6	6.3	400	330	35	25	100	40	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V212	KLO	6.3	6.6	6.3	440	330	35	35	100	40	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V303	KLO	6.3	6.6	6.3	800	900	110	1000	850	45	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V433	KLO	6.3	6.6	6.3	800	900	110	1000	850	45	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK4011	KLO	6.3	7.5	6.3	800	750	70	1000	360	43	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
OKK1080	KLO	6.4	7.4	6.3	2000	15K	40	50	450	400	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV26	KLO	6.4	7.2	6.3	440	330	35	100	350	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO	RI	CO
TV220G	KLO	6.4	6.6	6.3	800	750	80	700	1000	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG
TV222G	KLO	6.4	6.6	6.3	800	775	80	700	1000	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
V266C/1M	KLO	6.4	6.8	6.3	250	600	65	800	550	8	IM	EX	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG
KS6-1000G	KLO	6.4	6.5	6.3	800	750	65	1000	350	28	RE	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
VA220G	KLO	6.4	6.6	6.3	800	775	80	1000	1000	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
VA222G	KLO	6.4	6.6	6.3	800	775	80	1000	1000	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
YK1075	KLO	6.4	6.6	6.3	800	750	70	1000	350	28	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK720G	KLO	6.4	6.6	6.3	900	750	80	1100	1000	60	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
LK722G	KLO	6.4	6.6	6.3	900	750	80	1100	1000	35	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
6V203	KLO	6.4	6.6	6.3	760	750	70	1200	330	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV223	KLO	6.4	6.6	6.3	760	750	70	1200	330	35	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
K366G	KLO	6.4	6.6	6.3	800	750	80	1200	400	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
KY366G	KLO	6.4	6.6	6.3	800	750	80	1200	1000	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
K367G	KLO	6.4	6.6	6.3	800	750	75	1200	350	30	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
KY367G	KLO	6.4	6.6	6.3	800	750	80	1200	1000	35	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV272	KLO	6.4	7.2	6.3	750	750	75	1300	375	60	IN	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV221G	KLO	6.5	6.7	6.3	400	330	35	25	100	40	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV213	KLO	6.5	6.7	6.3	440	300	23	40	100	25	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
KS7-85	KLO	6.5	7.5	6.3	500	300	24	100	140	25	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
YK1021	KLO	6.5	7.2	6.3	440	300	28	100	300	25	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TK61	KLO	6.5	7.7	6.3	400	300	28	180	300	49	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV244B	KLO	6.5	7.3	6.3	800	750	80	700	1000	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG
KS6-1000D	KLO	6.5	6.8	6.3	800	750	65	1000	350	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG
TV259B	KLO	6.5	7.1	6.3	700	750	77	1000	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	
TV204	KLO	6.5	6.9	6.3	750	825	90	1100	1000	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG	RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING	
			MIN	MAX																			
TV242	KLO	6.5	7.3		104	MEC		C	6.3	750	750	75	1300	375					60	0.1mT	IN	WG	
VA244B			6.5	7.3		MEC	VA	C	6.3	750	800	80	1400	475					50		RI	WG	
VA259B			6.5	7.1		MEC	VA	C	6.3	750	800	80	1700	1000					55		RI	WG	
VA299B			6.5	7.1		MEC	VA	C	6.3	750	750	81	2900	400					40		RI	WG	
QKK531			6.6	6.9		MEC	RA	C	6.3	300	26	150	280							25		RI	WG
VA114	KLO	6.6	7.2		104	MEC	VA	C	6.3	800	750	80	180	1000							RI	WG	
TV220D			6.6	6.9		MEC	TV	C	6.3	800	750	80	700								RI	WG	
TV222D			6.6	6.9		MEC	TV	C	6.3	800	775	80	700	1000							RI	WG	
TV304			6.6	6.9		MEC	T0	C	6.3	800	900	110	1000	850					45		RI	WG	
TV434			6.6	6.9		MEC	T0	C	6.3	800	900	110	1000	850					45		RI	WG	
VA2220	KLO	6.6	6.9		104	MEC	VA	C	6.3	800	775	80	1000	1000					28		RI	WG	
LK840B			6.6	6.9		MEC	LI	C	6.3	800	750	70	1000	400					43		RI	WG	
YK1074			6.6	6.9		MEC	MU	C	6.3	800	750	70	1000	350					28		RI	WG	
LK720D			6.6	6.9		MEC	LI	C	6.3	900	750	80	1100	1000				10		60		RI	WG
LK7220			6.6	6.9		MEC	LI	C	6.3	900	750	80	1100	1000					60		RI	WG	
TV204	KLO	6.6	6.9		104	MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
TV224			6.6	6.9		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
TV254			6.6	6.9		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
K3660			6.6	6.9		MEC	EE	C	6.3	800	750	80	1200	400					35		RI	WG	
KY3660			6.6	6.9		MEC	EE	C	6.3	800	750	80	1200	1000					35		RI	WG	
K367D	KLO	6.6	6.9		104	MEC	EE	C	6.3	800	750	75	1200	350					30		RI	WG	
KY3670			6.6	6.9		MEC	EE	C	6.3	800	750	80	1200	1000					35		RI	WG	
QKK910			6.6	6.9		MEC	RA	C	6.3	750	68	1300	360					35		RI	SP		
QKK755A			6.6	6.9		MEC	RA	C	6.3	750	68	2500	350					40		RI	SP		
TV2210			6.7	7.0		MEC	TV	C	6.3	400	330	35	25								RI	WG	
TV214	* KLO	6.7	7.0		104	MEC	NE	C	6.3	440	300	23	40	100					40		IN	WG	
6390			6.7	11.0		MEC	RA	C	6.3	580	1250	20	60	700	25					RI	CO		
V271C/3M			6.8	7.4		MEC	ST	C	6.3	250	600	65	800	550	50				8		IM	EX	
TV221C			6.9	7.2		MEC	TV	C	6.3	400	330	35	25								RI	WG	
QKK532			6.9	7.1		MEC	RA	C	6.3	300	26	150	280							25		RI	WG
TV220C	KLO	6.9	7.1		104	MEC	TV	C	6.3	800	750	80	700								WG		
TV222C			6.9	7.1		MEC	TV	C	6.3	800	775	80	700	1000							RI	WG	
K57-1000C			6.9	7.1		MEC	MU	C	6.3	800	750	65	1000	350							RI	WG	
TV305			6.9	7.1		MEC	T0	C	6.3	800	900	110	1000	850					45		RI	WG	
TV435			6.9	7.1		MEC	T0	C	6.3	800	900	110	1000	850					45		RI	WG	
VA220C	KLO	6.9	7.1		104	MEC	VA	C	6.3	800	775	80	1000	1000					28		RE	WG	
VA222C			6.9	7.1		MEC	VA	C	6.3	800	775	80	1000	1000					28		RI	WG	
YK1073			6.9	7.1		MEC	MU	C	6.3	800	750	70	1000	350					28		RI	WG	
TV205			6.9	7.2		MEC	KK	C	6.3	750	825	90	1100	1000							RI	WG	
LK720C			6.9	7.1		MEC	LI	C	6.3	900	750	80	1100	1000				10		60		RI	WG
LK722C	KLO	6.9	7.1		104	MEC	LI	C	6.3	900	750	80	1100	1000					60		RI	WG	
TV205			6.9	7.1		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
TV225			6.9	7.1		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
TV255			6.9	7.1		MEC	NE	C	6.3	760	750	70	1200	330					35		IN	WG	
K366C			6.9	7.1		MEC	EE	C	6.3	800	750	80	1200	400							35		RI
KY366C	KLO	6.9	7.1		104	MEC	EE	C	6.3	800	750	80	1200	1000					35		RI	WG	
K367C			6.9	7.1		MEC	EE	C	6.3	800	750	75	1200	350					30		RI	WG	
KY367C			6.9	7.1		MEC	EE	C	6.3	800	750	80	1200	1000					35		RI	WG	
QKK966			6.9	7.1		MEC	RA	C	6.3	750	750	68	1300	360					35		RI	SP	
R9556/3			6.9	7.1		MEC	EM	C	12.6	1100	1200	140	2200	750							60		RI

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
QK756A		KLO	6.9	7.1	10%	MEC RA C		MEC RA C	6.3	800	750	68	2500	350						40	0.1 mT	RI SP	
QK860		KLO	7.0	11.0		MEC RA C		MEC RA C	6.3	800	750	68	2500	350						40	0.1 mT	EX	
QK1315		KLO	7.0	11.0		MEC RA C		MEC RA C	6.3	800	750	68	2500	350						40	0.1 mT	IN WG	
TV215		KLO	7.0	7.3		MEC NE C		MEC NE C	6.3	440	300	23	40	100						40	0.1 mT	RE WG	
VA221C		KLO	7.0	7.2		MEC VA C		MEC VA C	6.3	440	330	35	40	500						40	0.1 mT	RE WG	
R9696		KLO	7.0	11.7		MEC EM C		MEC EM C	6.3	780	350	55	60	500						20	0.1 mT	RE WG	
25157		KLO	7.0	10.3		MEC EM C		MEC EM C	6.3	780	370	55	60	500						20	0.1 mT	IN CO	
LD-588		KLO	7.0	7.6		MEC NE C		MEC NE C	6.3	440	300	25	100	100						50	0.1 mT	IN CO	
YK1050		KLO	7.0	8.2		MEC TE C		MEC TE C	6.3	380	300	32	170	170						71	0.1 mT	RI WG	
X13C		KLO	7.0	10.0		MEC VA C		MEC VA C	6.3	450	500	54	550	1000						71	0.1 mT	RI WG	
VA225B/C		KLO	7.0	8.0		MEC VA C		MEC VA C	6.3	800	785	80	700	1000						25	0.1 mT	RE WG	
R9516/3		KLO	7.0	7.3		MEC EM C		MEC EM C	12.6	1100	1200	140	2200	750						60	0.1 mT	RI WG	
TV40		KLO	7.1	7.8		MEC KK C		MEC KK C	6.3	440	330	30	60	350								RI CO	
MXK66		KLO	7.1	8.5		MEC ME C		MEC ME C	6.3	440	400	80	80	350								RI CO	
QK422		KLO	7.1	8.1		MEC RA C		MEC RA C	6.3	800	750	80	700									WG	
QK623		KLO	7.1	7.7		MEC RA C		MEC RA C	6.3	800	775	80	700	1000						25	0.1 mT	RI WG	
QK752		KLO	7.1	7.8		MEC RA C		MEC RA C	6.3	800	775	80	700	1000						25	0.1 mT	RI WG	
WL149		KLO	7.1	8.5		MEC WH C		MEC WH C	6.3	450	550	65	180	1000						40	0.1 mT	RI WG	
VA264		KLO	7.1	8.5		MEC VA C		MEC VA C	6.3	420	500	50	400	500						62	0.1 mT	RI WG	
TV220B		KLO	7.1	7.4		MEC TV C		MEC TV C	6.3	800	750	80	700									WG	
TV222B		KLO	7.1	7.4		MEC TV C		MEC TV C	6.3	800	775	80	700	1000								RI WG	
TV244C		KLO	7.1	7.8		MEC TV C		MEC TV C	6.3	800	775	80	700	1000								RI WG	
K57-1000B		KLO	7.1	7.4		MEC MU C		MEC MU C	6.3	800	750	65	1000	350								RI WG	
TV306		KLO	7.1	7.4		MEC TO C		MEC TO C	6.3	800	900	110	1000	850						45	0.1 mT	RI WG	
TV436		KLO	7.1	7.4		MEC TO C		MEC TO C	6.3	800	900	110	1000	850						45	0.1 mT	RI WG	
VA220B		KLO	7.1	7.4		MEC VA C		MEC VA C	6.3	800	775	80	1000	1000						25	0.1 mT	RE WG	
VA222B		KLO	7.1	7.4		MEC VA C		MEC VA C	6.3	800	775	80	1000	1000						25	0.1 mT	RE WG	
VA256A		KLO	7.1	8.4		MEC VA C		MEC VA C	6.3	750	800	70	1000	1000						30	0.1 mT	RE WG	
TV259C		KLO	7.1	7.8		MEC TV C		MEC TV C	6.3	700	750	77	1000									RI WG	
LK839B		KLO	7.1	7.4		MEC LI C		MEC LI C	6.3	800	750	80	1000	400						43	0.1 mT	RI WG	
YK1072		KLO	7.1	7.4		MEC MU C		MEC MU C	6.3	800	750	70	1000	350						28	0.1 mT	RI WG	
LK720B		KLO	7.1	7.4		MEC LI C		MEC LI C	6.3	900	750	80	1100	1000					10	60	0.1 mT	RI WG	
LK722B		KLO	7.1	7.4		MEC LI C		MEC LI C	6.3	900	750	80	1100	1000						60	0.1 mT	RI WG	
TV206		KLO	7.1	7.4		MEC NE C		MEC NE C	6.3	760	750	70	1200	330						35	0.1 mT	IN WG	
TV226		KLO	7.1	7.4		MEC NE C		MEC NE C	6.3	760	750	70	1200	330						35	0.1 mT	IN WG	
K366B		KLO	7.1	7.4		MEC EE C		MEC EE C	6.3	800	750	80	1200	400						35	0.1 mT	RI WG	
KY366B		KLO	7.1	7.4		MEC EE C		MEC EE C	6.3	800	750	80	1200	1000						35	0.1 mT	RI WG	
K367B		KLO	7.1	7.4		MEC EE C		MEC EE C	6.3	800	750	75	1200	350						30	0.1 mT	RI WG	
KY367B		KLO	7.1	7.4		MEC EE C		MEC EE C	6.3	800	750	80	1200	1000						35	0.1 mT	RI WG	
YK1101		KLO	7.1	7.4		TE C		TE C	6.3	1550	800	95	1200	400						55	0.1 mT	RI	
TV243		KLO	7.1	7.8		MEC C		MEC C	6.3	750	750	75	1300	1000						45	0.1 mT	RI WG	
TV273		KLO	7.1	7.8		MEC NE C		MEC NE C	6.3	750	750	75	1300	375						45	0.1 mT	IN WG	
QK967		KLO	7.1	7.8		MEC RA C		MEC RA C	6.3	750	750	68	1300	360						35	0.1 mT	RI SP	
VA244C		KLO	7.1	7.9		MEC VA C		MEC VA C	6.3	750	800	80	1450	475						40	0.1 mT	RI WG	
VA259C		KLO	7.1	7.8		MEC VA C		MEC VA C	6.3	750	800	80	1700	1000						55	0.1 mT	RI WG	
QK758A		KLO	7.1	7.8		MEC RA C		MEC RA C	6.3	750	750	68	2500	350						40	0.1 mT	RI SP	
VA299C		KLO	7.1	7.8		MEC VA C		MEC VA C	6.3	750	750	81	2900	400						40	0.1 mT	WG	
TV221B		KLO	7.2	7.6		MEC TV C		MEC TV C	6.3	400	330	35	25									RI WG	
VA115		KLO	7.2	7.7		MEC VA C		MEC VA C	6.3	800	750	80	120	1000								RI WG	
V275C/3M		KLO	7.2	7.8		ST C		ST C	6.3	250	600	65	750	550	50					8	0.1 mT	IM EX WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
R9704		KLO	7.2	7.4		MEC	EM C	12.6	1100	1200	140	2200	500							60		RI	
TV216		KLO	7.3	7.6		MEC	NE C	6.3	440	300	23	40	100							40		IN	WG
YK1100		KLO	7.3	7.8		MEC	TE C	6.3	1550	900	120	1700	800							65		RI	CO
R9630/3		KLO	7.3	7.6		MEC	EM C	12.6	1100	1200	140	2200	750							60		RI	WG
8V69		KLO	7.4	7.8		MEC	NE C	6.3	440	300	25	80	100							40		IN	CO
TV220A		KLO	7.4	7.8		MEC	TV C	6.3	800	750	80	700											WG
VA220A		KLO	7.4	7.8		MEC	VA C	6.3	800	775	80	700	1000							25		RE	WG
TV222A		KLO	7.4	7.8		MEC	TV C	6.3	800	775	80	700	1000									RI	WG
K57-1000A		KLO	7.4	7.8		MEC	MU C	6.3	800	750	65	1000	350									RI	WG
8V307		KLO	7.4	7.7		MEC	TO C	6.3	800	900	110	1000	850							45		RI	WG
8V437		KLO	7.4	7.7		MEC	TO C	6.3	800	900	110	1000	850									RI	WG
VA222A		KLO	7.4	7.8		MEC	VA C	6.3	800	775	80	1000	1000							45		RI	WG
YK1071		KLO	7.4	7.8		MEC	MU C	6.3	800	750	70	1000	350							25		RI	WG
8V207		KLO	7.4	7.8		MEC	NE C	6.3	760	750	70	1100								30		IN	WG
8V227		KLO	7.4	7.8		MEC	NE C	6.3	760	750	70	1100	330							30		IN	WG
8V257		KLO	7.4	7.8		MEC	NE C	6.3	760	750	70	1100	330							30		IN	WG
LK720A		KLO	7.4	7.8		MEC	LI C	6.3	900	750	80	1100	1000						10	60		RI	WG
LK722A		KLO	7.4	7.8		MEC	LI C	6.3	900	750	80	1100	1000							60		RI	WG
K366A		KLO	7.4	7.8		MEC	EE C	6.3	800	750	80	1200	400							35		RI	WG
KY366A		KLO	7.4	7.8		MEC	EE C	6.3	800	750	80	1200	1000							35		RI	WG
K367A		KLO	7.4	7.8		MEC	EE C	6.3	800	750	75	1200	350							30		RI	WG
KY367A		KLO	7.4	7.8		MEC	EE C	6.3	800	750	75	1200	350							35		RI	WG
WL107		KLO	7.5	11.0		MEC	WH C	6.3	1200	550	65	300	1000							50		RI	WG
WL113		KLO	7.5	11.0		MEC	WH C	6.3	1200	550	65	300	1000							65		RI	WG
WL121		KLO	7.5	11.0		MEC	WH C	6.3	1200	550	65	300	1000							50		RI	WG
X135		KLO	7.5	11.0		MEC	VA C	6.3	450	500	54	310	1000							75		RI	WG
WL139		KLO	7.5	8.5		MEC	WH C	6.3	1200	500	55	400								40		RI	WG
2K39		KLO	7.5	10.3		SP	C	6.3	1000	1250	50	700	750							15		RI	
VA225A		KLO	7.5	8.5		MEC	VA C	6.3	800	785	80	700	1000							25		RE	WG
VA297		KLO	7.5	10.7		MEC	VA C	6.3	750	750	80	1000	1000							30		RE	SP
VA215H		KLO	7.5	8.5		MEC	VA C	6.3	1200	575	80	1250	500							90		RE	WG
TV221A		KLO	7.6	7.8		MEC	TV C	6.3	400	330	35	25										RI	WG
8V217		KLO	7.6	7.8		MEC	NE C	6.3	440	300	23	35	100							40		IN	WG
8V77		KLO	7.6	8.2		MEC	NE C	6.3	440	300	25	60	100							40		IN	CO
YK1020		KLO	7.6	8.2		MEC	TE C	6.3	440	300	28	100	300							25		RI	CO
YK1023		KLO	7.6	8.2		TE	C	6.3	440	330	40	120	300							26		RI	WG
R9655/3		KLO	7.6	7.8		MEC	EM C	12.6	1100	1200	140	2200	750							60		RI	WG
8V77		KLO	7.7	8.2		MEC	KK C	6.3	440	330	30	100	350									RI	CO
8V308		KLO	7.7	8.0		MEC	TO C	6.3	800	900	110	700	850							45		RI	WG
TV244E		KLO	7.7	8.4		MEC	TV C	6.3	800	750	80	700	1000									RI	WG
K57-1000Z		KLO	7.7	8.1		MEC	MU C	6.3	800	750	65	1000	350									RI	WG
TV259E		KLO	7.7	8.4		MEC	TV C	6.3	700	750	77	1000										RI	WG
8V274		KLO	7.7	8.2		MEC	NE C	6.3	750	750	75	1300	375							35		IN	WG
VA244E		KLO	7.7	8.4		MEC	VA C	6.3	750	800	80	1600	475							50		RI	WG
VA259E		KLO	7.7	8.4		MEC	VA C	6.3	750	800	80	1700	1000							55		RI	WG
QKK753		KLO	7.8	8.4		MEC	RA C			300	26	150	280									RI	WG
VA220Z		KLO	7.8	8.1		MEC	VA C	6.3	800	775	80	500	1000							21		RE	WG
TV244F		KLO	7.8	8.5		MEC	TV C	6.3	750	800	80	700										RI	WG
VA222Z		KLO	7.8	8.1		MEC	VA C	6.3	800	775	80	1000	1000							28		RI	WG
YK1070		KLO	7.8	8.1		MEC	MU C	6.3	800	750	70	1000	350							21		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10%	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM ANODE VOLTS	I _k mA	P _o mW	COLLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN dB	NOISE FACTOR	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD O/mT	CAVITY	COUPLING
			MIN	MAX																			
8V208		KLO	7.8	8.1		MEC	NE	C	6.3	760	750	70	1100	330								IN	WG
8V228		KLO	7.8	8.1		MEC	NE	C	6.3	760	750	70	1100	330								IN	WG
LK720Z		KLO	7.8	8.1		MEC	LI	C	6.3	900	750	80	1100	1000					10			RI	WG
LK722Z		KLO	7.8	8.1		MEC	LI	C	6.3	900	750	80	1100	1000								RI	WG
OKK948		KLO	7.8	8.4		MEC	RA	C			750	68	1300	360								RI	SP
OKK759A		KLO	7.8	8.4		MEC	RA	C			750	68	2500	350								RI	SP
BL841		= KLO	8.0	9.5		FX	BL	C	6.3	1320	200	15	10	110								RI	WG
BL843		= KLO	8.0	9.5		FX	BL	C	6.3	1320	210	23	15	135								RI	WG
5231		= KLO	8.0	9.0		MEC	FE	C			8000	40	20									21	WG
BL846		= KLO	8.0	9.5		FX	VA	C	6.3	1320	300	30	50	150								RI	WG
OK1158		KLO	8.0	8.0		FX	RA	C															
5251		= KLO	8.0	8.8		MEC	FE	C	6.3	1200	350	60	120	500								RI	WG
5251A		= KLO	8.0	8.8		MEC	FE	C	6.3	1200	350	60	120	500								RI	WG
BL829		KLO	8.0	9.5		FX	BL	C	6.3	1320	500	70	400	400									
VAS08		KLO	8.0	9.5		FX	VA	C	6.3	950	1350	125	7000									21	WG
YK1042		KLO	8.1	8.9		MEC	MU	C	6.3	600	350	40	60	100								RI	WG
K359		= KLO	8.1	8.8		MEC	EE	C	6.3	1200	380	60	90	185								RI	WG
WL114		KLO	8.1	12.4		MEC	WH	C	6.3	1200	550	65	250	1000								RI	WG
WL128		KLO	8.1	12.4		MEC	WH	C	6.3	1200	550	65	250	1000								RI	WG
10V13		KLO	8.1	12.4		MEC	NE	C	6.3	450	500	55	350	300								IN	WG
X13		KLO	8.1	12.4		MEC	CV	C	6.3	450	500	65	350	350								RI	WG
VA212		= KLO	8.1	11.1		MEC	VA	C	6.3	750	600	66	500	1000								RI	WG
SOX4880		KLO	X			FX	SP	C	6.3	600	3800	25	1000									21	WG
SOX2394		KLO	X			FX	SP	C	6.3	600	4300	30	3000									21	WG
25182		KLO	8.2	11.7		MEC	EM	C	6.3	780	370	55	60	500								RE	WG
TV55		KLO	8.2	11.5		MEC	TV	C	6.3	1200	500	75	250									WG	
WL122		KLO	8.2	12.4		MEC	WH	C	6.3	1200	550	65	250	1000								RI	WG
9V54		KLO	8.2	9.6		MEC	NE	C	6.3	450	450	50	400	270								IN	WG
VA295		KLO	8.2	11.1		FX	VA	C	6.3	750	550	66	500	1000								WG	
SRX4610		KLO	8.2	12.4		SP	C		6.3	550	500	70	500	550								RI	
V-55		KLO	8.2	11.5		MEC	VA	C	6.3	1200	550	75	800	1000								RI	WG
YK1102		KLO	8.2	8.6		TE	C		6.3	1550	800	95	1100	400								RI	
MX443		KLO	8.4	10.3		MEC	ME	C			350	30	300									WG	
TV262		KLO	8.4	10.0		MEC	TV	C	6.3	1200	400	50	30	500								RI	WG
V262		KLO	8.4	10.0		MEC	VA	C	6.3	1200	400	42	220	1000								RE	WG
SZ60		KLO	8.5	10.0		FX	FE	C			5000	15	2									21	WG
BL803		KLO	8.5	10.0		BL	C		6.3	1320	200	23	15	165									
BLK011		KLO	8.5	10.5		BL	C		6.3	1320	300	32	20										
SRX0923		KLO	8.5	10.5		MEC	SP	C	6.3	600	300	34	20	180								RI	WG
MXK58		KLO	8.5	9.6		VT	ME	C			300	20	150										
TK115		KLO	8.5	9.6		TH	BE	C	6.3	1300	300	32	20	145								RI	CO
VA203B		KLO	8.5	9.6		MEC	CV	C	6.3	500	300	37	20	150								RI	WG
TV217C		KLO	8.5	9.6		MEC	TV	C	6.3	1200	350	45	20	500								RI	WG
TV2217H		KLO	8.5	9.6		MEC	TV	C	6.3	1200	350	45	20	500								RI	WG
6845		KLO	8.5	9.6		MEC	BE	C	6.3	1300	300	32	20	120								RI	CO
6940		KLC	8.5	9.6		TH	C		6.3	1300	300	32	20	145								RI	CO
8460		KLO	8.5	9.6		MEC	BE	C	6.3	450	300	32	20	150								RI	CO
6781		KLO	8.5	10.0		MEC	VA	C	6.3	1200	400	23	23	1000								RI	WG
BLK001		KLO	8.5	10.5		BL	C		6.3	1320	300	32	25	240									
MXK47		KLO	8.5	10.0		MEC	ME	C			200	25	225										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO x10 ⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM VOLTS	I _k mA	P _o mW	COLLECTOR VOLTAGE	CONTROL VOLTS	HEAT VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
WL177		KLO	8.5	11.0		FX		C	6.3	1200	500	55	25		315								RI WG
6310	*	KLO	8.5	10.0		BL		C	6.3	1320	300	32	25	225									RI WG
6316		KLO	8.5	10.0		MEC VA		C	6.3	1200	350	52	25	1000									RI WG
6116	*	KLO	8.5	9.7		TH		C	6.3	520	350	32	34	350									RI CO
2K25		KLO	8.5	9.7		MEC		C	6.3	440	300	22	35	300									RI CO
KS9-30		KLO	8.5	9.6		MEC MU		C	6.3	500	300	30	38	145									RI WG
TK105		KLO	8.5	9.6		TH BE		C			300		40										RI CO
TK106		KLO	8.5	9.6		MEC BE		C			300		40										RI CO
QKK607		KLO	8.5	9.7		MEC RA		C	6.3		300	25	40	200									RI WG
SRX4241		KLO	8.5	10.5		SP		C	6.3	500	300	34	40										RI
6975	*	KLO	8.5	9.6		MEC		C	6.3	450	350	52	40	500									RI WG
K311		KLO	8.5	9.5		MEC EE		C	6.3	600	400	50	45	365									RI WG
K342	=	KLO	8.5	9.0		MEC EE		C	6.3	600	400	50	45	275									RI WG
KS9-20A		KLO	8.5	9.7		MEC MU		C	6.3	450	300	22	50	190									RI CO
TK59		KLO	8.5	9.6		TH BE		C			300		50										RI CO
TK112		KLO	8.5	9.6		TH		C			300		50										RI CO
BL807		KLO	8.5	10.0		BL		C	6.3	1320	350	60	50	255									RI CO
BL847		KLO	8.5	10.0		BL		C	6.3	1320	300	32	50	225									RI CO
WL109		KLO	8.5	11.0		FX		WH	6.3	1200	300	35	55		150								RI WG
6315	=	KLO	8.5	10.0		MEC VA		C	6.3	1200	385	74	55	1000									RI WG
TK62		KLO	8.5	9.6		TH BE		C			300		60										RI CO
SRX92		KLO	8.5	10.5		MEC SP		C	6.3	450	330	37	60	500									RI WG
VA217C	=	KLO	8.5	9.6		MEC VA		C	6.3	1200	350	30	60	500									RE WG
VA201B		KLO	8.5	9.6		MEC CV		C	6.3	1200	350	45	65	500									RI WG
K351	=	KLO	8.5	9.7		MEC EE		C	6.3	1200	350	55	65	190									RI WG
9V10		KLO	8.5	10.0		MEC TO		C	6.3	1200	350	42	70	1000									RI WG
K3001		KLO	8.5	9.0		MEC EE		C	6.3	600	350	50	70	400									RI WG
6311	=	KLO	8.5	10.0		MEC VA		C	6.3	1200	350	42	70	1000									RI WG
6312	*	KLO	8.5	10.0		MEC		C	6.3	1200	350	42	70	1000									RI WG
1K20XS	=	KLO	8.5	9.2		MEC EI		C	6.3	800	350	55	75	500									RI WG
WL186		KLO	8.5	11.0		FX		WH	6.3	1200	300	30	80		320								RI WG
WX4906		KLO	8.5	10.0		MEC WH		C	6.3	1200	350	42	90	1000									RI WG
VA249		KLO	8.5	11.0		FX		VA	6.3	450	350	50	110	500									RI WG
WL187		KLO	8.5	10.0		MEC WH		C	6.3	1200	350	48	112		155								RI WG
5253	=	KLO	8.5	9.6		MEC FE		C	6.3	1200	350	60	120	500									RI WG
TK120		KLO	8.5	9.6		MEC BE		C			400		150										RI CO
1K20XN-A	=	KLO	8.5	11.0		FX		EI	6.3	800	450	50	200	290									RI WG
MXK65		KLO	8.5	10.0		VT		MEC			400		200	350									RI WG
WL138		KLO	8.5	10.0		MEC WH		C	6.3	1200	350	30	200		60								RI WG
6314		KLO	8.5	10.5		MEC WH		C	6.3	1200	350	45	210		105								RI WG
WL189		KLO	8.5	10.0		MEC WH		C	6.3	1200	500	50	300		330								RI WG
TV58		KLO	8.5	10.0		MEC TV		C	6.3	1200	500	70	500	1000									RE WG
MXK63		KLO	8.5	9.6		VT		MEC			500		500	350									WG
MXK67		KLO	8.5	10.0		MEC ME		C			500		500	500									WG
BL825		KLO	8.5	10.0		BL		C	6.3	1320	500	65	500	450									WG
WL115		KLO	8.5	10.0		MEC WH		C	6.3	1200	500	55	650		260								RI WG
WL191		KLO	8.5	10.0		MEC WH		C	6.3	1200	500	55	750		260								RI WG
VA265		KLO	8.5	9.6		MEC VA		C	6.3	1200	550	70	850	1000									RI WG
V-58		KLO	8.5	10.0		MEC VA		C	6.3	1200	550	70	880	1000									RI WG
VA242		KLO	8.5	11.3		FX		VA	6.3	1200	525	66	915	1000									RI WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM GR	I _k	P _o	COLLECTOR, etc VOLTS	CONTROL	RELAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
K350		KLO	8.5	10.0	10%	VEC	EE C		6.3	1600	1100	130	1200							12		21	WG
S222	=	KLO	8.5	10.0		FX	FE C				8000	40	20W									21	WG
YK1041		KLO	8.6	9.4		VEC	MU C		6.3	600	350	40	60	100								RI	WG
TV242		KLO	8.6	11.3		FX	TV C		6.3	1200	525	66	500	1000								RI	WG
K59-20		KLO	8.7	9.5		VEC	MU C		6.3	600	300	22	25	400						40		RI	CO
K59-20B		KLO	8.7	9.5		VEC	PH C		6.3	600	330	32	25	400						40		RI	CO
K59-20D		KLO	8.7	9.5		VEC	PH C		6.3	600	330	32	25	400						40		RI	CO
723A/B		KLO	8.7	9.5		VEC			6.3	600	300	22	25	400						40		RI	CO
K308		KLO	8.8	8.9		VEC	EE C		6.3	600	400	50	40	220						40		RI	WG
SRX424		KLO	8.8	10.2		VEC	SP C		6.3	600	380	37	40									RI	
K391A		KLO	8.8	8.9		VEC	EE C		6.3	600	400	50	60	500						40		41	WG
TV55F		KLO	8.8			FX	TV C		6.3	1200	500	70	450									WG	
MXK61		KLO	8.8	9.2		VT	ME C				500		500	360								WG	
VC718A		KLO	8.8	8.8		VEC	CV C		6.3	1200	500	70	550	420						50		RI	WG
VC722A		KLO	8.8	8.8		VEC	CV C		6.3	1200	500	70	550	420						60		RI	WG
V55F		KLO	8.8	8.8		VEC	CV C		6.3	1200	500	70	600	1000						50		RI	WG
VC721A		KLO	8.8	8.8		VEC	CV C		6.3	1200	500	70	600	320						50		RI	WG
SRX4592		KLO	8.8			SP	C		6.3	600	500	45	600	240						65		RI	WG
SRX4591		KLO	8.8			SP	C		6.3	1200	600	70	1000	300						40		RI	
K397		KLO	8.8	8.8		FX	EE C		6.3	1600	1100	70	1200							10		21	WG
CV5426		KLO	8.8	8.8		VEC	EE C		6.3	1600	1100	70	1200							10			WG
OK1167		KLO	9.0	9.7		RA	C					20											
OKK1308		KLO	9.0	10.0		VEC	RA C					20										RI	WG
K324		KLO	9.0	10.0		VEC	EE C		6.3	600	400	50	45	400						30		RI	WG
K337	=	KLO	9.0	10.0		VEC	EE C		6.3	600	400	50	45	400						24		RI	WG
S250		KLO	9.0	9.6		VEC	FE C		6.3	1200	350	60	66	500						15		RI	WG
K3002		KLO	9.0	9.5		VEC	EE C		6.3	600	350	50	70	400						40		RI	WG
SRX0921		KLO	9.0	10.5		VEC	SP C		6.3	500	400	52	125	300								RI	
BLK005		KLO	9.0	10.5		BL	C		6.3	1320	500	70	500										
MXK52		KLO	9.1	9.5		VT	ME C				175	10	100										WG
OKK1074		KLO	9.1	10.1		VEC	RA C		2.5	1450	18K	60	10	500	300							RI	WG
YK1040		KLO	9.1	9.5		VEC	MU C		6.3	600	300	34	55	80								RI	WG
R9538P		KLO	9.1	9.3		VEC	EM C		6.3	700	370	55	60	500						20		RE	WG
V-23		KLO	9.1	11.0		FX	VA C		6.3	1000	1350	125	5000	1350								IN	WG
MXK53		KLO	9.1	11.0		FX	ME C				1350	5000										21	WG
TV152C		KLO	9.2	9.2		FX	TV C		6.3	1200	350	60	4	300								RI	
TV203H		KLO	9.2	9.6		TV	C		6.3	450	350	52	12	500								RI	
K305		KLO	9.2	9.5		VEC	EE C		6.3	600	400	50	25	170						35		RI	WG
K391		KLO	9.2	9.3		VEC	EE C		6.3	600	325	45	40	500						30		RI	WG
1K20XK	=	KLO	9.2	10.0		VEC	EI C		6.3	800	350	55	75	500						35		RI	WG
IV232		KLO	9.2	10.0		VEC	TV C		6.3	1200	375	45	155									RI	WG
VA232		KLO	9.2	10.0		VEC	VA C		6.3	1200	375	45	335	500						40		RE	WG
K300		KLO	9.3	9.5		VEC	EE C		6.3	600	400	50	30	150						30		RI	WG
K302		KLO	9.3	9.5		VEC	EE C		6.3	600	400	50	30	165						30		RI	WG
K340		KLO	9.3	9.5		VEC	EE C		6.3	600	350	35	35	175						40		RI	CO
K59-40		KLO	9.3	9.5		VEC	MU C		6.3	800	300	35	40	90						40		RI	WG
K364		KLO	9.3	9.4		VEC	EE C		6.3	600	365	45	40	250						40		RI	WG
K3007		KLO	9.3	9.4		VEC	EE C		6.3	600	375	45	40	500						32		RI	WG
LK4334		KLO	9.3	9.3		FX	LI C		6.3	800	400	55	40	700						30		RI	WG
K3020		KLO	9.3	9.5		VEC	EE C		6.3	600	350	28	45							40		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANGLE	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTAGE	HELIX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
SRX4770		KLO	9.3					SP C	6.3	600	300	25	50	275								RI WG	
YK1043		KLO	9.3	10.1			MEC MU C		6.3	600	350	40	60	100						20		RE WG	
R9539P		KLO	9.3	9.5			MEC EM C		6.3	700	370	55	60	500								RI WG	
MXK62		KLO	9.3	10.2			VT ME C		6.3	600	400	70	300							50		RI WG	
K3003		KLO	9.3	9.5			MEC EE C		6.3	600	350	35	70	500									
BLK002		KLO	9.3					BL C	6.3	1320	600	70	1000										
KS9-400		KLO	9.4	9.5			MEC MU C		6.3	700	300	33	35	88						40		RI WG	
LK4339		KLO	9.4	9.4			FX LI C		6.3	800	400	55	40	700						30		RI WG	
10V54		KLO	9.4	10.7			MEC NE C		6.3	450	450	50	250	190						65		IN WG	
MXK59		KLO	9.5	9.6			VT ME C		6.3	450	300	20	150										
R9540P		KLO	9.5	9.7			MEC EM C		6.3	700	370	55	60	500						20		RE WG	
TV2219		KLO	9.5	10.9			MEC TV C		6.3	1200	350	35	100									RI WG	
WL137		KLO	9.5	10.9			MEC WH C		6.3	1200	350	35	125		170					35		RI WG	
OKK1022		KLO	9.5	10.9			MEC RA C		6.3	400	400	40	125	300								RI WG	
VA523		KLO	9.5	10.6			FX VA C		6.3	750	2500	15	200									21 WG	
VA524		KLO	9.5	10.6			MEC VA C		6.3	750	2500	15	200									21 WG	
VA266A		KLO	9.5	11.2			MEC CV C		6.3	1150	550	75	460	1000						83		RI WG	
VC102		KLO	9.5	11.0			MEC CV C		6.3	1200	550	65	900	1000						50		RI WG	
TV514		KLO	9.5	10.6			TV C		6.3	800	4500	30	2000									21 WG	
VA514		KLO	9.5	10.6			FX VA C		6.3	800	4000	25	2000									21 WG	
TV518		KLO	9.5	10.6			TV C		6.3	2700	4300	30	2000									21 WG	
VA518		KLO	9.5	10.6			MEC VA C		6.3	750	4200	30	2000									21 WG	
VA519		KLO	9.5	10.6			FX VA C		6.3	750	4200	30	2000									21 WG	
VA520		KLO	9.5	10.6			MEC VA C		6.3	750	4200	30	2000									21 WG	
SOX2391		KLO	9.5	11.0			FX SP C		6.3	600	4500	30	3000									21 WG	
SOX2392		KLO	9.5	11.0			FX SP C		6.3	600	4900	40	10W							250		21 WG	
VA517		KLO	9.5	10.6			MEC VA C		6.3	1700	11K	100	75W									21 WG	
VA511		KLO	9.5	10.6			FX VA C		3.7	6300	11K	100	80W									21 WG	
VA525		KLO	9.5	10.6			MEC VA C		3.6	6300	13K	140	200W									21 WG	
VA526		KLO	9.5	10.6			MEC VA C		3.6	6300	13K	140	200W									21 WG	
VA527		KLO	9.5	10.6			FX VA C		3.6	6300	13K	140	200W									21 WG	
K335		KLO	9.6	9.7			MEC EE C		6.3	600	400	50	25	180						30		RI WG	
TV210B		KLO	9.6	10.8			MEC TV C		6.3	1200	400	35	30									RI WG	
TK111		KLO	9.6	12.8			MEC BE C		6.3	1200	300	30	100							40		RI WG	
VA210B		KLO	9.6	10.8			MEC VA C		6.3	1200	400	35	125							65		RE WG	
R9541P		KLO	9.7	9.9			MEC EM C		6.3	700	370	55	60	500						20		RE WG	
8332		KLO	9.7	9.9			FX VA C		6.3	1200	500	55	915	315						55		RI WG	
TV55E		KLO	9.8				FX TV C		6.3	1200	500	70	450									RI WG	
BLK004		KLO	9.8	11.2			BL C		6.3	1320	600	70	500									WG	
MXK60		KLO	9.8	10.2			VT ME C		6.3	1320	500	500	360										
VC718B		KLO	9.8	9.8			MEC CV C		6.3	1200	500	70	550	420						50		RI WG	
VC722B		KLO	9.8	9.8			MEC CV C		6.3	1200	500	70	550	420						60		RI WG	
OKK839		KLO	9.8	10.5			FX RA C		5.0	9000	14K	700	2K									RI WG	
R9542P		KLO	9.9	10.1			MEC EM C		6.3	700	370	55	60	500						20		RE WG	
OKK1075		KLO	10.0	11.0			MEC RA C		2.5	1450	18K	70	5	500	300							RI WG	
TV210C		KLO	10.0	10.3			MEC TV C		6.3	1200	350	50	500									RI WG	
1K20XD-A		KLO	10.0	10.7			MEC EI C		6.3	800	350	55	75	500						30		RI WG	
BLK008		KLO	10.0	10.2			BL C		6.3	1320	400	60	150									RI WG	
V-39B		KLO	10.0	15.5			MEC VA C		6.3	1200	800	42	450	750						32		RE SP	
V154		KLO	10.0	12.0			MEC VA C		6.3	1200	450	70	460	1000						60		RI WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REF. VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
BLK006		KLO 10.0 11.7						BL C	6.3 1320	600		70	500										
MXK68		KLO 10.0 11.5						MEC ME C	6.3 1200	500		45	500		100					40	RI WG		
WL130		KLO 10.0 11.5						MEC WH C	6.3 1200	500		45	500							2	RI WG		
SOX239		KLO 10.0 11.0						MEC SP C	6.3 600 3100	17		500											
BLK007		KLO 10.0 10.2						BL C	6.3 1320	600		80	1000										
VA310		KLO 10.0 15.0						MEC VA C	6.3 1000	800		90	1200	300						70	RE WG		
VA273B		KLO 10.0 10.5						VA C	6.3 750	800		80	1390	1000						34	RI WG		
QK1039		KLO 10.0 10.2						RA C	3.5 6000	10K		85	50W										
QK11393		KLO 10.0 10.2						FX RA C	3.2 6200	10K		100	120W							10	RI WG		
QKX896		KLO 10.0 10.3						MEC RA C	3.2 6200	10K		100	120W										
QK11102		KLO 10.0 10.3						FX RA C	3.4 6400	14K		145	300W										
QKX974		KLO 10.1 10.4						MEC EI C	6.3 850	350		40	50	110						40	RE WG		
1K20XF-B		KLO 10.1 10.4						MEC VA C	6.3 600	350		40	60							40	RE WG		
VA210F		KLO 10.1 10.6						MEC MU C	6.3 600	350		40	60	100									
YK1044		KLO 10.1 10.6						MEC EM C	6.3 700	370		55	60	500						20	RE WG		
R9543P		KLO 10.1 10.4						MEC VA C	6.3 425	350		37	100							25	RI WG		
VA203K		KLO 10.1 10.4						FX RA C	3.5 6000	10K		85	65W										
QK11392		KLO 10.1						FX RA C	3.5 6000	10K		85	65W							10	RI WG		
QK11391		KLO 10.1						FX RA C	3.5 6200	13K		125	200W							10	RI WG		
QKX1106		KLO 10.2 10.6						FX RA C	6.3 3200	4200		30	5000										
QK1229		KLO 10.2 10.2						FX RA C	6.3 1320	400		70	150	340						20	IN WG		
BL814		KLO 10.4 12.3						MEC ME C	6.3 1200	1250		58	1700	360						60	IN WG		
MXK72		KLO 10.4 10.8						VT ME C	6.3 1200	200		20	200										
11V71		KLO 10.5 11.5						FX LI C	6.3 750	400		55	20	300									
MXK51		KLO 10.5 11.5						FX WH C	5.7 450	350		45	32	1000						20	RI WG		
LKX333		KLO 10.5 10.5						MEC TV C	6.3 1200	400		50	50							52	RI WG		
WL146		KLO 10.5 10.5						FX VA C	6.3 400	350		37	62	500						35	RE WG		
TV154		KLO 10.5 10.5						FX LI C	6.3 800	400		55	65	700									
VA218B		KLO 10.5 10.5						BL C	6.3 1320	400		68	70	400						32	IN WG		
LKX332		KLO 10.5 10.5						FX NE C	6.3 450	300		26	75	220						25	RE WG		
BL849		KLO 10.5 11.5						FX VA C	6.3 400	350		37	75	500									
11V18		KLO 10.5 10.5						FX WH C	6.3 450	350		45	100	1000						37	RI WG		
VA218		KLO 10.5 10.5						FX WH C	6.3 450	350		45	100	1000						37	RI WG		
WL135		KLO 10.5 10.5						FX WH C	6.3 450	350		45	100	1000						30	RI WG		
WL147		KLO 10.5 10.5						FX WH C	6.3 450	350		45	100	1000						50	RI WG		
WL148		KLO 10.5 10.5						FX WH C	6.3 450	350		45	100	1000						60	RI WG		
1K20XD-S		KLO 10.5 11.0						MEC EI C	6.3 1000	450		45	120	500						60	RI WG		
QKX1048		KLO 10.5 12.4						MEC RA C	6.3 1200	450		50	180	300						50	RI WG		
K353		KLO 10.5 12.2						MEC EE C	6.3 1200	450		70	250	400						60	RI WG		
K358		KLO 10.5 12.2						MEC EE C	6.3 1200	450		70	250	400						60	RI WG		
YK1090		KLO 10.5 12.2						MEC C	6.3 1200	400		60	370	300									
YK1091		KLO 10.5 12.2						MEC C	6.3 1200	400		60	370	300									
TV2211		KLO 10.5 13.5						TV C	6.3 1500	775		80	500	500									
TV2218		KLO 10.5						FX TV C	6.3 1200	500		26	500							20	RI WG		
R9544P		KLO 10.6 11.0						MEC EM C	6.3 700	370		55	45	500									
VA288A		KLO 10.6 10.6						MEC VA C	6.3 800	400		70	150	500									
WL136		KLO 10.6 12.4						MEC WH C	6.3 1200	500		45	200		100					50	RI WG		
SRX4550		KLO 10.6						SP C	6.3 600	400		36	200	200						50	RI WG		
MXK46		KLO 10.7 11.7						MEC ME C	6.3 600	400		40	25	250									
K361		KLO 10.7 10.7						MEC EE C	6.3 600	350		40	27	250						20	RI WG		

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10 ⁻⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR REF. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oe	CAVITY	COUPLING
			MIN	MAX																			
K361B		KLO 10.7 10.7				MEC EE C			6.3	600	350	40	27	250								RI WG	
X1118B	=	KLO 10.7 11.2				MEC EI C			6.3	1000	425	45	30	1000								RI WG	
11V54		KLO 10.7 11.7				MEC C			6.3	450	330	25	50	1000								RI WG	
11V53		KLO 10.7 11.7				MEC NE C			6.3	1100	300	28	90	180								IN WG	
OKK826		KLO 10.7 11.7				MEC RA C			6.3	440	400	30	100	350								RI CO	
X1118A	=	KLO 10.7 11.2				MEC EI C			6.3	1000	500	60	100	500								RI WG	
V53B		KLO 10.7 11.7				MEC VA C			6.3	1200	400	32	109	250								RI WG	
11V53A		KLO 10.7 11.7				MEC C			6.3	1200	475	75	160	1000								RI WG	
K398A		KLO 10.7 11.7				MEC EE C			6.3	800	450	65	200	200								RI WG	
11V54A		KLO 10.7 11.7				MEC NE C			6.3	450	500	50	250	260								IN WG	
11V64		KLO 10.7 11.7				MEC NE C			6.3	500	450	50	300	250								IN WG	
MXK54		KLO 10.7 11.7				VT ME C					550	400	400									IN WG	
VA237E		KLO 10.7 11.7				MEC VA C			6.3	1200	800	40	420	1000								RE WG	
11V54B		KLO 10.7 11.7				MEC C			6.3	450	500	65	450	1000								RI WG	
TV2212ABCD		KLO 10.7 12.7				MEC TV C			6.3	700	750	65	500									RI WG	
11V651		KLO 10.7 11.2				MEC NE C			6.3	500	550	60	550	250								IN WG	
OKK878		KLO 10.7 11.7				MEC RA C			6.3	800	800	85	650	700	200							RI WG	
VA287		KLO 10.7 13.3				MEC VA C			6.3	750	800	90	1000	800								RE SP	
X1118	=	KLO 10.7 11.2				MEC EI C			6.3	1300	900	110	1000	1000								RI WG	
OKK1235		KLO 10.7 11.7				MEC RA C			6.3	1200	450	45	150	350								RI SP	
VA287A		KLO 10.7 11.7				MEC VA C			6.3	750	750	74	1200	600								RE WG	
VA237B		KLO 10.7 11.7				MEC VA C			6.3	1200	1300	70	1500	1000								RE WG	
LD-670		KLO 10.7 11.7				MEC NE C			6.3	1200	1250	57	1800	450								IN WG	
OKK1076		KLO 10.9 12.0				MEC RA C			2.5	1450	18K	70	5	500	300							RI WG	
OKK1041	=	KLO 10.9 11.0				MEC RA C			6.3	1200	450	45	150	350								RI WG	
SRX4840		KLO 10.9 11.1				SP C			6.3	500	475	65	200	100								RI	
BLK010		KLO 11.0				BL C			6.3	1320	300	50	50									RI	
DX237		KLO 11.0 12.0				MEC AM C			3.5	1800	2600	17	50	600	150							RI WG	
MXK50		KLO 11.0 12.4				MEC ME C					550	70	500									RI WG	
7829A	=	KLO 11.0 11.0				FX VA C			6.3	420	300	29	90	305								RI WG	
MXK14		KLO 11.0 14.0				FX ME C					500	400	350									RI WG	
TV246		KLO 11.0 14.0				FX TV C			6.3	1200	550	66	400	1000								RI WG	
VA246	=	KLO 11.0 14.0				FX VA C			6.3	1200	550	66	440	1000								RI WG	
WL119		KLO 11.0 14.0				FX WH C			6.3	1200	500	55	450	295								RI WG	
X1117B	=	KLO 11.2 11.7				MEC EI C			6.3	1000	425	45	30	400								RI WG	
X1117A	=	KLO 11.2 11.7				MEC EI C			6.3	1000	500	60	100	500								RI WG	
11V652	=	KLO 11.2 11.7				MEC NE C			6.3	500	550	60	550	250								IN WG	
X1117	=	KLO 11.2 11.7				MEC EI C			6.3	1300	900	110	1000	1000								RI WG	
MXK69		KLO 11.5 12.5				MEC ME C					500	500	500									RI WG	
12V25		KLO 11.6 12.8				MEC TO C			6.3	450	500	70	250	1000								RI WG	
X1116B	=	KLO 11.7 12.2				MEC EI C			6.3	800	425	45	400	400								RI WG	
OKK869	=	KLO 11.7 12.2				MEC RA C			6.3	440	425	45	100	380								RI CO	
X1116A	=	KLO 11.7 12.2				MEC EI C			6.3	800	500	60	150	500								RI CO	
LD-561		KLO 11.7 12.4				MEC NE C			6.3	450	400	45	200	220								IN WG	
LD-656		KLO 11.7 12.7				MEC NE C			6.3	450	500	58	350	320								IN WG	
MXK55		KLO 11.7 12.7				VT ME C					550	400	400									WG	
VA237D		KLO 11.7 12.7				MEC VA C			6.3	1200	800	40	420	1000								RE WG	
OKK879		KLO 11.7 12.2				RA C					750	70	700	700	40							RI CO	
X1116	=	KLO 11.7 12.2				MEC EI C			6.3	1300	900	110	1000	1000								RI WG	
VA287B		KLO 11.7 12.2				MEC VA C			6.3	750	750	74	1200	600								RE WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
VA237A		KLO	11.7	12.7	100	MEC	VA C	6.3	1200	1300	70	1700	1000						50	RE	WG	
QKK448		KLO	12.0	13.8		MEC	RA C	6.3		300	40	25	275						60	RI	WG	
R9678		KLO	12.0	18.0		MEC	EM C	6.3	1000	400	40	40	500						20	RE		
K343		KLO	12.0	14.5		MEC	EE C	6.3	600	400	40	80	350						80	RI	WG	
R9676		KLO	12.0	18.0		MEC	EM C	6.3	800	2500	20	300	500						60	RI	WG	
EM1149			12.0	18.0		MEC	VA C	6.3	1000	800	90	1200	300						70	RE	WG	
X11158			12.2	12.7		MEC	EI C	6.3	800	425	45	40	400						35	RI	WG	
QKK822		KLO	12.2	12.7		MEC	RA C	6.3	440	400	45	100	380						35	RI	CO	
X1115A			12.2	12.7		MEC	EI C	6.3	800	500	60	150	500						30	RI	WG	
QKK833		KLO	12.2	12.7		MEC	RA C	6.3	675	750	75	500	450						35	RI	CO	
QKK978		KLO	12.2	12.7		RA C					70	700	700	40					35	RI	CO	
X1115		KLO	12.2	12.7		MEC	EI C	6.3	1300	900	110	1000	1000						40	RI	WG	
VA287C		KLO	12.2	12.7		MEC	VA C	6.3	750	750	74	1200	600						44	RE	WG	
QKK833A		KLO	12.2	12.7		MEC	RA C			750	75	1200	550						40	RI	SP	
S004870		KLO	U			FX	SP P	6.3	400	1800	175	10W								21	WG	
VA533		KLO	12.4	18.0		FX	VA C	6.3	1000	1400	120	10								21	WG	
MKK23		KLO	12.4	14.5		MEC	ME C			300	20	400										
WL108		KLO	12.4	18.0		MEC	WH C	6.3	1200	625	70	70	1000						45	RI	WG	
R9624		KLO	12.4	15.0		MEC	EM C	6.3	800	2200	15	100	500						80	RI	WG	
WL110		KLO	12.4	14.5		MEC	WH C	6.3	1200	625	65	200	1000						65	RI	WG	
WL117		KLO	12.4	18.0		MEC	WH C	6.3	1200	625	70	210	1000						65	RI	WG	
WL124		KLO	12.4	18.0		MEC	WH C	6.3	1200	625	70	210	1000						65	RI	WG	
X12		KLO	12.4	18.0		MEC	VA C	6.3	450	625	60	300	1000						65	RI	WG	
VA286		KLO	12.4	14.4		MEC	VA C	6.3	1200	575	66	300	1000						40	RI	WG	
VA92C/8467		KLO	12.4	14.5		MEC	VA C	6.3	450	625	66	358	1000						75	RI	WG	
VA240C		KLO	12.4	15.0		MEC	VA C	6.3	600	900	24	450	800						50	RI	WG	
VA92B		KLO	12.4	14.5		MEC	VA C	6.3	1200	625	70	550	1000						100	RI	WG	
X1120			12.5	15.0		MEC	EI C	6.3	1250	400	38	225	300						35	WG		
13V64			12.5	13.5		MEC	NE C	6.3	500	500	58	300	250						45	IN	WG	
X1149			12.5	18.0		MEC	EI C	6.3	1300	800	95	1200	300						60	RE		
QKK877		KLO	12.7	13.2		MEC	RA C	6.3	440	400	30	100	350						35	RI	CO	
VA237F		KLO	12.7	13.7		MEC	VA C	6.3	1200	800	40	420	1000						39	RE	WG	
QKK880		KLO	12.7	13.2		MEC	RA C			750	70	700	700	40					35	RI	CO	
VA237C		KLO	12.7	13.7		MEC	VA C	6.3	1200	1300	70	2200	1000						45	RE	WG	
TK118		KLO	12.8	17.0		MEC	BE C			300	30								40	RE	WG	
TK119		KLO	12.8	17.0		MEC	BE C			300	30								30	RI	WG	
TK117		KLO	12.8	17.0		MEC	BE C			500	200								40	RI	WG	
VA274A		KLO	12.9	12.9		FX	VA C			500	55	250	300									
VC103B		KLO	12.9	12.9		MEC	CV C	6.3	1200	550	70	350	320						100	RI	WG	
QKK873		KLO	13.2	14.0		MEC	RA C	6.3	440	440	45	100	380						35	RI	CO	
QKK881		KLO	13.2	14.0		RA C				750	70	700	700	40					35	RI	CO	
LK4335		KLO	13.3	13.3		FX	LI C	6.3	800	400	55	25	700						30	RI	WG	
SRU4500		KLO	13.3			SP C		6.3	600	300	28	70	100						50	RI		
QKK1113		KLO	13.3	14.4		MEC	RA C			400	37	140	280						35	RI	WG	
SRU4474		KLO	13.3			SP C		6.3	600	350	32	150	100						100	RI		
X11203			13.3	13.3		FX	EI C	6.3	1250	500	52	200	150						155	WG		
VC103A		KLO	13.3	13.3		MEC	CV C	6.3	1200	550	70	350	320						100	RI	WG	
BL844		KLO	13.3			BL C		6.3	1320	550	70	500							45			
SRU4473		KLO	13.3			SP C		6.3	600	500	45	500	250						70	RI		
MKK37		KLO	13.3	13.3		ME C				1600		1000								21		

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
VA281		KLO 13.3 13.3			10%	FX	VA C		6.3	500	1000	40 1000	600								RI SP	
SOU414		KLO 13.3				FX	SP C		6.3	500	950	65 1500									21 WG	
VA503C		KLO 13.3 13.3				FX	VA C		6.3	1000	1650	32 1500									21 WG	
SOU4141		KLO 13.3 13.3				FX	SP C		6.3	500	950	65 1500							8		21 WG	
MKK22		KLO 13.3 13.3				VT	ME C			2200		2000									21	
VA5103		KLO 13.3 13.3				FX	VA C		6.3	1000	2500	24 2300									21 WG	
VA510D		KLO 13.3 13.3				FX	VA C		6.3	1000	2500	24 2300									21 WG	
MKK16		KLO 13.3 13.3				FX	ME C			2200		5000									21	
MKK11		KLO 13.3 13.3				FX	ME C			3000		15W									21 WG	
MKK12		KLO 13.3 13.3					ME C			3000		15W									21	
VA5048		KLO 13.3 13.3				FX	VA C		6.3	1000	3100	77 21W									21 WG	
X1123		KLO 13.4 13.4				MEC EI C			6.3	800	500	55 20	500					30			RI WG	
MKK17		KLO 13.4 13.6				MEC ME C				1700		750									21 WG	
VA311		KLO 13.5 18.0				MEC VA C			6.3	650	300	30 20	600					50			RI WG	
R9625		KLO 13.5 16.5				EM C			6.3	800	2000	15 100	750 200					40			RI WG	
MKK35		KLO 13.5 13.5				MEC ME C				600		385	300								RI WG	
WL141		KLO 13.5 13.5				MEC WH C			6.3	450	625	70 450	1000					70			RI WG	
VA503B		KLO 13.5 13.5				FX VA C			6.3	1000	1650	32 1500									21 WG	
VA515B		KLO 13.5 13.5				FX VA C			6.3	900	2400	60 8000									21 WG	
VA504D		KLO 13.5 13.5				FX VA C			6.3	1000	3100	77 21W									21 WG	
EM1114		KLO 13.9 13.9				MEC EI C			6.3	1300	500	55 200	500					25			RI WG	
VC101A		KLO 13.9 13.9				MEC CV C			6.3	1200	400	65 300	300					50			RI WG	
MKK25		KLO 14.0 17.5				MEC ME C				300		30 300									RI WG	
QKK874		KLO 14.0 15.0				MEC RA C			6.3	440	440	45 100	380					35			RI CO	
WL111		KLO 14.0 17.5				MEC WH C			6.3	1200	625	70 105	1000					65			RI WG	
WL118		KLO 14.0 17.5				MEC WH C			6.3	1200	625	70 105	1000					65			RI WG	
WL126		KLO 14.0 17.5				MEC WH C			6.3	1200	625	66 125	1000					65			RI WG	
VA92		KLO 14.0 17.5				MEC VA C			6.3	1200	625	66 125	1000					75			RE WG	
VA309		KLO 14.0 18.0				MEC VA C			6.3	650	550	35 300	250					65			RE WG	
VA237G		KLO 14.0 15.0				MEC VA C			6.3	1200	900	36 400	1000								RI CO	
OKK882		KLO 14.0 15.0				RA C				750		70 700	700	40				35			RI CO	
VA308		KLO 14.0 18.0				MEC VA C			6.3	650	800	43 900	350					80			RE WG	
QKK1114		KLO 14.4 15.5				MEC RA C				400		37 140	280					35			RI WG	
MKK33		KLO 14.4 15.4				VT ME C				500		200 250									IN WG	
15V64		KLO 14.4 15.4				MEC NE C			6.3	500	600	55 250	250					45			IN WG	
15V66		KLO 14.4 15.2				MEC NE C			6.3	650	650	65 500	250					50			IN WG	
SRU4472		KLO 14.4				SP C			6.3	600	540	50 600	300					50			RI WG	
K346		KLO 14.5 17.0				MEC EE C			6.3	600	400	40 45	350					120			RI WG	
VA306		KLO 14.5 18.0				MEC VA C			6.3	1200	600	55 400	600					50			RI WG	
SRU266		KLO 15.0 17.0				MEC SP C			6.3	550	300	35 20	100								RI WG	
VA276		KLO 15.0 17.0				FX VA C			6.3	1200	350	45 30	500					33			RI WG	
SRU216		KLO 15.0 17.0				MEC SP C			6.3	550	350	31 45	500					100			RI WG	
V40B		KLO 15.0 21.0				MEC VA C			6.3	1200	800	42 90	750								RE WG	
R9626		KLO 15.0 18.0				EM C			6.3	800	2000	15 100	750 200					40			RI WG	
VA253		KLO 15.0 22.0				MEC VA C			6.3	1150	900	28 245	800								RI WG	
X1130		KLO 15.0 18.0				MEC EI C			6.3	1250	500	52 250	300					35			WG	
VA240B		KLO 15.0 17.0				MEC VA C			6.3	600	900	24 350	800					50			RI WG	
OKK1314		KLO 15.4 15.6				MEC RA C						10									RI WG	
TK113		KLO 15.4 15.6				MEC BE C			6.3	500	300	32 15	190					30			RI WG	
SRU410		KLO 15.5 17.1				MEC SP C			6.3	600	205	25 8						15			RI	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO 10 ⁻⁴	TUNE	MFR	OPERATION	E _f V	I _f mA	BEAM OR ANODE VOLTS	I _k mA	P _o mW	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN dB	NOISE FACTOR dB	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
RK6573 17V10 SRU419 SRU4191 SRU4192		KLO 15.5 17.0				MEC RA C			6.3	600	330	45	40	300						75		RI	WG
		KLO 15.5 18.5				MEC OK C			6.3	650	2200	14	50	400	200					45		RI	WG
		KLO 15.5 17.5				MEC SP C			6.3	550	475	60	200	400						30		RI	WG
	=	KLO 15.5 17.5				MEC SP C			6.3	550	475	60	200	400						60		RI	WG
SOU408 SRU55A/B MKK24 SRU210 6178		KLO 15.5 18.0				FX SP C			6.3	550	475	60	250	400						45		RI	WG
		KLO 15.6 15.6				FX SP C			6.3	400	900	60	200							8		21	WG
	=	KLO 15.7 17.0				MEC SP C			6.3	550	300	31	45	350					40		RI	WG	
	=	KLO 15.8 16.2				MEC ME C			6.3	300	300	30	20	130					50		RI	WG	
SRU4435 MKK28 MKK26 TV94 QKK815		KLO 15.8 16.2				MEC SP C			6.3	550	300	35	20	110						75		RI	WG
		KLO 15.8 16.2				MEC RA C			6.3	600	330	45	25	300						65		RI	WG
		KLO 15.8 16.5				SP C			6.3	600	300	30	30	130								RI	WG
		KLO 15.8 16.2				MEC ME C			6.3	350	350	40	150									RI	WG
SRU4430 VA275D SRU2161 SRU4432 SOU428		KLO 16.0 17.0				MEC TV C			6.3	1200	350	45	20	500								RI	WG
	=	KLO 16.0 17.0				MEC RA C			6.3	1250	350	45	20	500						55		RI	WG
		KLO 16.0 17.0				SP C			6.3	550	300	27	30	170						50		RI	WG
		KLO 16.0 17.0				MEC VA C			6.3	1150	300	15	40	600					50		RE	WG	
SRU4480 VA94 SRU4434 SRU4850 SOU403		KLO 16.0 17.0				MEC SP C			6.3	600	300	35	45	180						45		RI	WG
		KLO 16.4 16.6				SP C			6.3	600	300	30	80	130						55		RI	WG
		KLO 16.4 16.4				FX SP C			6.3	400	800	55	250						10		21	WG	
		KLO 16.0 16.0				FX SP C			6.3	500	1100	80	1000							15		21	WG
X1126B SRU4431 MKK36 MKK18 VA240A		KLO 16.5 17.2				MEC E1 C			6.3	1300	500	55	20	500						40		RI	WG
	=	KLO 16.0 17.0				SP C			6.3	550	500	45	400	500						55		RI	WG
		KLO 16.2 16.8				MEC VA C			6.3	1200	350	38	50	500						70		RE	WG
		KLO 17.0 19.0				SP C			6.3	600	250	25	40	99						55		RI	WG
QKK1043 VA275A SOU4042 SOU293 SOU407		KLO 17.0 18.0				MEC ME C			6.3	600	475	55	300	100						100		RI	WG
		KLO 17.0 18.0				VTC ME C			6.3	600	750		300	300								RI	WG
		KLO 17.0 18.5				MEC VA C			6.3	600	900	24	300	800						50		RI	WG
	=	KLO 17.0 18.0				MEC RA C			6.3	1000	750	70	300	300						60		RI	WG
SOU4041 OK306 RK6253 20V10 R9622		KLO 17.0 18.0				MEC VA C			6.3	1150	900	35	350	600						50		RE	WG
		KLO 17.4				FX SP C			6.3	500	1025	65	1000									21	WG
		KLO 17.5 17.5				FX SP C			6.3	400	1080	80	1000							15		21	WG
		KLO 17.5 17.5				FX SP C			6.3	400	1080	80	1000							15		21	WG
VA241A VA293 EM1138 R9675 VA254		KLO 17.5 17.5				FX SP C			6.3	500	1080	80	1000							15		21	WG
		KLO 18.0 22.0				MEC RA C			6.3	580	2300	9	40	500	100					40		RI	WG
		KLO 18.0 22.0				MEC RA C			6.3	580	2300	9	40	500	100					40		RI	WG
		KLO 18.0 22.0				MEC OK C			6.3	650	2200	14	50	500	200					45		RI	WG
VA282 SOK2920 EM1188 VA532 MKK10		KLO 18.0 22.5				MEC EM C			6.3	800	2200	15	100	300						60		RI	WG
		KLO 18.0 19.0				FX VA C			6.3	1150	750	35	200	800						80		RI	WG
	=	KLO 18.0 26.5				MEC VA C			6.3	600	600	33	200	600					65		RI	WG	
		KLO 18.0 26.5				MEC VA C			6.3	650	550	36	240	250						80		RE	WG
VA282 SOK2920 EM1188 VA532 MKK10		KLO 18.0 26.5				MEC EM C			6.3	800	2500	20	250	500						60		RI	WG
	=	KLO 18.0 26.5				MEC VA C			6.3	1250	925	35	260	800						50		RI	WG
		KLO 18.0 26.5				FX VA C			6.3	1250	800	35	300	600						50		RI	WG
	=	KLO 18.0 26.5				FX SP C			6.3	550	1150	45	600							25		21	WG
VA282 SOK2920 EM1188 VA532 MKK10		KLO 18.0 26.5				MEC VA C			6.3	650	800	45	700	350						90		RE	WG
		KLO 18.0 24.0				MEC VA C			6.3	750	1500	120	4000									2E	SP
		KLO 18.1 18.3				FX ME C			6.3	750	200	100		400								WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM GR	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VA241B		KLO 19.0	20.0		100%	FX	VA C		6.3	1150	750	35	175	800						80		RI	WG
22V10		KLO 20.0	24.0			MEC OK C			6.3	650	2200	14	50	500	200					40		RI	WG
R9621		KLO 20.0	24.0			MEC EM C			6.3	800	2200	15	100	500						60		RI	WG
VA241C		KLO 20.0	22.0			FX	VA C		6.3	1150	750	35	150	800						80		RI	WG
X1138		= KLO 20.0	30.0			EI C			6.3	1000	550	40	200	700						90		RI	WG
L3692		= KLO 21.0	21.0			MEC LI C			6.3	2200	3500	30	350	1000	100					60		RI	WG
SOK2922		KLO 21.6				FX SP C			6.3	700	1450	70	800							21		WG	
SOK2925		KLO 21.7				FX SP C			6.3	600	1850		4000							110		21	WG
SRK4642		KLO 21.9	22.1			MEC RA C			6.3	600	475	55	250	100						40		RI	WG
2K33		KLO 22.0	25.0			MEC RA C			6.3	580	2300	9	40	500	100					40		RI	WG
RK6254		KLO 22.0	25.0			MEC RA C			6.3	580	2300	9	40	500	100					40		RI	WG
R9602		KLO 22.0	26.0			MEC EM C			6.3	700	2200	15	60	500						50		RI	WG
24V10A		KLO 22.0	26.0			MEC OK C			6.3	650	2200	14	80	500	200					50		WG	
24V11		KLO 22.0	26.0			MEC OK C			6.3	650	1800	40	150	750	100					50		WG	
VA241D		KLO 22.0	24.0			FX VA C			6.3	1150	800	35	150	800						80		RI	WG
24V20		KLO 23.0	25.5			MEC NE C			6.3	1200	600	35	50	500						60		IN	WG
OKK1376		KLO 23.0	25.0			FX RA C			6.3	450		50	100	325						15		RI	WG
L3642		= KLO 23.0	23.0			MEC LI C			6.3	2200	3500	30	100	1000	100					60		RI	WG
L3631		= KLO 23.0	23.0			MEC LI C			6.3	2100	4000	150	8000										WG
L3630		= KLO 23.0	23.0			FX LI C			6.3	2100	4000	150	10W		1K								WG
2K50		* KLO 23.5	24.5			TH C			6.3	755	330	28	10	150						125		RI	WG
TK4		KLO 23.5	24.5			MEC BE C			6.3	750	300	32	14	90						70		RI	WG
MKK19		KLO 23.5	24.5			VT ME C			6.3	400		20	200										WG
OKK923		= KLO 23.5	24.5			MEC RA C			6.3	680	375	35	30	150						100		RI	WG
OKS1017		= KLO 23.5	24.5			MEC RA C			6.3	680	425	60	60	150						100		RI	WG
OKK1045		= KLO 23.5	24.5			MEC RA C			6.3	680	450	60	125	300						100		RI	WG
SRK4781		KLO 23.5	25.0			SP C			6.3	600	600	60	550	400						60		RI	
SRK4780		KLO 23.5	25.0			SP C			6.3	600	600	70	600	300						70		RI	
VA98E		= KLO 23.6	24.4			MEC CV C			6.3	1200	400	40	70	500						80		RE	WG
VA98J		= KLO 23.6	24.0			MEC CV C			6.3	1200	375	40	110	330						50		RE	WG
VA98M		= KLO 23.6	24.4			MEC VA C			6.3	450	390	40	125	500						84		RI	WG
VA98G		KLO 23.8	23.9			MEC CV C			6.3	1200	375	45	70	300						50		RI	WG
R9547		KLO 24.0	27.8			MEC EM C			6.3	800	2200	15	60	500						60		RI	WG
OKK1290		KLO 24.0				MEC RA C			6.3	1150	850	35	150	800						80		RI	WG
VA241E		KLO 24.0	26.5			FX VA C			6.3	1150	850	35	150	800									
SOK2921		KLO 24.0				FX SP C			6.3	600	1200	45	600									21	WG
SRK4641		KLO 24.3	24.7			SP C			6.3	600	450	50	300	170						60		RI	WG
OKK463A		KLO 24.5	27.5			MEC RA C			6.3	1800		9	25	300						30		RI	WG
SRK4640		KLO 24.5				SP C			6.3	600	450	50	200	250						100		RI	WG
OKK991		= KLO 24.8	25.2			MEC RA C			6.3	680	600	75	250	300						100		RI	WG
SOK2926		KLO 25.0				FX SP C			6.3	600	1250	48	600									21	WG
SOK2924		KLO 25.0				FX SP C			6.3	550	1300	50	1000									21	WG
SRK4761		KLO 25.7				SP C			6.3	600	400	43	80	290						50		RI	WG
VA294		KLO 26.5	40.0			MEC VA C			6.3	800	650	50	150	800						80		RE	WG
VA312		= KLO 26.5	35.0			MEC VA C			6.3	650	550	35	150	300						80		RE	WG
R9674		KLO 26.5	40.0			MEC EM C			16.3	800	2500	20	200	500						60		RI	WG
VA283		KLO 26.5	40.0			FX VA C			6.3	1250	800	35	220	300						50		RI	WG
VA284		= KLO 26.5	40.0			MEC VA C			6.3	600	1050	40	300	800						80		RI	WG
VA257		KLO 26.5	40.0			MEC VA C			6.3	1150	1000	30	400	800						90		RI	WG
SOV4130		KLO 26.5	31.0			FX SP C			6.3	700	1550	80	500							15		21	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
VA313	=	KLO	26.5	35.0		MEC	VA	C	6.3	650	800	40	550	350						70	RE	WG	
50V413	=	KLO	26.5	31.0			SP	C	6.3	550	1500	60	1000							20	RI	WG	
VA531		KLO	26.5	35.0			VA	C	6.3	800	1500	80	1000								2E	SP	
OK1185		KLO	27.0	31.0			RA	C					50								RI	WG	
OK289		KLO	27.3	30.0		MEC	RA	C	6.3	580	2500	15	20	450	250						RI	WG	
R9518		KLO	27.8	32.2		MEC	EM	C	6.3	800	2200	15	60	500						60	RI	WG	
30V10		KLO	28.0	32.0		MEC	OK	C	6.3	650	2200	14	40	500	200					70	WG		
30V11		KLO	28.0	32.0		MEC	OK	C	6.3	650	2200	30	100	500	200					75	WG		
F2904	=	KLO	28.0	33.0		FX	IT	C	6.3	1200	2500	50	1000	1000	100					30	RI	WG	
F2906	=	KLO	28.0	33.0		FX	IT	C	6.3	1200	2500	50	1000	1000	100					30	RI	WG	
30V150		KLO	29.5	30.5		MEC	OK	C	6.3		2000	12	50	350	100					80	WG		
30V16		KLO	29.5	30.0		MEC	OK	C	6.3		2200	30	180	325	80					80	WG		
OK290		KLO	29.7	33.5		MEC	RA	C	6.3	580	2500	15	20	450	250						RI	WG	
SRV4450		KLO	30.0	40.0		MEC	SP	C	6.3	600	400	33	20	100					100		RI		
31V151		KLO	30.5	31.5		MEC	OK	C					80								WG		
SRV4403		KLO	30.7				SP	C	6.3	700	700	90	500	300					50		RI	WG	
35V155		KLO	31.0	35.0		MEC	OK	C	6.3		2200	14	50	350	100				80		WG		
DX184		KLO	31.0	36.0		MEC	AM	C	6.3	800	2500	18	100	500	100				60		WG		
55335		KLO	31.0	36.0		MEC	PH	C	6.3	800	2500	18	150	600					60		RI	WG	
KTC31B		KLO	31.0	31.0		FX	OK	C	6.3		3000	150	1000	300							WG		
50V2200	=	KLO	31.0	40.0			SP	C	6.3	500	1500	65	1000						15		RI	WG	
KC31A		KLO	31.0	31.0		FX	OK	C	7.0	3000		150	3000	300							RI	WG	
R9651		KLO	31.2	33.7		MEC	EM	P	6.3	800	2200	15	60	500					70		RI	WG	
32V152		KLO	31.5	32.5		MEC	OK	C					80								WG		
OKK1228		KLO	32.0	32.7		MEC	RA	C			400	50	10	175					60		RI	WG	
35V10		KLO	32.0	37.0		MEC	OK	C	6.3	650	2200	14	40	500	200				100		WG		
R9546		KLO	32.0	37.5		MEC	EM	C	6.3	800	2200	15	40	500					60		RI	WG	
OK1186		KLO	32.0	37.0			RA	C					50								WG		
35V11		KLO	32.0	37.0		MEC	OK	C	6.3	650	2200	30	100	500	200				90		WG		
KL2T3		KLO	32.5	36.5		MEC	LT	C	6.3	740	2000	20	25	2500	2K				50		RI	WG	
33V153		KLO	32.5	33.5		MEC	OK	C					80								WG		
VA979	=	KLO	32.6	34.0		MEC	VA	C	6.3	1200	425	50	20	500					88		RE	WG	
SRV4405		KLO	32.9	33.1			SP	C	6.3	700	475	50	100	100					100		RI	WG	
VA534		KLO	33.0	40.0		FX	VA	C	6.3	1500	1400	120	10								2I	WG	
F2900	=	KLO	33.0	38.0		FX	IT	C	6.3	1200	2500	50	1000	1000	100				35		RI	WG	
F2905	=	KLO	33.0	38.0		FX	IT	C	6.3	1200	2500	50	1000	1000	100				35		RI	WG	
34LV20		KLO	33.2	34.8		MEC	OK	C	6.3	1500	2200	120	10W	600	400				200		IM	RI	WG
OK291		KLO	33.5	36.2		MEC	RA	C	6.3	580	2500	15	18	450	250						RI	WG	
34V154		KLO	33.5	34.5		MEC	OK	C					80								WG		
TV97		KLO	34.0	35.6		MEC	TV	C	6.3	1200	400	40	10								WG		
OKK834A		KLO	34.0	35.6		MEC	RA	C	6.3		375	50	10	175					75		RI	WG	
OK1117		KLO	34.0	35.6			RA	C					10										
MKK21		KLO	34.0	35.6		VT	ME	C			400		15	100							WG		
VA97	=	KLO	34.0	35.6		MEC	VA	C	6.3	1160	425	40	19	500					100		RE	WG	
KL3T2		KLO	34.0	36.0		MEC	LT	C	6.3		500	40	20	600					100		RI	WG	
35V30		KLO	34.0	36.0		MEC	OK	C	6.3		1000	25	20	145	125				80		WG		
OKK834	=	KLO	34.0	35.6		MEC	RA	C	6.3	600	400	27	20	105					110		RI	WG	
35V20		KLO	34.0	36.0		MEC	NE	C	6.3	1200	600	35	25	400					60		IN	WG	
OKK834B		KLO	34.0	35.6		MEC	RA	C	6.3		400	50	200						75		RI	WG	
R5146		KLO	34.0	36.5		MEC	EM	C	6.3	800	2200	12	60	500					60		RI	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	REFLECTOR VOLTAGE	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
KL215		KLO 34.0 36.0				MEC	LT C		6.3	740	2500	30	200	3000	3K					50		RI	WG
MKK20		KLO 34.0 35.6					ME C				2000		300									21	WG
VA239		KLO 34.0 36.0				FX	VA C		6.3	1250	2750	40	750	1000						125			WG
34LV10		KLO 34.0 34.0				FX	OK C		6.3	1500	2100	140	3000		500					60			WG
35V61		KLO 35.0 35.0				FX	OK C		6.3		1000	25	15	500	200								WG
L3710		KLO 35.0 35.0				MEC	LI C		6.3	1600	2300	15	30	290	200					60		RI	WG
R9521		KLO 35.0 40.0				MEC	EM C		6.3	800	2200	15	40	500						60		RI	WG
QK1040		KLO 35.0 35.0				FX	RA C				2200	30	80	500	200								WG
35V51		KLO 35.0 35.0				FX	OK C		6.3	1250	1000	40	300	600						150		RI	WG
VA302		KLO 35.0 42.0				FX	VA C																
L3659		KLO 35.0 35.0				MEC	LI C		6.3	2000	4000	150	5000		1K								WG
L3628		KLO 35.0 35.0				MEC	LI C		6.3	2000	4000	150	10W		1K								WG
L3629		KLO 35.0 35.0				FX	LI C		6.3	2000	4000	150	15W		1K								WG
L3713		KLO 35.0 35.0				FX	LI C		6.3	2100	6000	200	30W		1K								WG
L3736		KLO 35.0 35.0				FX	LI C		6.3	2200	6300	200	50W		1K							RI	WG
OK292		KLO 35.1 39.7				MEC	RA C		6.3	580	3600	20	5	450	200							RI	WG
36V156		KLO 35.5 36.5				MEC	OK C					55	100	200						75		RI	WG
SRV4401		KLO 36.0					SP C		6.3	700	500	30	35	500	200					90		RI	WG
40V10		KLO 37.0 42.0				MEC	OK C		6.3	650	2500	20	5	450	200								
OK293		KLO 37.1 42.6				MEC	RA C		6.3	580	3600	20	5	450	200								
SRV4406		KLO 38.4				SP C			6.3	700	475	50	40	100						50		RI	WG
SRV4407		KLO 39.0				SP C			6.3	700	700	85	275	175						50		RI	WG
SOV2201		KLO 39.5				FX	SP C		6.3	600	1500		250									21	WG
QKK892		KLO 39.6 46.0				MEC	RA C		6.3	3000		18	4	300	175							RI	WG
SRV4402		KLO 39.8				SP C			6.3	700	700	85	200	175						50		RI	WG
SRV4404		KLO 39.8				SP C			6.3	700	700	90	250	200						50		RI	WG
VA535		KLO 40.0 44.0				FX	VA C		6.3	1250	1500	80	800									21	WG
QK1188		KLO 41.0 48.0					RA C					20	5	450	200					100		RI	WG
OK294		KLO 41.7 50.0				MEC	RA C		6.3	580	3600	20	5	450	200								
45V10		KLO 42.0 48.0				MEC	OK C		6.3	650	2500	30	35	500	200								
47V10		KLO 43.0 51.0				MEC	OK C		6.3	650	2500	30	30	500	200					150			WG
47V11		KLO 43.0 51.0				MEC	OK C		6.3	650	2500	30	80	500	200					120			WG
QK1189		KLO 45.0 52.0				FX	RA C		6.3	1500	2200	135	1000		500				60				WG
45LV10		KLO 45.0 45.0				MEC	OK C		6.3		3000	18	4	300	175							RI	WG
QKK893		KLO 45.9 50.0				MEC	RA C		6.3														
50V10		KLO 46.0 54.0				MEC	OK C		6.3	650	2700	30	25	500	200					140			WG
50BT/A		KLO 46.0 54.0				MEC	BM C		6.3	580	2800	45	300	500	120					140		RE	WG
OK295		KLO 50.0 60.0				MEC	RA C		6.3	580	3600	20	2	450	200							RI	WG
VC720A		KLO 50.0 56.0				MEC	CV C		6.3	1800	1400	10	25	450						150		RI	WG
QKK863		KLO 50.0 57.0				MEC	RA C		2.5	1450	1400	50	25	450	400							RI	WG
QKK1148		KLO 50.0 57.0				MEC	RA C		6.3	2500	1800	50	150	600	300							RI	WG
VA250		KLO 50.0 80.0				MEC	CV C		6.3	2200	2550	25	250	1250						200		RI	WG
VC705		KLO 50.0 80.0				MEC	CV C		6.3	2200	2550	25	250	1250						200		RI	WG
VC104		KLO 50.0 80.0				MEC	CV C		6.3	2200	2550	25	600	1250						200		RI	WG
50LV10		KLO 50.0 50.0				FX	OK C		6.3	1500	2300	150	1000		500				40				WG
L3640		KLO 50.0 50.0				FX	LI C		6.3	2000	4000	150	1000		700								WG
L3693		KLO 50.0 50.0				MEC	LI C		6.3	2000	4000	150	1000		1K								WG
810H		KLO 51.0 55.0				HP C				10K		60	10W							140			WG
55V10		KLO 52.0 58.0				MEC	OK C		6.3	650	2700	30	30	500	200								WG
55V11		KLO 52.0 58.0				MEC	OK C		6.3	650	2700	30	70	500	200					190			WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
VC720B	=	KLO 55.0 61.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
KC55B		KLO 55.0 55.0				FX OK C			7.0	3900	200	5000			300							RI	WG
QK864		KLO 56.0 65.0				MEC RA C			2.5	1450	1400	50	25	450	400							RI	WG
QK1149		KLO 56.0 65.0				MEC RA C			6.3	2500	1800	50	160	600	300					140		RI	WG
60V10		KLO 57.0 63.0				MEC OK C			6.3	650	2700	30	30	500	200								
VC720C	=	KLO 60.0 66.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
QK865		KLO 64.0 74.0				MEC RA C			2.5	1450	1400	50	25	450	400							RI	WG
QK1150		KLO 64.0 74.0				MEC RA C			6.3	2500	1800	50	110	600	300							RI	WG
QK1024		KLO 64.5 69.5				FX RA C							200										
R9653		KLO 65.0 85.0				MEC EM C			6.3	1300	2500	30	20	500						100		RI	WG
70V10		KLO 65.0 73.0				MEC OK C			6.3	650	2800	30	25	500	200					140			WG
VC720D	=	KLO 65.0 71.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
70B7		KLO 65.0 75.0				MEC BM C			6.3	580	3200	45	30	400	120					170		RE	WG
70B7/A		KLO 65.0 75.0				MEC BM C			6.3	580	3200	45	60	400	120					170		RE	WG
70V11A		KLO 65.0 75.0				MEC OK C			6.3	650	2800	30	70	500	200					165			WG
QK837		KLO 67.0 70.1				MEC RA C			2.5	1450	1400	40	15	400	400					75		RI	WG
VC720E	=	KLO 67.0 73.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
DX151		KLO 67.0 73.0				MEC AM C			3.8	1750	2700	22	125	300	25					100		RI	WG
YK1010		KLO 67.0 74.0				MEC PH C			3.5	1750	2600	20	130	500	200					100		RI	WG
QK838		KLO 69.9 73.0				MEC RA C			2.5	1450	1400	40	15	400	400					75		RI	WG
VC720F	=	KLO 70.0 76.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
QK866		KLO 73.0 83.0				MEC RA C			2.5	1450	1800	60	25	500	300							RI	WG
QK1151		KLO 73.0 83.0				MEC RA C			6.3	2000	1800	60	25	600	300					80			WG
DX164		KLO 73.7 73.7				2	FX AM P		4.8	4120	13K	10A	15K								18K		
VC720G	=	KLO 74.0 80.0				MEC CV C			6.3	1800	1400	10	25	450						150		RI	WG
L3638	=	KLO 74.0 74.0				FX LI C			6.3	2000	4000	150	100		1K								WG
L3690	=	KLO 74.0 74.0				MEC LI C			6.3	2000	7000	150	100		1K								WG
L3691	=	KLO 74.0 74.0				MEC LI C			6.3	2300	4200	150	100		1K								WG
L3639	=	KLO 74.0 74.0				FX LI C			6.3	2000	4000	150	500		1K								WG
L3689	=	KLO 74.0 74.0				MEC LI C			6.3	2000	4000	150	500		1K								WG
80V10A		KLO 75.0 85.0				MEC OK C			6.3	650	2700	30	15	500	200					140			WG
VC710	=	KLO 80.0 H1.1				MEC CV C			6.3	2200	50	25	300	1250						200		RI	WG
VC713	=	KLO 80.0 H1.1				MEC CV C			6.3	2200	2550	25	400	1250						200		RI	WG
QK673		KLO 82.0 92.0				MEC RA C			2.5	1450	1800	50	3	4500	300							RI	WG
QK867		KLO 82.0 H1.0				MEC RA C			2.5	1450	1700	60	10	450	400							RI	WG
QK1152		KLO 82.0 92.0				MEC RA C			6.3	2000	1900	60	25	600	300					90			WG
90V10A		KLO 85.0 95.0				MEC OK C			6.3	650	2700	30	10	500	200					180			WG
90V11		KLO 85.0 95.0				MEC OK C			6.3	650	2700	25	30	500	200					300			WG
QK977		KLO 88.0 H1.0				MEC RA C			2.5	1450	1700	60	25	400	400					90		RI	WG
DX242		KLO 90.0 H1.0				MEC AM C			3.5	1800	2600	18	70	200	150					150		RI	WG
QK1153		KLO 91.0 H1.0				MEC RA C			6.3	2000	1900	60	10	600	300					100			WG
196H		KLO 92.8 94.8				3	HP P				30K	2400	3K										WG
100V10A		KLO 95.0 H1.0				MEC OK C			6.3	650	2800	25	10	500	200					250			WG
QK971		KLO H1.0 H1.2				MEC RA C			2.5	1450	1800	70	20	450	300							RI	WG
DX264		KLO H1.0 H1.1				MEC AM C			4.0	1750	2700	22	50	800	150					150		RI	WG
120V10		KLO H1.1 H1.2				MEC OK C			6.3	650	2700	25	5	500	200					350			WG
VC714	=	KLO H1.1 H1.7				MEC CV C			6.3	2200	2550	25	100	1250						200		RI	WG
VC715	=	KLO H1.1 H1.4				MEC CV C			6.3	2200	2550	25	200	1250						200		RI	WG
DX247		KLO H1.4 H1.5				MEC PH C			3.5	1850	2600	16	20	600	150					300		RI	WG
VC717		KLO H1.4 H1.7				MEC CV C			6.3	2200	2550	25	100	1250						200		RI	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
ILI-2R		MAG	0.1	0.2		VT	MR C		3.0	2000	2000	10	1000		300								CO
EM1300		MAG	0.2	0.5		VT	VA C		6.3	860	2200	10	150										CO
.25P.25-.75		MAG	0.2	0.7		VT	MR C		3.0	3000	2400	5	250		100								CO
.25P.25-.75S		MAG	0.2	0.7		VT	MR C		3.0	3000	2400	5	250	100									CO
.5P.2-.4		MAG	0.2	0.4		VT	MR C		3.0	3000	1600	3	300		100								CO
.5P.2-.4S		MAG	0.2	0.4		VT	MR C		3.0	3000	1600	3	300	100									CO
.5P.25-5		MAG	0.2	0.5		VT	MR C		3.0	3000	2100	3	500		150								CO
.5P.25-5S		MAG	0.2	0.5		VT	MR C		3.0	3000	2100	3	500	150									CO
1P.25-.5		MAG	0.2	0.5		VT	MR C		3.0	3000	2200	5	1000	250									CO
1P.25-.5S		MAG	0.2	0.5		VT	MR C		3.0	3000	2200	5	1000	250									CO
X1083B		MAG	0.3	0.5		VT	EI C		6.3	800	2300	10	50								IM		CO
.1P.35-1		MAG	0.3	1.0		VT	MR C		3.0	2000	1500	3	100		100								CO
X1084		MAG	0.3	0.6		VT	EI C		6.3	800	1800	10	200								IM		CO
.25P.35-1		MAG	0.3	1.0		VT	MR C		3.0	2000	2400	5	250	200									CO
.25P.35-1S		MAG	0.3	1.0		VT	MR C		3.0	2000	2400	5	250	200									CO
1P.375-.75		MAG	0.3	0.7		VT	MR C		3.0	3000	2200	8	1000	300									CO
1P.375-.75S		MAG	0.3	0.7		VT	MR C		3.0	3000	2200	8	1000	300									CO
5P.35-.5		MAG	0.3	0.5		VT	MR C		3.0	3000	2300	10	5000	300									CO
5P.35-5S		MAG	0.3	0.5		VT	MR C		3.0	3000	2300	10	5000	300									CO
X1094		MAG	0.4	0.5		VT	EI C		6.3	800	2000	10	50								IM		CO
.25PL.4-1.2		MAG	0.4	1.2		VT	MR C		3.0	2000	2400	5	250	200									CO
.25PL.4-1.2S		MAG	0.4	1.2		VT	MR C		3.0	2000	2400	5	250	200									CO
EM747		MAG	0.4	1.2		VT	EI C		6.3	800	2000	20	250								IM		CO
5P.4-.8		MAG	0.4	0.8		VT	MR C		3.0	3000	2900	15	5000	400									CO
5P.4-.8S		MAG	0.4	0.8		VT	MR C		3.0	3000	2900	15	5000	400									CO
L3455		MAG	0.4	0.4	20 MEC	LI P			6.5	55A	55K	97A	2M										CO
7547		MAG	0.4	0.4	18 MEC	RA P			6.5	55A	55K	97A	2M										CO
X1099		MAG	0.5	0.7		VT	EI C		6.3	800	1500	10	25								IM		CO
X1088B		MAG	0.5	0.9		VT	EI C		6.3	800	2300	10	50								IM		CO
.1P.5-1		MAG	0.5	1.0		VT	MR C		3.0	2000	500	2	100		100								CO
EM1310		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	8	1000	300									CO
.5P.5-1		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	10	150										CO
.5P.5-1S		MAG	0.5	1.0		VT	MR C		3.0	2000	1400	10	500		200								CO
.5PL.5-1.5		MAG	0.5	1.5		VT	MR C		3.0	2000	2400	10	500	200									CO
.5PL.5-1.5S		MAG	0.5	1.5		VT	MR C		3.0	2000	2400	10	500	200									CO
1P.5-1		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	8	1000	300									CO
1P.5-1R		MAG	0.5	1.0		VT	MR C		3.0	2000	2000	10	1000	300									CO
1P.5-1S		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	8	1000	300									CO
2P.5-1		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	10	2000	300									CO
2P.5-1S		MAG	0.5	1.0		VT	MR C		3.0	2000	2200	10	2000	300									CO
10P.5-.75		MAG	0.5	0.7		VT	MR C		3.0	3000	2700	15	8000	300									CO
10P.5-.75S		MAG	0.5	0.7		VT	MR C		3.0	3000	2700	15	8000	300									CO
L3714		MAG	0.5	0.7	18 MEC	LI C			5.5	1700	3500	200	165W								3	2	IM
QKH517B		MAG	0.5	0.6	18 FX	RA P			50K	50K	90A	2M											CO
X1153C		MAG	0.6	1.2		EI C			6.3	800	2300	10	50								IM		CO
5PL.6-1.2		MAG	0.6	1.2		VT	MR C		3.0	3000	2800	25	5000	400									CO
5PL.6-1.2S		MAG	0.6	1.2		VT	MR C		3.0	3000	2800	25	5000	400									CO
X1097		MAG	0.6	1.2		VT	EI C		6.3	800	3000	35	5500								IM		CO
QKH517A		MAG	0.6	0.6	18 FX	RA P			50K	50K	90A	2M											CO
QKH626		MAG	0.6	0.6	18 MEC	RA P			50K	50K	90A	2M											CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
2PL-75-1.5S	MAG		0.7	1.5		VT	MR C		3.0	2000	2200	15	2000	300									CO
2PL-75-1.5	MAG		0.7	1.5		VT	MR C		3.0	2000	2200	15	2000	300									CO
10P-75-1	MAG		0.7	1.0		VT	MR C		3.0	3000	2400	15	10W	400									CO
10P-75-1S	MAG		0.7	1.0		VT	MR C		3.0	3000	2400	15	10W	400									CO
QKH517	MAG		0.7	0.7	18	FX	RA P		3.0	3000	50K	90A	2M										CO
5PL-8-2.4	MAG		0.8	2.4		VT	MR C		3.0	2000	2400	10	500	200									CO
5PL-8-2.4S	MAG		0.8	2.4		VT	MR C		3.0	2000	2400	10	500	200									CO
X1092	=	MAG	0.8	1.4		VT	EI C		6.3	800	2070	15	750								IM		CO
X1098	=	MAG	0.9	1.5		VT	EI C		6.3	800	1800	20	80								IM		CO
ZM6085	MAG		0.9	1.5		VT	GE C		2.3	2000	1825	20	150	170									CO
EMI320	=	MAG	0.9	1.8		VT	EI C		6.3	900	2200	12	200										CO
ZM6238	MAG		0.9	2.3		VT	GE C		2.5	2000	2000	25	1000								IM		CO
X1081	=	MAG	0.9	1.2		VT	EI C		6.3	1000	2400	30	12W								IM		CO
EMI086	=	MAG	0.9	1.1		VT	EI C		6.3	1000	2500	35	16W								IM		CO
EMI5LS	MAG		0.9	0.9		FX	EI C		13.0	115A	12K	2400	25K										WG
8684	MAG		0.9	0.9		FX	RC C		11.4	100A	14K	3000	30K										WG
ZM6051	MAG		1.0	2.0		VT	GE C		2.2	2000	2200	10	100								IM		CO
EMI323	MAG		1.0	2.5		VT	VA C		6.3	860	2200	12	400										CO
5L1-2	MAG		1.0	2.0		VT	MR C		3.0	2000	1400	10	500	200									CO
5LS1-3	MAG		1.0	3.0		VT	MR C		3.0	2000	2400	10	500	200									CO
5LS1-35	MAG		1.0	3.0		VT	MR C		3.0	2000	2400	10	500	200									CO
2L1-2	MAG		1.0	2.0		VT	MR C		3.0	2000	2200	15	2000	300									CO
2L1-2S	MAG		1.0	2.0		VT	MR C		3.0	2000	2200	15	2000	300									CO
5L1-2	MAG		1.0	2.0		VT	MR C		3.0	3000	2400	20	5000	400									CO
5L1-2S	MAG		1.0	2.0		VT	MR C		3.0	3000	2400	20	5000	400									CO
10L1-1.5	MAG		1.0	1.5		VT	MR C		3.0	3000	2500	25	10W	400									CO
10L1-1.5S	MAG		1.0	1.5		VT	MR C		3.0	3000	2500	25	10W	400									CO
QKH427	MAG		1.0	1.0		FX	RA C		6.3	800	2500	60	45W										WG
X1150	=	MAG	1.0	1.0		VT	EI C		5.5	17A	3200	130	110W								IM		WG
L3502	MAG		1.0	1.5		MEC	LI C		5.5	17A	3200	130	110W										WG
QKH959	MAG		1.0	1.5		MEC	RA C		6.0	15A	4300	800	850W								IM		CO
L3465	MAG		1.0	1.5		MEC	LI C		6.0	15A	4300	800	850W								IM		CO
EMI080	=	MAG	1.2	2.2		VT	EI C		6.3	800	1500	25	100										CO
5LS1-2-3.6	MAG		1.2	3.6		VT	MR C		3.0	2000	2400	10	500	200									CO
5LS1-2-3.6S	MAG		1.2	3.6		VT	MR C		3.0	2000	2400	10	500	200									CO
QK1042	MAG		1.2	1.4		RA C			23.5	2200	31K	55A	450K								1400		CO
5J26	MAG		1.2	1.4	25	MEC	PH P		8.0	15A	30K	30A	500K										CO
F1113	MAG		1.2	1.4	20	CS	P		23.5	2200	27K	46A	600K								1400		CO
JNT1-500	MAG		1.2	1.4	10	MEC	MU P		23.5	2200	34K	80A	750K								1400		CO
YJ1150	MAG		1.2	1.4	25	MEC	PH P		2.8	75A	70K	60A	1M										WG
RK6517	MAG		1.2	1.4	13	MEC	RA P		2.8	75A	80K	100A	2M								IM		WG
7484A	MAG		1.2	1.4	14	MEC	P		3.7	90A	60K	90A	2M								IM		WG
7528	MAG		1.2	1.4	12	MEC	RA P		20.0	14A	42K	150A	3M								950		WG
M586	MAG		1.2	1.3	15	FX	EE P		48.0	14A	52K	250A	5M								800		WG
M565	MAG		1.2	1.4	25	FX	EE P		15.0	150A	72K	150A	5M								IM		WG
QK665	MAG		1.2	1.3	18	FX	RA P		20.0	13A	42K	150A	2K								IM		WG
QKH942	MAG		1.2	1.4	18	MEC	RA P		20.0	13A	42K	150A	2K										WG
MC567A-J	MAG		1.3	1.4	15	CS	P		20.0	13A	42K	150A	2K										WG
F1088-1096	MAG		1.3	1.4	15	CS	P		20.0	13A	42K	150A	2K										WG
QKH1014	MAG		1.3	1.4	11	MEC	RA P		55K	50A	1M												WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																			
M554		MAG	1.3	1.4	15	FX	EE	P	20.0	14A	42K	150A	3M						4		950	WG	
OK666		MAG	1.3	1.4	18	FX	RA	P	15.0	150A	72K	150A	5M								IM	WG	
ZM6086		MAG	1.4	2.6		VT	GE	C	2.3	2000	1740	20	150		160							CO	
3L1.4-1.6		MAG	1.4	1.6		VT	MR	C	3.0	2000	1100	15	3000		300							CO	
.5LS1.5-3		MAG	1.5	3.0		VT	MR	C	3.0	2000	1400	10	500		200							CO	
EM1321		MAG	1.5	3.0		VT	VA	C	6.3	860	2500	18	650									CO	
2LS1.5-3		MAG	1.5	3.0		VT	MR	C	3.0	2000	2200	15	2000		300							CO	
2LS1.5-3S		MAG	1.5	3.0		VT	MR	C	3.0	2000	2200	15	2000		300							CO	
10L1.5-2		MAG	1.5	2.0		VT	MR	C	3.0	3000	2200	25	10W		400							CO	
10L1.5-2S		MAG	1.5	2.0		VT	MR	C	3.0	3000	2200	25	10W		400							CO	
L3503		MAG	1.5	2.4		MEC	LI	C	5.5	17A	3200	130	110W								IM	WG	
OK1134		MAG	1.5	2.3		MEC	LI	C	6.0	15A	4300	800	185W						15	2		IM	CO
L3464		MAG	1.5	2.4		MEC	LI	C	12.6	2400	16K	16A	60K						6			IM	WG
SFD325		MAG	1.6	1.7	10	MEC	SD	P							300							IM	CO
3L1.8-2.1		MAG	1.8	2.1		VT	MR	C	3.0	2000	1100	15	3000									CO	
ZM6242		MAG	1.8	1.9		VT	GE	C	2.2	2400	1500	20	3000								IM	CO	
EM1332		MAG	2.0	3.0		VT	VA	C	6.3	860	2500	20	200									CO	
ZM6222		MAG	2.0	4.0		VT	GE	C	2.8	2000	1000	15	1000								IM	CO	
ZM6223		MAG	2.0	4.0		VT	GE	C	2.5	2000	1500	15	1250								IM	CO	
252-4		MAG	2.0	4.0		VT	MR	C	3.0	2000	2200	15	2000		300							CO	
252-4S		MAG	2.0	4.0		VT	MR	C	3.0	2000	2200	15	2000		300							CO	
1052-3		MAG	2.0	3.0		VT	MR	C	3.0	3000	2300	25	10W		400							CO	
1052-3S		MAG	2.0	3.0		VT	MR	C	3.0	3000	2300	25	10W									CO	
EM1091A		MAG	2.1	2.3		VT	VA	C	6.3	860	2500	50	20W								IM	CO	
X1091		MAG	2.2	2.3		VT	EL	C	6.3	1000	2500	60	35W								IM	CO	
EM1331		MAG	2.2	2.3		VT	EL	C	6.3	1000	2500	60	42W									CO	
OK1135		MAG	2.3	3.2		MEC	RA	C					185W										
OKH1234		MAG	2.3	2.5		MEC	RA	P					800K										
ZM6203		MAG	2.4	2.8		VT	GE	C	2.5	2000	1200	20	1750								IM	CO	
2M60		MAG	2.4	2.5		FX	TO	C	9.0	75A	6700	1300	2500								1000	WG	
5609A		MAG	2.4	2.8		FX	RA	C	6.3	1800	1450	135	70W						7			CO	
2M40		MAG	2.4	2.5		FX	TO	C	6.3	3500	1700	135	100W									CO	
L3504		MAG	2.4	3.6		MEC	LI	C	5.5	17A	3200	130	110W									WG	
OKH960		MAG	2.4	3.6		MEC	RA	C				2900	225	190W								IM	CO
2M50		MAG	2.4	2.6		FX	TO	C	5.3	3200	1900	230	200W									IM	CO
MG8		MAG	2.4	2.4		FX	TE	C	4.5	2500	1500	340	200W								1500	CO	
7090		MAG	2.4	2.5		FX	TE	C	5.3	3200	2900	230	200W									IM	CO
L3460		MAG	2.4	3.6		MEC	LI	C	6.0	15A	4500	800	850W						20	2		IM	WG
2M89		MAG	2.4	2.5		FX	PH	C	5.0	16A	7700	2000	1K								1800	CO	
DX206		MAG	2.4	2.5		FX	PH	C	4.0	30A	5800	410	1K									IM	WC
OKH904		MAG	2.4	2.4		FX	RA	C	4.4	28A	4500	500	1K									CO	
TV1022AB		MAG	2.4	2.5		FX	TV	C	7.5	5000	2350	850	1K								IM	SP	
TV1022C		MAG	2.4	2.5		FX	TV	C	7.5	5000	1800	1000	1K								IM	SP	
TV1022D		MAG	2.4	2.5		FX	TV	C	7.5	5000	2350	850	1K								IM	SP	
F1112		MAG	2.4	2.5		FX	CS	C	12.0	3000	3500	800	1K										
F1122		MAG	2.4	2.5		FX	CS	C	12.0	3000	4000	900	1K										
MG2000		MAG	2.4	2.4		FX	TE	C	9.0	5000	2400	1350	1K								1100	CO	
L3189		MAG	2.4	2.4		FX	LI	C															
TV1023		MAG	2.4	2.5		FX	TV	C	7.5	5000	4250	1200	2K								IM	SP	
YJ1080		MAG	2.4	2.5		FX	PH	C	2.8	54A	4900	800	2K								IM	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
YJ1082	MAG	2.4	2.5			FX	PH C	PH C	2.8	54A	800	2K								IM		CO
F1117	MAG	2.4	2.5				CS C	CS C	15.0	5000	4600	1000	2K								IM	WC
YJ1160	MAG	2.4	2.5			FX	PH C	PH C	5.0	35A	4800	800	2K								IM	WC
YJ1162	MAG	2.4	2.5			FX	PH C	PH C	5.0	35A	4800	800	2K								IM	CO
7292	MAG	2.4	2.4			FX			5.0	32A	4500	2100	2K									CO
YJ1190	MAG	2.4	2.5			FX	PH C	PH C	5.5	66A	7200	1300	5K					12			IM	WC
ZM6087	MAG	2.5	4.3			VT	GE C	VT	2.3	2000	1700	20	150	300								CO
EMI1093	MAG	2.5	2.7			VT	EI C		6.3	650	1500	25	3000								IM	CO
1052.5-3R	MAG	2.5	3.0			VT	MR C		3.0	3000	1800	25	10W	400								CO
1052.5-3.5	MAG	2.5	3.5			VT	MR C		3.0	3000	2200	25	10W	400								CO
1052.5-3.55	MAG	2.5	3.5			VT	MR C		3.0	3000	2200	25	10W	400								CO
ZM6211	MAG	2.5	3.5			VT	GE C		2.5	2000	2500	40	10W	450								CO
ZM6215	MAG	2.5	3.5			VT	GE C		2.5	2000	2500	40	10W								IM	CO
5052.5-3.5	MAG	2.5	3.5			VT	MR C		3.0	3500	4100	45	50W	800								CO
QKH1381	MAG	2.5				FX	RA		3.0	12A	4000	300	60W									WG
10052.5-3	MAG	2.5	3.0			VT	MR C		3.0	3500	3600	80	100W	1	400							CO
BT020	MAG	2.6	3.7			VT	BL C		2.5	3000	2300	40	10W					600				CO
ZM6046	MAG	2.6	2.9			VT	GE C		2.1	5000	3100	70	75W								IM	CO
ZM6239	MAG	2.6	2.9			VT	GE C		2.5	6000	3500	70	100W								IM	CO
ZM6244	MAG	2.6	3.2			VT	GE C		2.5	6000	3500	70	100W								IM	CO
QK1109	MAG	2.6	2.8				RA C		3.0	2000	1000	25	5000	300								CO
552.7-2.85	MAG	2.7	2.8			VT	MR C						400W									
QK1100	MAG	2.7	2.9				RA C						400W									
QK1034	MAG	2.7	2.8			20	MEC	RA P	6.3	1500	20K	25A	150K									
2J68	MAG	2.7	2.8			20	MEC	RA P	6.3	1500	20K	25A	150K									
2J69	MAG	2.7	2.8			20	MEC	RA P	6.3	1500	20K	25A	150K									
2J33	MAG	2.7	2.8			10	FX	RA P	6.3	1500	20K	30A	240K					15	40	1900		CO
2J34	MAG	2.7	2.7			10	FX	RA P	6.3	1500	20K	30A	240K					15	40	1900		CO
BM1014	MAG	2.7	2.8			5	EE P		6.0	7000	28K	40A	400K					15		1350		CO
4J34	MAG	2.7	2.8			10	FX	RA P	16.0	3100	30K	70A	685K					15		2700		CO
4J35	MAG	2.7	2.7			10	FX	RA P	16.0	3100	30K	70A	685K					15		2700		CO
5586	* MAG	2.7	2.9			5	MEC	RA P	16.0	3100	30K	70A	800K					7		1800		WG
M525	MAG	2.7	2.9			12	FX	EE P	8.5	9000	40K	80A	1M					5				
VC701	MAG	2.7	2.9				FX	CV P	12.0	14K	35K	157A	2M									
7529	MAG	2.7	2.8				MEC	RA P	8.2	78A	62K	115A	3M								IM	WG
3495	MAG	2.7	2.9			10	MEC	TO P	8.2	79A	75K	135A	5M									
352.8-3.1	MAG	2.8	3.1			VT	MR C		3.0	2000	1100	15	3000	300							IM	WG
4J62	MAG	2.8	3.0				RA C				1200	125	50W								IM	CO
2J66	MAG	2.8	2.9			20	MEC	RA P	6.3	1500	20K	25A	150K									
2J67	MAG	2.8	2.9			20	MEC	RA P	6.3	1500	20K	25A	150K									
2J32	MAG	2.8	2.8			10	FX	RA P	6.3	1500	20K	30A	240K					15	40	1900		CO
2J31	MAG	2.8	3.0			10	FX	RA P	6.3	1500	20K	30A	240K					15	40	1900		CO
BM1015	MAG	2.8	2.8			5	EE P		6.0	7000	28K	40A	400K									CO
BM1016	MAG	2.8	2.9			5	EE P		6.0	7000	28K	40A	400K									CO
4J53	MAG	2.8	2.8			10	FX	RA P	16.0	3100	30K	70A	500K									CO
4J32	MAG	2.8	2.9			10	FX	RA P	16.0	3100	30K	70A	685K									CO
4J33	MAG	2.8	2.8			10	FX	RA P	16.0	3100	30K	70A	685K									CO
M566	MAG	2.8	2.9			15	FX	EE P	12.0	15A	42K	176A	2M									WG
VC702	MAG	2.8	2.9			15	FX	CV P	8.3	85A	56K	95A	2M									
6406A	MAG	2.8	2.9			6	FX	P													IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING MHz	BANDWIDTH MHz	MAGNETIC FIELD Oersted	CAVITY	COUPLING
			MIN	MAX																		
OKH880		MAG	2.8	2.9	10	MEC	RA P		8.0	79A	70K	130A	4M							IM	WG	
OKH883		MAG	2.8	2.9	10	FX	RA P		8.0	79A	70K	130A	4M							IM	WG	
RK6410A		MAG	2.8	2.9	10	FX	RA P		7.7	76A	70K	130A	4M							IM	WG	
3M901		MAG	2.8	2.8	10	MEC	TO P		7.7	76A	75K	135A	5M							IM	WG	
3M902		MAG	2.8	2.8	10	MEC	TO P		7.7	76A	75K	135A	5M							IM	WG	
3M903		MAG	2.8	2.8	10	MEC	TO P		7.7	76A	75K	135A	5M							IM	WG	
3M904		MAG	2.8	2.9	10	MEC	TO P		7.7	76A	75K	135A	5M							IM	WG	
OK1140		MAG	2.9	3.1			RA C		2.2	2400	1500	30	3000							IM	CO	
ZM6243		MAG	2.9	3.1		VT	GE C		2.1	5000	3100	70	75W							IM	CO	
ZM6047		MAG	2.9	3.2			VT	GE C	2.5	6000	3500	70	100W							IM	CO	
ZM6240		MAG	2.9	3.1			RA C		5.3	2600	22K	28A	220K									
OK1240		MAG	2.9	3.5	5		CS P		6.3	1500	20K	30A	240K									
MC839-103		MAG	2.9	2.9	10	FX	RA P		5.0	2600	30K	35A	475K									
F1057-1077		MAG	2.9	2.9	10	FX	RA P		16.0	3100	30K	70A	685K									
2J30		MAG	2.9	2.9	10	FX	RA P		16.0	3100	32K	70A	700K									
55100-04		MAG	2.9	2.9	10	FX	RA P		16.0	3100	28K	70A	900K									
4J31		MAG	2.9	3.0	15	FX	EE P		8.5	9000	47K	110A	1M									
5657		MAG	2.9	3.0	10	FX	EE P		14.0	5200	30K	65A	1M									
TV1658A		MAG	2.9	3.0	10	FX	EE P		12.0	15A	43K	170A	2M									
BM1005		MAG	2.9	3.0	15	FX	EE P		12.0	15A	41K	170A	2M									
F1054		MAG	2.9	3.0	10	FX	EE P		8.0	79A	52K	85A	2M									
MCV1055E		MAG	2.9	3.0	10	FX	EE P		13.0	44A	48K	92A	2M									
M569		MAG	2.9	2.9	8	FX	RA P		8.0	79A	70K	130A	4M									
M573		MAG	3.0	3.5	10	FX	EE P		3.0	3000	2200	25	10W									
OKH899		MAG	2.9	3.0	15	FX	EE P		3.0	3000	2300	25	10W									
6518		MAG	2.9	2.9	7	FX	RA P		3.0	3000	2300	25	10W									
OKH898		MAG	2.9	2.9	8	FX	RA P		3.0	3000	2300	25	10W									
10S-3.5R		MAG	3.0	3.5	10	FX	EE P		3.0	3000	2300	25	10W									
10S3-4		MAG	3.0	4.0	10	FX	EE P		3.0	3000	2300	25	10W									
10S3-45		MAG	3.0	4.0	10	FX	EE P		3.0	3000	2300	25	10W									
4J63		MAG	3.0	3.4			RA C		3.0	3000	2300	25	10W									
50S3-4		MAG	3.0	4.0			RA C		3.0	3000	2300	25	10W									
100S3-3.5		MAG	3.0	3.5			RA C		3.0	3000	2300	25	10W									
2J70		MAG	3.0	3.1	20	FX	RA P		6.3	1400	7500	15A	25K									
M561		MAG	3.0	3.1	20	FX	EE P		10.0	1100	18K	25A	80K									
CV1495		MAG	3.0	3.0	10	FX	GC P		6.0	1250	22K	22A	200K									
CV1496		MAG	3.0	3.0	10	FX	GC P		6.0	1250	22K	22A	200K									
CV1497		MAG	3.0	3.1	10	FX	GC P		6.0	1250	22K	22A	200K									
CV176		MAG	3.0	3.1	10	FX	GC P		5.0	2500	27K	35A	450K									
CV1479		MAG	3.0	3.1	10	FX	GC P		5.0	2600	27K	35A	450K									
CV1480		MAG	3.0	3.0	10	FX	GC P		5.0	2600	27K	35A	450K									
CV1481		MAG	3.0	3.0	10	FX	GC P		5.0	2600	27K	35A	450K									
CV1482		MAG	3.0	3.0	10	FX	GC P		5.0	2600	27K	35A	450K									
55100-01		MAG	3.0	3.1	12	FX	VV P		5.0	2600	30K	35A	475K									
55100-02		MAG	3.0	3.0	12	FX	VV P		5.0	2600	30K	35A	475K									
55100-03		MAG	3.0	3.0	12	FX	VV P		5.0	2600	30K	35A	475K									
4J43		MAG	3.0	3.0	10	FX	RA P		16.0	3100	30K	70A	900K									
4J44		MAG	3.0	3.0	10	FX	RA P		16.0	3100	30K	70A	900K									
M577A		MAG	3.0	3.0	10	FX	EE P		16.0	3100	30K	70A	900K									
F1007		MAG	3.0	3.0	10	FX	TV P		16.0	3100	32K	70A	900K									

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
BM1003		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	47K	110A	1M						7	1600		WG	
BM1004		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	47K	110A	1M						7	1600		WG	
BM1006		MAG	3.0	3.0	15	FX	EE	P	8.5	9000	38K	70A	1M						7	1375		WG	
F1055		MAG	3.0	3.1	10		CS	P	14.0	5200	30K	65A	1M										
MCV1055F		MAG	3.0	3.1	10		CS	P	14.0	5200	30K	65A	1M										
M570		MAG	3.0	3.1	15	FX	EE	P	12.0	15A	43K	170A	2M						7	1580		WG	
M574		MAG	3.0	3.1	15	FX	EE	P	12.0	15A	44K	155A	2M						7	1675		WG	
BM1001		MAG	3.0	3.0	15	MEC	EE	P	8.5	9000	47K	110A	2M						7	1550		WG	
TV1542		MAG	3.0	3.0		FX	TV	C	8.5	9000	45K	90A	2M									SP	
QK1136		MAG	3.1	4.2			RA	C					185W										
CV1498		MAG	3.1	3.1	10	FX	GC	P	6.0	1250	22K	22A	200K						7	2050		CO	
CV1499		MAG	3.1	3.1	10	FX	GC	P	6.0	1250	22K	22A	200K						7	2050		CO	
CV1500		MAG	3.1	3.1	10	FX	GC	P	6.0	1250	22K	22A	200K						7	2050		CO	
F1001		MAG	3.1	3.3	10	FX	TV	P	16.0	3100	32K	70A	800K						15	2700		CO	
M578A		MAG	3.1	3.1	10	FX	EE	P	16.0	3100	30K	70A	900K						15				
TH1658B		MAG	3.1	3.1	10	FX	TV	P	16.0	3100	32K	70A	900K						15	2750		CO	
MCV1055G		MAG	3.1	3.2	10		CS	P	14.0	5200	30K	65A	1M										
F1056		MAG	3.1	3.2	10		CS	P	14.0	5200	30K	65A	1M										
5795		MAG	3.1	3.5	22	MEC	NE	P	10.7	3650	50K	50A	1M						10	IM		WG	
M579		MAG	3.1	3.2	15	FX	EE	P	12.0	14A	42K	176A	2M							1580		WG	
M507		MAG	3.2	3.4	10	FX	EE	P	5.0	2600	30K	40A	425K							2100		CO	
CV1478		MAG	3.2	3.3	2	FX	GC	P	5.0	2600	26K	40A	450K							2100		WG	
4J64		MAG	3.3	3.7			RA	C			1200	125	50W							IM		CO	
2J52		MAG	3.3	3.4	20	MEC	RA	P	6.3	1500	15K	1A	70K							1400			
CV5117		MAG	3.3	3.3	6	FX	GC	P	6.0	1250	22K	24A	180K						7	1880		WG	
CV1475		MAG	3.3	3.4	2	FX	GC	P	5.0	2600	26K	40A	450K							2100		WG	
CV1476		MAG	3.3	3.3	2	FX	GC	P	5.0	2600	26K	40A	450K							2100		WG	
CV1477		MAG	3.3	3.3	2	FX	GC	P	5.0	2600	26K	40A	450K							2100		WG	
553.4-3.7		MAG	3.4	3.7	VT	MR	C		3.0	2000	1200	20	5000	300								CO	
CV1486		MAG	3.4	3.5	2	FX	GC	P	5.0	2600	27K	40A	400K							2300		WG	
M519		MAG	3.4	3.6	10	FX	EE	P	5.0	2600	30K	40A	425K							2300		CO	
55085-04		MAG	3.4	3.5	2	FX	VV	P	5.0	2900	30K	40A	450K							2500		CO	
RK6695		MAG	3.4	3.6	10	MEC	RA	P	16.0	3100	31K	60A	650K							2600		CO	
6402		MAG	3.4	3.6	16	MEC	RA	P	8.3	43A	57K	55A	700K							IM		WG	
4J40		MAG	3.4	3.5	10	FX	RA	P	16.0	3100	30K	70A	850K						10	2500		WG	
4J41		MAG	3.4	3.4	10	FX	RA	P	16.0	3100	30K	70A	850K						10	2500		WG	
RK6403		MAG	3.4	3.6	14	MEC	RA	P	8.3	43A	54K	80A	2M									WG	
105C3.5-4.5		MAG	3.5	4.5	VT	MR	C		3.0	3000	2500	25	10W	400								CO	
105C3.5-4.5S		MAG	3.5	4.5	VT	MR	C		3.0	3000	2500	25	10W	400								CO	
CV1484		MAG	3.5	3.6	2	FX	GC	P	5.0	2600	27K	40A	400K							2300		WG	
CV1485		MAG	3.5	3.5	2	FX	GC	P	5.0	2600	27K	40A	400K							2300		WG	
55085-02		MAG	3.5	3.6	2	FX	VV	P	5.0	2900	30K	40A	450K							2500		CO	
55085-03		MAG	3.5	3.5	2	FX	VV	P	5.0	2900	30K	40A	450K							2500		CO	
4J39		MAG	3.5	3.6	10	FX	RA	P	16.0	3100	30K	70A	850K						10	2500		WG	
L3505		MAG	3.6	5.0		MEC	LI	C	5.5	17A	3200	130	110W							IM		WG	
L3461		MAG	3.6	5.0		MEC	LI	C	6.0	15A	4300	800	600W						20	2	IM	WG	
CV1483		MAG	3.6	3.6	2	FX	GC	P	5.0	2600	27K	40A	400K							2300		WG	
55085-01		MAG	3.6	3.6	2	FX	VV	P	5.0	2900	30K	40A	450K							2500		CO	
4J36		MAG	3.6	3.7	10	FX	RA	P	16.0	3100	30K	70A	850K						10	2500		WG	
4J37		MAG	3.6	3.6	10	FX	RA	P	16.0	3100	30K	70A	850K						10	2500		WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, AND VOLTS	A	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHz																					
			MIN	MAX																				
4J38		MAG	3.6	3.6	10	FX	RA P		16.0	3100	30K	70A	850K							10	2500		WG	
5C4-5		MAG	4.0	5.0		VT	MR C		3.0	3000	2200	20	5000										CO	
5C4-5S		MAG	4.0	5.0		VT	MR C		3.0	3000	2200	20	5000										CO	
QK1133		MAG	4.1	4.2		RA	RA C					6000											CO	
WX4529	=	MAG	4.2	4.4		FX	WH C		6.3	600	250	1000									IM		CO	
WX4160	=	MAG	4.2	4.4		MEC	WH C		6.3	600	440	30	4500								IM		CO	
7794	=	MAG	4.2	4.4		MEC	WH C		6.3	600	500	100	5000							4		IM	CO	
QK1031		MAG	4.3	4.3		RA	RA C					1000											CO	
6177A		MAG	4.3	4.3		FX	WH C		6.3	540	275	30	1000							4		IM	WG	
WX4103		MAG	4.3	4.4		MEC	WH C		6.3	600	350	25	1500								IM		CO	
WX4163		MAG	4.3	4.3		FX	WH C		6.3	600	350	25	1500									IM	CO	
7795	=	MAG	4.3	4.3		FX	WH C		6.3	600	425	30	10W									IM	CO	
QKH1199		MAG	4.9	5.1		MEC	RA P					200K											CO	
L3506		MAG	5.0	6.2		MEC	LI C		5.5	17A	3200	130	110W									IM	WG	
L3467		MAG	5.0	6.2		MEC	LI C		6.0	15A	4800	800	600W							25	2		WG	
L3897		MAG	5.0	5.4	10	LI	P		13.5	2500	2150	22A	175K											
MCM40		MAG	5.2	5.7	20	MEC	ME P			3000	2100	900W								10	1	3100	CO	
M5008		MAG	5.2	5.3	15	FX	EE P		6.3	13A	36K	65A	840K										WG	
QKH632		MAG	5.2	5.3	10	FX	RA P			35K	60A	1M											WG	
VF30		MAG	5.2	5.6	15	FX	FE P			29K	90A	2M											WG	
5M71		MAG	5.3	5.3	10	FX	TO P		10.0	3200	16K	16A	85K									IM	WG	
BLM200		MAG	5.4	5.9	20	MEC	BL P		5.0	700		585								9			CO	
BLM155		MAG	5.4	5.9	20	MEC	BL P		5.0	700		840								12			CO	
QK1170		MAG	5.4	5.9		RA	RA C					6000											CO	
JB5-04		MAG	5.4	5.5	10	FX	MU P		6.3	1200	1200	225	70W							15		IM	WG	
MCM11		MAG	5.4	5.9	20	MEC	ME P			1500	1200	100W											CO	
BL212		MAG	5.4	5.9	20	MEC	BL P		5.0	500	1350	800	100W							12			CO	
YJ1030		MAG	5.4	5.9	10	MEC	MU P		5.0	500	1180	800	120W							10		IM	CO	
MCM34		MAG	5.4	5.9	20	MEC	ME P			1300	1000	150W											CO	
MCM30		MAG	5.4	5.9	20	MEC	ME P			1300	1000	159W											CO	
QKH737		MAG	5.4	5.6	30	MEC	RA P			1700	1100	200W									IM		SP	
QKH875		MAG	5.4	5.6	30	MEC	RA P			1700	1100	200W									IM		SP	
QK1162		MAG	5.4	5.8		RA	RA C					200W											CO	
MCM31		MAG	5.4	5.9	20	MEC	ME P			1500	1100	250W											CO	
MCM12		MAG	5.4	5.9	20	MEC	ME P			2000	1100	400W											CO	
MCM15		MAG	5.4	5.9	20	MEC	ME P			2000	1100	400W											CO	
MCM38		MAG	5.4	5.9	20	MEC	ME P			2300	1100	400W											CO	
MCM41		MAG	5.4	5.9	20	MEC	ME P			2400	1300	400W								15			CO	
BL223		MAG	5.4	5.9	20	MEC	BL P		5.0	700	2100	1100	400W										CO	
QKH488		MAG	5.4	5.9		MEC	RA P					400W												
QKH735		MAG	5.4	5.9	20	MEC	RA P			2100	1500	400W									IM		SP	
BLM008		MAG	5.4	5.9	20	MEC	BL P		5.0	700	2250	1100	500W							15			CO	
BLM086		MAG	5.4	5.9	20	MEC	BL P		5.0	700	2150	1100	500W							12			CO	
MCM14		MAG	5.4	5.9	20	MEC	ME P			2200	1100	500W											CO	
MCM27		MAG	5.4	5.9	20	MEC	ME P			2200	1100	500W												
BLM093		MAG	5.4	5.9	20	MEC	BL P		5.0	700	2200	2000	600W							15			CO	
MCM43		MAG	5.4	5.9	20	MEC	ME P			2800	1700	600W											CO	
MCM18		MAG	5.4	5.9	20	MEC	ME P			2500	1500	700W											CO	
RK7578		MAG	5.4	5.9	20	MEC	RA P			2800	2000	800W									IM		SP	
MCM36		MAG	5.4	5.9	20	MEC	ME P			2100	1500	900W											CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1mT	CAVITY	COUPLING
			MIN	MAX																			
BL245	MAG		5.4	5.9	20			BL P	5.0	700	2650	1500	900W					15					CO
BLM095	MAG		5.4	5.9	20			BL P	5.0	700	2650	1700	1K					12					CO
MCM16	MAG		5.4	5.9	20	MEC		ME P			2800	1900	1K										
MCM26	MAG		5.4	5.9	20	MEC		ME P			2700	1700	1K										
BLM100	MAG		5.4	5.9	20			BL P	5.0	700	2700	1700	1K						12				CO
BLM105	MAG		5.4	5.9	20			BL P	5.0	700	2700	2000	1K						15				CO
BLM116	MAG		5.4	5.9	15			BL P	5.0	700	3050	1900	1K						12				CO
BLM201	MAG		5.4	5.9	20			BL P	5.0	700	2700	1700	1K						12				CO
OK1174	MAG		5.4	5.8				RA C					1K										
MCM29	MAG		5.4	5.9	20	MEC		ME P			3300	3500	2K										CO
MCM33	MAG		5.4	5.9	20	MEC		ME P			3300	3000	2K										CO
MCM39	MAG		5.4	5.9	20	MEC		ME P			2900	2000	2K										CO
OKH821	MAG		5.4	5.9	20	MEC		RA P			3500	2800	2K								IM		SP
MCM37	MAG		5.4	5.9	10	MEC		ME P			4300	4200	4K										CO
BLM127	MAG		5.4	5.9	10			BL P	5.0	1150	5000	3200	4K					12					CO
6521	MAG		5.4	5.4	10	FX		RC P	10.0	3200	16K	16A	16K					10	2				WG
OK456	MAG		5.4	5.4	10	FX		RA P	6.3	1500	16K	20A	75K										WG
RK7040	MAG		5.4	5.4	10	FX		RA P	6.3	1650	14K	14A	85K										WG
SFD347	MAG		5.4	5.8	50	MEC		SD P			22K	20A	175K					3					WG
6344A	MAG		5.4	5.8	10	MEC		P	13.5	2500	22K	22A	175K					15	2				WG
SFD341	MAG		5.4	5.8	10	MEC		SD P			25K	24A	250K					3					WG
SFD362	MAG		5.4	5.8	40	MEC		SD P			25K	24A	250K					3					WG
F1050	MAG		5.4	5.8	12	FX		TV P	9.5	5500	28K	30A	250K					15					WG
TV1502	MAG		5.4	5.8	12	FX		TV P	9.5	5500	28K	30A	250K					15					WG
L5080	MAG		5.4	5.8	12	MEC		LI P	5.0	5000	28K	30A	250K					15					WG
7156	MAG		5.4	5.8	12	MEC		P	50.5	000	28K	24A	250K					15					WG
7460	MAG		5.4	5.8	3	MEC		P			24K	25A	250K										WG
6344	MAG		5.4	5.8	10	MEC		P	11.0	12A	24K	30A	260K					15					WG
TV1501	MAG		5.4	5.5	5	FX		TV P	9.5	5500	30K	33A	400K					15					WG
M5009	MAG		5.4	5.5	15	FX		EE P	6.3	13A	38K	65A	840K					10	1	3100			WG
SFD313	MAG		5.4	5.8	10	MEC		SD P	5.0	19A	37K	60A	1M					4					WG
SFD313A	MAG		5.4	5.9	10	FX		SD P			36K	60A	1M					3					WG
MCM20	MAG		5.5	5.8	20	MEC		ME P			500	190	25W										
6M70	MAG		5.5	5.5	10	FX		TO P	10.0	3200	13K	16A	50K										
OKH447	MAG		5.5	5.8	10	MEC		RA P					250K										
OKH539	MAG		5.5	5.5				FX RA P					1M										
J95-04B	MAG		5.6	5.7	10	FX		MU P	6.3	1200	1200	225	70W					15					WG
SFD344	MAG		5.6	5.6	10	FX		SD P			35K	60A	1M					3					WG
BLM153	MAG		5.7	5.8	10	MEC		BL P	5.0	1250	5800	6000	5K					2					CO
OKH1214	MAG		5.7	5.7	10	MEC		RA P			35K	65A	1M										WG
M320	MAG		5.8	5.8				TE C	3.5	3000	1100	120	40W							2400			CO
J95-04C	MAG		5.8	5.9	10	FX		MU P	6.3	1200	1200	225	70W					15					WG
BLM102	MAG		5.8	5.8	15			BL P			5200	4200	5K										CO
L3468	MAG		6.2	7.3		MEC		LI C	6.0	15A	4800	800	500W					25	2				WG
4J59	MAG		6.3	6.4	10	FX		RA P	12.6	3750	25K	35A	250K					15					WG
4J58	MAG		6.4	6.5	10	FX		RA P	12.6	3750	25K	35A	250K					15					WG
4J57	MAG		6.5	6.6	10	FX		RA P	12.6	3750	25K	35A	250K					15					WG
4J56	MAG		6.6	6.7	10	FX		RA P	12.6	3750	25K	35A	250K					15					WG
4J55	MAG		6.7	6.8	10	FX		RA P	12.6	3750	25K	35A	250K					15					WG
10X6.8-7.2	MAG		6.8	7.2		VT		MR C	3.0	3000	2300	30	10W							600			CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
4J54 MA259 10X7-2-7.6 L3507 L3508	=	MAG	6.8	6.9	10	FX	RA P	12.6 3750	25K	35A	250K							15			IM		WG
		MAG	7.0	7.3	50	FX	MA P	6.3 1200	2000	2000	1100												CO
		MAG	7.2	7.6	VT	MR C		3.0 3000	2400	30	10W			600							IM		CO
		MAG	7.2	7.3	MEC	LI C		5.5 17A	3200	130	110W										IM		WG
		MAG	7.3	8.8	MEC	LI C		5.5 17A	3200	130	110W										IM		WG
L3462 10X7-4-7.8 MA237 MA217B MA221B	=	MAG	7.3	8.8	MEC	LI C		6.0 15A	4800	800	400W								35	2	IM		WG
		MAG	7.4	7.8	VT	MR C		3.0 3000	2500	30	10W			600									CO
		MAG	7.5	8.5	MEC	MA C			450	25	500												WG
		MAG	7.5	8.5	MEC	MA C			470	20	1000												WG
		MAG	7.5	8.8	FX	MA P		6.3 550	450	20	2200								16				WG
MA217C MA221A MA221C MA231B MA221D	=	MAG	7.5	8.5	50	MEC	MA P		560	300	20W												WG
		MAG	7.5	8.8	100	FX	MA P	6.3 550	500	150	20W								13				WG
		MAG	7.5	8.8	100	FX	MA P	6.3 550	500	150	20W								13				WG
		MAG	7.5	8.8	FX	MA C		6.3 700	930	55	20W								13				WG
		MAG	7.5	8.8	50	FX	MA P	6.3 550	530	300	35W								13				WG
MA231A OK1157 MA236 MA230 MA253	=	MAG	7.5	8.8	500	FX	MA P	6.3 700	1000	750	200W								13	2			WG
		MAG	7.9	8.1		RA C				10W									4				WG
		MAG	8.0	8.4	VT	MA C		6.3 750	550	12	1000									30			WG
		MAG	8.0	8.3	FX	MA C		6.3 750	550	12	1500												WG
		MAG	8.0	8.4	VT	MA C			800	60	2000												WG
MA248 JPG8-01B JPT8-01B MA252 BM1041	=	MAG	8.0	8.3	VT	MA C			1000	60	10W												WG
		MAG	8.0	8.6	MEC	MU C		6.3 1200	960	50	12W								20		IM		WG
		MAG	8.0	8.6	MEC	MU C		6.3 1200	960	50	12W								10	15	IM		WG
		MAG	8.0	10.0	50	MEC	MA P	6.3 600	1150	650	250W								15		5000		WG
		MAG	X		7	EE P		6.3 800	14K	9000	30K												WG
7950 MA219D MA219B JPG8-01E MA219E	=	MAG	8.4	9.6	15	MEC	LI P	20.0 4000	34K	20A	275K								13		IM		WG
		MAG	8.5	9.6		MEC	MA C		470	20	1000												WG
		MAG	8.5	9.6		MEC	MA C		470	20	1500												WG
		MAG	8.5	8.8	50	MEC	MU C	6.3 1200	1090	60	18W									32	IM		WG
		MAG	8.5	9.6	50	MEC	MA P		560	300	20W												WG
JPG8-02B YJ1091 BLM060 L3820 MXM13	=	MAG	8.5	9.0	500		MU P	6.3 1200	1150	150	30W								25		IM		WG
		MAG	8.5	9.0	20	MEC	MU P	5.0 500	1180	900	50W								3		IM		CO
		MAG	8.5	9.5	20	MEC	BL P	5.0 500	1320	900	100W								15				CO
		MAG	8.5	8.5	12	FX	LI P	6.3 500	500	120	100W												
		MAG	8.5	8.9	20	MEC	ME P		1400	1000	150W												
YJ1101 QKH943 QKH1002 MXM23 MXM53	=	MAG	8.5	9.0	20	MEC	P	5.0 500	1180	900	180W								15				CO
		MAG	8.5	9.6		MEC	RA P			200W													
		MAG	8.5	9.6		HY	RA P		2600	2000	1K												
		MAG	8.5	8.9	20	MEC	ME P		3200	2500	1K												
		MAG	8.5	9.1		MEC	ME P																
MA250 L3103 2J51 2J51A 7256	=	MAG	8.5	10.0	50	FX	MA P	10.0 650	3750	4000	5K								16				WG
		MAG	8.5	9.6	20	MEC	LI P	12.6 2300	12K	10A	30K								15	2	IM		WG
		MAG	8.5	9.6	11	MEC		6.3 1000	16K	16A	50K										IM		WG
		MAG	8.5	9.6	11	MEC	P	6.3 1000	16K	15A	50K								18		IM		WG
		MAG	8.5	9.6	10	MEC	RA P	6.3 1000	16K	16A	55K										IM		WG
JPT9-60 L3106 L3106A MCV602 F1025	=	MAG	8.5	9.6	11	MEC	MU P	6.3 1000	16K	16A	63K								10		IM		WG
		MAG	8.5	9.6	10	MEC	LI P	12.6 2300	15K	15A	65K								15	2	IM		WG
		MAG	8.5	9.6	10	MEC	LI P	12.6 2300	15K	15A	65K								15		2	IM	WG
		MAG	8.5	9.6	10	CS	P	12.6 2200	15K	15A	70K												WG
		MAG	8.5	9.6	20	FX	TV P	12.6 2100	17K	20A	70K									15	IM		WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ON VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
F1097		MAG	8.5	9.6	10	MEC	CS	P	12.6	2200	15K	15A	70K										WG
8635		MAG	8.5	9.6	20	MEC	WH	P	12.6	2200	17K	22A	70K										WG
WX22762		MAG	8.5	9.6	10	MEC	WH	P	12.6	2400	16K	16A	70K										WG
L4503		MAG	8.5	10.0	13	MEC	LI	P	12.6	2200	15K	15A	75K										WG
6543		MAG	8.5	9.6	13	MEC			12.6	2200	15K	15A	75K										WG
6543A		MAG	8.5	9.6	13	MEC			12.6	2200	15K	15A	75K										WG
YJ1170/DX249		MAG	8.5	9.6	16	MEC	PH	P	12.6	1000	16K	17A	90K										WG
SFD349		MAG	8.5	9.6	10	MEC	SD	P	12.6	200K	22K	27A	200K										WG
SFD352		MAG	8.5	9.6	10	MEC	SD	P	12.6	200K	22K	27A	200K										WG
SFD354		MAG	8.5	9.6	10	MEC	SD	P	12.6	200K	22K	27A	200K										WG
F1026		MAG	8.5	9.6	10	FX	TV	P	13.8	3400	24K	25A	200K										WG
TV1780A		MAG	8.5	9.6	10	MEC	TV	C	13.7	3300	22K	25A	200K										WG
L3312		MAG	8.5	9.6	10	FX	LI	P	13.8	3000	23K	28A	200K										WG
L4164B		MAG	8.5	9.6	13	MEC	LI	P	13.8	3200	21K	28A	200K										WG
L4193C		MAG	8.5	9.6	11	MEC	LI	P	13.8	3750	23K	28A	200K										WG
4J5010		MAG	8.5	9.6	10		CS	P	9.0	2600	22K	28A	220K										
4J501R		MAG	8.5	9.6	10		CS	P	9.0	2600	22K	28A	220K										
F1103/7008		MAG	8.5	9.6	10		CS	P	9.0	2600	22K	28A	220K										
WX4700		MAG	8.5	9.6	10	MEC	WH	P	13.8	3100	23K	28A	220K										WG
M549		MAG	8.5	8.7	10	FX	EE	P	13.8	3250	23K	28A	225K										WG
YJ1011		MAG	8.5	9.6	11	MEC	PH	P	13.8	3100	23K	30A	225K										WG
WX4742		MAG	8.5	9.6	13	MEC	WH	P	13.8		22K	28A	230K										WG
OKH1000		MAG	8.5	9.6	13	MEC	RA	P	9.0	14A	28K	25A	240K										WG
OKH1000A		MAG	8.5	9.6	13	MEC	RA	P	9.0	14A	28K	25A	240K										WG
OKH1001		MAG	8.5	9.6	13	HY	RA	P	9.0	14A	28K	25A	240K										WG
OKH1001A		MAG	8.5	9.6	13	HY	RA	P	9.0	14A	28K	25A	240K										WG
JP9-250E		MAG	8.5	9.6	10	FX	MU	P	13.8	3250	23K	27A	250K										WG
SFD304		MAG	8.5	9.6	10	MEC	SD	P	9.0	14A	27K	25A	250K										WG
6249B		MAG	8.5	9.6	13	MEC			9.0	14A		32A	250K										WG
7541		MAG	8.5	9.6	11	MEC	WH	P	13.8	3500	23K	28A	250K										WG
L4164		MAG	8.5	9.6	13	MEC	LI	P	13.7	3200	23K	28A	270K										WG
L4310		MAG	8.5	9.6	13	HY	LI	P	13.7	3200	23K	28A	270K										WG
7008		MAG	8.5	9.6	11	MEC			13.7	3200	23K	28A	270K										WG
7111		MAG	8.5	9.6	13	MEC			13.7	3200	23K	28A	270K										WG
WX5457		MAG	8.5	9.6	MEC	WH	P		9.0		28K	30A	300K										WG
5780		MAG	8.5	9.6	10	MEC	NE	P	20.0	4000	38K	36A	300K										WG
L4396A		MAG	8.5	9.6	13	MEC	LI	P	13.7	3200	23K	28A	350K										WG
WX3737		MAG	8.5	9.6	13	MEC	WH	P	9.0	1420	30K	50A	600K										WG
JP38-01		MAG	8.6	9.2	MEC	MU	C		6.3	1200	960	50	12W										WG
JP18-01		MAG	8.6	9.2	MEC	MU	C		6.3	1200	960	50	12W										WG
L3602		MAG	8.6	8.6	270	FX	LI	P	6.3	500	550	300	30W										WG
MXM38		MAG	8.6	9.0	20	MEC	ME	P			2300	1300	500W										WG
MXM39		MAG	8.6	9.0	20	MEC	ME	P			2600	1700	750W										WG
WL193		MAG	8.6	9.6	13	MEC	WH	P	9.0	14A	29K	32A	250K										WG
YJ1180/DX285		MAG	8.7	9.5	11	MEC	PH	P	13.8	3150	24K	28A	205K										WG
M539		MAG	8.7	8.8	10	FX	EE	P	13.8	3250	23K	28A	225K										WG
JP9-250D		MAG	8.7	8.8	10	FX	MU	P	13.8	3250	22K	27A	250K										WG
MA212B		MAG	8.8	10.0	FX	MA	C		6.3	550	460	20	2000										WG
MA232B		MAG	8.8	10.0	FX	MA	C		6.3	700	930	55	15W										WG
MA212A		MAG	8.8	10.0	100	MA	P		6.3	550	520	150	20W										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR VOLTS	I _k	P _o	COLLECTOR, etc. VOLTS	CONTROL VOLTS	HEX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
MA212C		MAG	8.8	10.0	100			MA P	6.3	550	520	150	20W						15				WG
JP8-02B		MAG	8.8	8.8	22	FX	MU P		6.3	1200	800	150	25W						12		IM		WG
JP8-02C		MAG	8.8	8.8	22	FX	MU P		6.3	1200	850	150	25W						15		IM		WG
MA212D		MAG	8.8	10.0	50			MA P	6.3	550	560	300	35W						15				WG
L3089B		MAG	8.8	8.8	25	FX	LI P		6.3	900	900	240	40W						20	5	IM		WG
MA215		MAG	8.8	9.6	500	FX	MA P				900	500	100W										WG
L3509		MAG	8.8	10.5	MEC	LI C			5.5	17A	3200	130	110W							2	IM		WG
MA232A	=	MAG	8.8	10.0	500	FX	MA P		6.3	700	1000	750	150W						13				WG
MXM52		MAG	8.8	9.5	MEC	ME P					2700	1400	350W										WG
L3463		MAG	8.8	10.5	MEC	LI C			6.0	15A	4800	800	350W						47	2	IM		WG
MXM42		MAG	8.8	9.2	45	MEC	ME P				2100	1300	400W										WG
MXM50		MAG	8.8	9.5	20	MEC	ME P				2200	1300	400W										WG
BLM138		MAG	8.8	9.5	20	BL	P		5.0	700	2150	1100	400W						15				CO
MXM32		MAG	8.8	9.5	20	MEC	ME P				2400	1500	500W								IM		CO
MXM16		MAG	8.8	9.6	20	MEC	ME P				2900	1900	1K										CO
MXM46		MAG	8.8	9.6	20	MEC	ME P				2900	1900	1K										CO
BLM136		MAG	8.8	9.5	15	BL	P		5.0	700	2800	2000	1K						15				CO
L3379		MAG	8.8	9.5	30	FX	LI P		6.3	900	3350	1150	1K						20	2	IM		WG
L3380		MAG	8.8	9.5	20	FX	LI P		6.3	900	3450	2250	2K						20	2	IM		WG
L3381		MAG	8.8	9.5	10	FX	LI P		6.3	900	3600	3250	3K						18	2	IM		WG
L3382		MAG	8.8	9.5	10	FX	LI P		6.3	900	4000	4000	4K						20	2	IM		WG
MS37A		MAG	8.8	8.9	25	FX	EE P		6.3	500	6000	5500	9K						15	1	IM		WG
MXM41		MAG	8.8	10.0	12	FX	ME C				930	55	20K										WG
TH1250B		MAG	8.8	9.0	10	MEC	TV P		6.3	700	15K	15A	36K						15		5400		WG
TH1250		MAG	8.8	8.9	10	FX	TV P		6.3	700	15K	15A	40K						15		5400		WG
TH1250A		MAG	8.8	9.0	10	FX	TV P		6.3	700	15K	15A	40K						15				WG
TV1255B		MAG	8.8	8.8		FX	TV C		6.3	1000	12K	12A	40K						15		IM		CO
2J50		MAG	8.8	8.9	12	FX	P		6.3	1000	16K	16A	50K						15		5400		WG
MS29		MAG	8.8	9.0	10	FX	EE P		13.8	3250	23K	28A	225K						15		IM		WG
L3039A		MAG	8.8	8.8	10	FX	LI P		13.8	3300	22K	28A	225K						15	2	IM		WG
L3039D		MAG	8.8	8.8	10	FX	LI P		13.8	3200	22K	28A	225K						15	2	IM		WG
L3039R		MAG	8.8	8.8	100	FX	LI P		13.8	3350	22K	28A	225K						14		IM		WG
JP9-250B		MAG	8.8	9.0	10	FX	MU P		13.8	3250	22K	27A	250K						15		IM		CO
BLM203		MAG	8.9	9.5	13	MEC	BL P		5.0	700			520										WG
MXM26		MAG	8.9	9.5	10	MEC	ME P				1300	1000	150W										WG
6229		MAG	8.9	9.4	5	MEC	MA P				4000	500	400W										WG
6230		MAG	8.9	9.4	30	MEC	MA P				4300	800	900W								IM		WG
7521		MAG	8.9	9.4	10	MEC	RA P		5.0	450	4300	950	950W										WG
MXM22		MAG	8.9	9.0	20		ME P				2700	2000	1K						15				WG
BLM112		MAG	8.9	9.4	20		BL P		5.0	700	2800	2000	1K										WG
OKH790		MAG	8.9	9.4	10	MEC	RA P				4500	1000	1K										WG
MXM24		MAG	8.9	9.6	20		ME P				3400	3500	2K										WG
MXM30		MAG	8.9	9.4	10	MEC	ME P				3000	2500	2K										WG
MXM40		MAG	8.9	9.6	20	MEC	ME P				3300	3000	2K										WG
L3956		MAG	8.9	8.9	12	FX	LI P		6.3	900	3800	3750	4K										WG
L3039E		MAG	8.9	8.9	10	FX	LI P		13.8	3200	22K	28A	225K						15	2	IM		WG
L3039F		MAG	8.9	8.9	10	FX	LI P		13.8	3200	22K	28A	225K						15	2	IM		WG
JP9-250C		MAG	8.9	9.0	10	FX	MU P		13.8	3250	22K	27A	250K						14		IM		WG
MA214A		MAG	9.0	10.0		MEC	MA C				500	15	150										WG
MA214F		MAG	9.0	9.6		MEC	MA P				570	15	5000										WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		OUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HEXIS VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
MA214D		MAG	9.0	10.0	50	MEC	MA	P	6.3	1200	570	300	16W										WG
JP69-02B		MAG	9.0	9.5	500	MEC	MU	P	5.0	1050	1050	150	30W										WG
YJ1090		MAG	9.0	9.5	20	MEC	MU	P	5.0	500	1180	900	50W										CO
L3314		MAG	9.0	9.0	270	FX	LI	P	6.3	500	925	600	100W										WG
L3212		MAG	9.0	9.0	20	FX	LI	P	6.3	500	800	550	120W										WG
L3213		MAG	9.0	9.1	270	MEC	LI	P	6.3	500	900	600	120W										WG
BLM003		MAG	9.0	9.5	20	MEC	BL	P	5.0	500	1600	1200	150W										CO
MXM14		MAG	9.0	9.6	20	MEC	ME	P	5.0	500	1400	1000	150W										CO
YJ1100		MAG	9.0	9.5	20	MEC	P	P	5.0	500	1180	900	180W										WG
BLM088		MAG	9.0	9.5	20	BL	P	P	5.0	500	1350	900	200W										WG
MXM47		MAG	9.0	9.3	20	MEC	ME	P			1500	1100	200W										CO
QK1166		MAG	9.0	9.4			RA	C					200W										
QK1226		MAG	9.0	10.0			RA	C					300W										
MXM45		MAG	9.0	9.6	20	MEC	ME	P			2600	1700	750W										WG
MXM28		MAG	9.0	9.6	10	MEC	ME	P			2600	2000	1K										
MXM54		MAG	9.0	9.6			MEC	ME	P		3200	2500	1K										
MAG12		MAG	9.0	10.0	10	FX	GC	P	0.6	2900	2500	4000	2K										WG
MAG12A		MAG	9.0	10.0	7	FX	GC	P	0.6	2900	2100	3000	2K										WG
MAG15		MAG	9.0	10.0	10	FX	GC	C	0.4	5000	5800	5000	8K										WG
QKH1213		MAG	9.0	10.0			MEC	RA	P				10K										
2J36		MAG	9.0	9.2	20	FX	RA	P	6.3	1500	14K	12A	14K										WG
QK1169		MAG	9.0	9.8			RA	C					35K										
TH12498		MAG	9.0	9.2	10	MEC	TV	P	6.3	800	15K	15A	36K										
TH1249		MAG	9.0	9.2	10	FX	TV	P	6.3	800	15K	15A	40K										
2J49		MAG	9.0	9.2	12	FX	P	P	6.3	1000	16K	16A	50K										WG
MAG14		MAG	9.0	9.1	10	MEC	GC	C	6.3	1300	14K	12A	50K										WG
BM1040		MAG	9.0	9.1	10	EE	P	P	6.3	800	16K	12A	50K										WG
CV5031		MAG	9.0	9.2	10	FX	GC	P	3.0	3500	14K	12A	50K										WG
7006		MAG	9.0	9.6	13	MEC	LI	P	13.8	3200	23K	28A	190K										WG
L3695		MAG	9.0	9.6	10	MEC	LI	P	13.8	3200	23K	28A	200K										WG
YJ1010		MAG	9.0	9.0	10	FX	MU	P	13.8	3100	23K	28A	225K										WG
L3039G		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	22K	28A	225K										WG
L3039H		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	22K	28A	225K										WG
55032		MAG	9.0	9.2	10	FX	AM	P	13.7	3500	21K	28A	225K										WG
4J78		MAG	9.0	9.2	20	FX	P	P	13.8	3350	23K	30A	240K										WG
JP9-250A		MAG	9.0	9.2	10	FX	MU	P	13.8	3250	22K	27A	250K										WG
55032/01		MAG	9.0	9.1	10	FX	PH	P	13.8	3400	23K	28A	250K										WG
L3030B		MAG	9.0	9.0	10	FX	LI	P	13.8	3200	28K	28A	300K										WG
VF10		MAG	9.0	9.5	8	FX	FE	P			32K	60A	800K										WG
VF11		MAG	9.0	9.5	10	MEC	FE	P			33K	75A	1M										WG
JP69-01		MAG	9.1	9.6			MEC	MU	C	6.3	1200	920	50	10W									WG
JP69-02C		MAG	9.1	9.6	500	MEC	MU	P	6.3	1200	1020	140	25W										WG
MXM11		MAG	9.1	9.5	20	MEC	ME	P			1200	800	100W										WG
L3214		MAG	9.1	9.1	20	FX	LI	P	6.3	500	800	550	120W										WG
L3218		MAG	9.1	9.1	20	FX	LI	P	6.3	500	800	550	120W										WG
L3226		MAG	9.1	9.2	20	FX	LI	P	6.3	500	800	550	120W										WG
MXM37		MAG	9.1	9.1	30	FX	ME	P			1400	1100	150W										WG
MA241		MAG	9.1	9.4	10	MEC	MA	P			2750	1000	150W										WG
QKH736		MAG	9.1	9.3	30	MEC	RA	P			1900	1100	200W										SP
MXM48		MAG	9.1	9.6	20	FX	ME	P			2400	1300	500W										CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM DR	V _o	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HEATX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																				
BMI037		MAG	9.1	9.2	10	MEC	EE	P	6.3	800	18K	50K	12A	50K					15	15	2	6800	WG	
L3039I		MAG	9.1	9.1	10	FX	LI	P	13.8	3200	22K	28A	225K						15	15		IM	WG	
M5006		MAG	9.1	9.1	10	FX	EE	P	13.8	3250	23K	28A	225K						15	15		IM	WG	
M5010		MAG	9.1	9.2	10	FX	EE	P	13.8	3250	23K	28A	225K						15	15		IM	WG	
55032/02		MAG	9.1	9.2	10	FX	PH	P	13.8	3400	23K	28A	250K									IM	WG	
JPT9-01		MAG	9.2	9.6		MEC	MU	C	6.3	1200	920	50	10W						19	19		IM	WG	
MA249		MAG	9.2	9.4		MEC	MA	C			1000	50	17W						20	20		IM	WG	
JPS9-02		MAG	9.2	9.6	5	MEC	MU	P	6.3	1200	1150	120	25W						20	20		IM	WG	
JPT9-02		MAG	9.2	9.6	5	MEC	MU	P	6.3	1200	1150	120	25W						20	20		IM	WG	
L30285		MAG	9.2	9.3	20	FX	LI	P	6.3	500	7500	550	120W						20	20	2	IM	WG	
L3087A		MAG	9.2	9.3	20	FX	LI	P	5.0	700	910	600	120W						20	20	3	IM	WG	
L3180		MAG	9.2	9.2	20	FX	LI	P	6.3	500	800	550	120W						20	20	2	IM	WG	
L3181		MAG	9.2	9.2	20	FX	LI	P	6.3	500	800	550	120W						20	20	2	IM	WG	
L3187		MAG	9.2	9.2	20	FX	LI	P	6.3	700	800	550	120W						20	20	3		WG	
9M63		MAG	9.2	9.3		MEC	KK	C	5.5	16A	4800	900	1K	1000									WG	
L3384		MAG	9.2	9.3	30	FX	LI	P	6.3	500	2800	1330	1K						20	20	3	IM	WG	
MXM55		MAG	9.2	9.4	52	MEC	ME	P			3500	3500	2K						18	18		IM	WG	
JP9-2.5B		MAG	9.2	9.2	2	FX	MU	P	6.3	500	3800	3000	3K						15	15		IM	WG	
YJ1000		MAG	9.2	9.3	10	FX	PH	P	6.3	500	3800	3500	3K						14	14		IM	WG	
JP9-7A		MAG	9.2	9.3	25	FX	PH	P	6.3	600	6000	5500	7K						20	20	2	IM	WG	
L3029A		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						15	15		IM	WG	
L3029B		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	20	2	IM	WG	
L3029C		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	20	2	IM	WG	
L3029D		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	20	2	IM	WG	
6233		MAG	9.2	9.3	30	FX	LI	P	6.3	1000	5500	3800	7K						20	20	2	IM	WG	
M508		MAG	9.2	9.3	25	FX	EE	P	6.3	500	6000	5500	8K						15	15		IM	WG	
2J56A		MAG	9.2	9.3	10	FX		P	6.3	1000	12K	12A	40K						15	15		IM	WG	
TH1249A		MAG	9.2	9.2		FX	TV	C	6.3	700	12K	12A	40K						15	15		5400	CO	
JP9-50		MAG	9.2	9.3	10	FX	MU	P	6.3	1000	14K	12A	50K						15	15		IM	WG	
BMI036		MAG	9.2	9.3	10	MEC	EE	P	6.3	800	18K	12A	50K						15	15		6800	WG	
L3036F		= MAG	9.2	9.2	10	FX	LI	P	12.6	2300	15K	15A	65K						15	15	2	IM	WG	
RK6967A		= MAG	9.2	9.3	10	FX	RA	P	6.3	2900	16K	14A	75K						15	15	4	IM	CO	
JP9-80A		= MAG	9.2	9.3	10	FX	MU	P	12.6	2200	15K	15A	80K						12	12		IM	WG	
L41935		= MAG	9.2	9.6	13	MEC	LI	P	13.8	3200	23K	28A	200K						15	15		IM	WG	
M538A		MAG	9.2	9.3	10	FX	EE	P	13.8	3250	23K	28A	225K						15	15		IM	WG	
L3039J		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	22K	28A	225K						15	15	2	IM	WG	
L3039K		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	22K	28A	225K						15	15	2	IM	WG	
M5007		MAG	9.2	9.3	10	FX	EE	P	13.8	3250	23K	28A	225K						15	15		IM	WG	
55031		MAG	9.2	9.3	10	FX	AM	P	13.7	3500	21K	28A	225K						18	18		IM	WG	
6002		MAG	9.2	9.4	10	FX	RA	P	4.0	44A	30K	32A	250K						15	15		IM	WG	
55031/01		MAG	9.2	9.3	10	FX	PH	P	13.8	3400	23K	28A	250K						15	15	3	IM	WG	
L3030C		MAG	9.2	9.2	10	FX	LI	P	13.8	3200	28K	28A	300K						13	13		IM	WG	
JP9-01		MAG	9.3	9.4		FX	MU	C	6.3	1200	930	50	10W									IM	WG	
MXM36		MAG	9.3	9.5	3	FX	ME	P			550	150	10W									IM	WG	
MXM56		MAG	9.3	9.4	12	MEC	ME	P			800	250	10W									IM	WG	
QK1121		MAG	9.3	9.7		RA	C						14W						16	16		IM	WG	
JPT9-01C		MAG	9.3	9.5	22	MEC	PH	P	6.3	1200	1100	140	15W									IM	WG	
JP9-01B		MAG	9.3	9.3		MEC	MU	C	6.3	1200	1090	60	18W						15	15	32	IM	WG	
7098		MAG	9.3	9.5	20	MEC	LI	P	5.0	650	2000	1250	60W						15	15	3	IM	CO	
L3105		= MAG	9.3	9.3	270	FX	LI	P	6.3	500	900	550	100W						20	20	3	IM	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E_f	I_f	BEAM OR VOLTS	I_k	P_o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
7503		MAG	9.3	9.5	20	MEC	LI	P	5.0	650	2000	1150	100W						15		IM	CO	
L3327		MAG	9.3	9.3	20	FX	LI	P	6.3	500	8000	550	120W						20	3	IM	WG	
WL103	=	MAG	9.3	9.3	270	MEC	WH	P	6.3	480	850	550	150W						20		IM	WG	
WL142	=	MAG	9.3	9.4	270	MEC	WH	P	6.3	480	850	550	150W						20		IM	WG	
L3601		MAG	9.3	9.3	20	FX	LI	P	6.3	500	825	550	170W						20	2	IM	WG	
L3603		MAG	9.3	9.3	200	FX	LI	P	6.3	900	1300	1300	500W						20	2	IM	WG	
L3606	=	MAG	9.3	9.3	100	FX	LI	P	6.3	1000	1300	1300	500W										
MXM10		MAG	9.3	9.4	15	FX	ME	P			2800	1500	800W										
QK1141		MAG	9.3	9.4			RA	C					1K										
L3058		MAG	9.3	9.3	10	FX	LI	P	6.3	500	2900	1500	1K						20	3	IM		
L3225		MAG	9.3	9.3	30	FX	LI	P	6.3	500	2800	1330	1K						20	3	IM	WG	
L3238		MAG	9.3	9.3	30	FX	LI	P	6.3	500	28K	1330	1K						20	3	IM	WG	
L3429		MAG	9.3	9.3	20	FX	LI	P	6.3	900	13K	2200	1K						20	2	IM	WG	
L3604		MAG	9.3	9.3	30		LI	P	6.3	500	2800	1330	1K						20	2	IM	WG	
L3812	=	MAG	9.3	9.3	500	MEC	LI	P	6.3	900	1400	2200	1K								IM	WG	
MXM21		MAG	9.3	9.4	20	FX	ME	P			3000	4000	2K										
L3239		MAG	9.3	9.3	30	FX	LI	P	6.3	500	3400	2250	2K						20	3	IM	WG	
JP9-2.5		MAG	9.3	9.5	2	FX	MU	P	6.3	500	3400	3000	3K						15		IM	WG	
MXM15		MAG	9.3	9.4	15	FX	ME	P			2800	2500	3K										
L3605		MAG	9.3	9.3	10	FX	LI	P	6.3	500	3600	3150	3K						20	2	IM	WG	
7028		MAG	9.3	9.5	10	FX	PH	P	6.3	500	3800	3500	3K						15		IM	WG	
L3268		MAG	9.3	9.3	10	FX	LI	P	6.3	900	3750	3750	4K						20	3	IM	WG	
L3813	=	MAG	9.3	9.3	100	FX	LI	P	6.3	850	1400	1500	5K						20		IM	WG	
JP9-5		MAG	9.3	9.5	4	FX	MU	P	6.3	500	4400	5000	6K						18		IM	WG	
2J42H		MAG	9.3	9.4	20	FX		P	7.0	500	6000	4500	7K							60		WG	
L3023	=	MAG	9.3	9.3	300	FX	LI	P	6.3	1000	5800	3800	7K								IM	WG	
2J42		MAG	9.3	9.4	25	FX		P	6.3	515	6000	5500	8K						15		IM	WG	
JP9-7		MAG	9.3	9.4	10	FX	MU	P	6.3	600	5700	4500	8K						15		IM	WG	
MXM31		MAG	9.3	10.0	10	MEC	ME	P			3700	4500	8K								IM	WG	
M503A		MAG	9.3	9.4	25	FX	EE	P	6.3	500	6200	5500	8K						15		IM	WG	
JP9-7D		MAG	9.3	9.4	2	FX	MU	P	6.3	600	5900	7000	10K						14		IM	WG	
MA218	=	MAG	9.3	10.0	20	MEC	MA	P	6.3	500	5800	4500	10K										
M597		MAG	9.3	9.4	25	FX	EE	P	6.3	500	6200	6000	10K						15	50		WG	
YJ1040		MAG	9.3	9.4	10	FX	MU	P	6.3	550	6500	5750	14K						15		IM	WG	
6027H	=	MAG	9.3	9.4	25	FX		P	6.3	500	8000	8000	18K						10		IM	WG	
9M40		MAG	9.3	9.4	25	FX	NE	P	6.3	515	8000	8000	20K						15		IM	WG	
YJ1060		MAG	9.3	9.4	20	FX		P	6.3	550	7400	8000	20K						14		IM	WG	
YJ1110		MAG	9.3	9.4	15	FX		P	6.3	600	8200	9000	20K						15		IM	WG	
6027	*	MAG	9.3	9.4	25	FX		P	6.3	515	8000	8000	20K						15		IM	WG	
8356		MAG	9.3	9.4	25	FX	EE	P	6.3	500	8000	8000	20K						15		IM	WG	
JP9-15		MAG	9.3	9.4	15	FX		P	6.3	550	8200	9000	22K						17		IM	WG	
JP9-15D		MAG	9.3	9.4	15	FX		P	6.3	550	8200	9000	22K						17		IM	WG	
M513A		MAG	9.3	9.4	25	FX	EE	P	6.3	500	8000	8500	22K						15	50		WG	
M513B		MAG	9.3	9.4	25	FX	EE	P	6.3	500	8000	8500	22K						15		IM	WG	
8543		MAG	9.3	9.4		FX	LI	P	6.3	1100	8250	8250	24K						16		IM	WG	
8357		MAG	9.3	9.4		FX	EE	P	6.3	500	8000	8500	25K						25		IM	WG	
TH1725B		MAG	9.3	9.5	10	MEC	TV	P	6.3	800	15K	15A	36K						15		5400	WG	
TH1725C		MAG	9.3	9.5	10	MEC	TV	P	6.3	800	15K	15A	36K						15		5400	WG	
2J53		MAG	9.3	9.4	12	FX		P	6.3	1000	16K	16A	40K								5400	WG	
TH1725A		MAG	9.3	9.4	10	FX	TV	P	6.3	800	15K	15A	40K						15		5400	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR V	CONTROL V	HEAT V	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHz																			
			MIN	MAX																		
TH17250		MAG	9.3	9.3	10 FX	TV P		P	6.3	800	15K	15A	40K						15		WG	
M5005		MAG	9.3	9.4	10 FX	EE P		P	12.6	2200	14K	12A	45K						13		IM	WG
2J55		MAG	9.3	9.4	10 FX			P	6.3	1000	16K	16A	50K						15		IM	WG
JP9-50A		MAG	9.3	9.4	10 FX	MU P		P	6.3	1000	13K	12A	50K						12		IM	WG
725A		MAG	9.3	9.4	10 FX			P	6.3	1000	16K	16A	50K						15		5400	WG
MAG9		MAG	9.3	9.5	10 FX	GC P		P	3.0	2500	15K	15A	61K						15		3250	WG
L3036B		MAG	9.3	9.3	10 FX	LI P		P	12.6	2300	15K	15A	65K						15		2	WG
4J52A	=	MAG	9.3	9.4	13 FX			P	12.6	2200	15K	15A	70K						10		2	WG
TH1452A		MAG	9.3	9.3	20 FX	TV P		P	12.6	2100	16K	30A	70K						15		IM	WG
6510		MAG	9.3	9.3	10 FX	LI P		P	12.6	2200	15K	15A	70K						13		2	WG
JP9-75		MAG	9.3	9.4	10 FX	MU P		P	10.0	2850	15K	15A	80K						10		IM	WG
JP9-80		MAG	9.3	9.4	10 FX	EE P		P	12.6	2200	15K	15A	80K						12		IM	WG
M575		MAG	9.3	9.4	20 FX	MU P		P	10.0	2850	16K	18A	80K						15		25	WG
6972		MAG	9.3	9.4	20 FX	PH P		P	10.0	2850	16K	18A	80K						10		IM	WG
JP9-180		MAG	9.3	9.4	4 FX	MU P		P	12.6	2250	20K	23A	180K						13		IM	WG
L3039L		MAG	9.3	9.3	10 FX	LI P		P	13.8	3200	22K	28A	225K						15		2	WG
L3039M		MAG	9.3	9.3	10 FX	LI P		P	13.8	3200	22K	28A	225K						15		2	WG
JP9-250		MAG	9.3	9.4	10 FX	MU P		P	13.8	3250	22K	27A	250K						14		IM	WG
SF0329		MAG	9.3	9.4	40 FX	SD P		P	26.0	8000	25K	24A	250K						5		IM	WG
L4371		MAG	9.3	9.4	13 MEC	LI P		P	13.8	3200	23K	28A	250K						35		IM	WG
55030		MAG	9.3	9.4	10 FX	PH P		P	13.8	3400	23K	28A	250K								IM	WG
55031/02		MAG	9.3	9.3	10 FX	PH P		P	13.8	3400	23K	28A	250K								IM	WG
4J50		MAG	9.3	9.4	10 FX			P	13.7	3200	23K	28	270K						12		IM	WG
4J50A		MAG	9.3	9.4	10 FX			P	13.7	3200	23K	28	270K						12		IM	WG
RK6959		MAG	9.3	9.4	10 FX	RA P		P	6.0	30A	33K	67A	800K						4		IM	WG
SF0303		MAG	9.3	9.4	10 FX	SO P		P	26.0	8000	33K	60A	1M						6		IM	WG
TV303		MAG	9.3	9.4	10 FX	TV P		P	26.0	8000	33K	60A	1M								IM	WG
7718		MAG	9.3	9.4	9 FX	RA P		P	3.6	36A	39K	69A	1M								IM	WG
9M10		MAG	9.4	9.4	10 FX	TO P		P	6.3	550	3800	3000	2800						15		IM	WG
L4380		MAG	9.4	9.4	10 FX	LI P		P	6.3	1100	8000	7000	20W								IM	WG
L4398		MAG	9.4	9.4	10 FX	LI P		P	6.3	1100	9000	8000	24W						15		1	WG
QK1131		MAG	9.4	9.5	20 FX	RA C		P	6.3	500	900	650	120W						20		IM	WG
L3616		MAG	9.4	9.4	270 MEC	LI P		P	6.3	500	900	650	120W						20		IM	WG
WL143	=	MAG	9.4	9.4	270 MEC	WH P		P	6.3	480	850	550	150W						15		IM	WG
BL233		MAG	9.4	9.4	15	BL P		P	5.0	700	2850	1500	800W									WG
JP9-2.50		MAG	9.4	9.4	2 FX			P	6.3	500	3800	3000	3K								IM	WG
JP9-2.5E		MAG	9.4	9.4	2 FX			P	6.3	500	3800	3000	3K						18		IM	WG
M599		MAG	9.4	9.5	10 FX	EE P		P	6.3	500	3800	3500	3K						18		IM	WG
QK4798		MAG	9.4	9.5	3 FX	RA P		P	6.3	5200	3500	30K									IM	WG
YJ1071		MAG	9.4	9.4	20 FX	PH P		P	6.3	550	5900	7000	10K								IM	WG
L3635		MAG	9.4	9.4	200 FX	LI P		P	6.3	1300	6000	6000	10K								IM	WG
L4242		MAG	9.4	9.4	25 FX	LI P		P	6.3	500	7200	7500	15K								IM	WG
JP9-15B		MAG	9.4	9.4	2 FX			P	6.3	550	8200	7500	18K						18		IM	WG
L3431		MAG	9.4	9.4	10 FX	LI P		P	6.3	1300	7000	7000	18K						20		IM	WG
9M40		MAG	9.4	9.4	25 FX	TO P		P	6.3	520	8000	8000	20K								IM	WG
YJ1111		MAG	9.4	9.5	5 FX	MU P		P	6.3	550	8200	7500	20K						18		IM	WG
L3469		MAG	9.4	9.4	100 FX	LI P		P	12.6	500	7250	7250	20K								IM	WG
L3531		MAG	9.4	9.4	10 FX	LI P		P	6.3	1000	8000	8500	20K						20		IM	WG
M591B		MAG	9.4	9.5	25 FX	EE P		P	6.3	500	8000	8500	22K						15		IM	WG
M598B		MAG	9.4	9.4	25 FX	EE P		P	6.3	500	8000	8500	22K						15		50	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			CHZ																			
			MIN	MAX																		
L3654	=	MAG	9.4	9.4	10 FX	LI P			6.3	1300	8000	24K						20		IM	WG	
L3890A	=	MAG	9.4	9.4	10 FX	LI P			6.3	1200	8000	8250	24K					15		IM	WG	
MAG16		MAG	9.4	9.4	10 FX	GC P			6.3	500	8600	9000	25K					15		IM	WG	
M515		MAG	9.4	9.4	15 FX	EE P			6.3	550	8500	10A 25K						18	50	IM	WG	
YJ1120		MAG	9.4	9.4	5 FX				6.3	550	8500	8000	25K					18		IM	WG	
YJ1121		MAG	9.4	9.5	5 FX	MU P			6.3	600	8500	9000	26K					18		IM	WG	
L3168		MAG	9.4	9.4	20 FX	LI P			12.6	2300	12K	10A 30K						15	2	IM	WG	
BM1031		MAG	9.4	9.5	10 FX	EE P			6.3	800	14K	12A 40K						15		4850	WG	
TH1725E		MAG	9.4	9.5	10 FX	TV P			6.3	800	15K	15A 40K						15			WG	
MAS2		MAG	9.4	9.5	2 FX	GC P			3.0	2500	15K	10A 45K						15		3250	WG	
MAG11		MAG	9.4	9.5	10 FX	GC P			2.0	3800	16K	15A 45K						15		3250	WG	
BM1032		MAG	9.4	9.5	10 MEC	EE P			6.3	800	18K	12A 50K						15		6800	WG	
M581		MAG	9.4	9.5	10 FX	EE P			6.3	1000	16K	16A 65K						15		IM	WG	
L3036A	=	MAG	9.4	9.4	10 FX	LI P			12.6	2300	15K	15A 65K						15	2	IM	WG	
L5047		MAG	9.4	9.4	12 FX	LI P			12.6	1500	13K	15A 75K						5		IM	WG	
JP9-75B		MAG	9.4	9.4	10 FX	MU P			10.0	2850	16K	15A 80K						15		IM	WG	
M596		MAG	9.4	9.4	10 FX	EE P			12.6	2200	16K	15A 80K						13		IM	WG	
L3156		MAG	9.4	9.4	20 FX	LI P			13.8	3200	20K	16A 112K						15	6	IM	WG	
L3039N		MAG	9.4	9.4	10 FX	LI P			13.8	3200	22K	28A 225K						15	2	IM	WG	
L3039P	=	MAG	9.4	9.4	10 FX	LI P			13.8	3200	22K	28A 225K						15	2	IM	WG	
L3107	=	MAG	9.4	9.4	10 FX	LI P			13.8	3370	23K	28A 225K						15		IM	WG	
L3613		MAG	9.4	9.4	10 FX	LI P			13.8	3350	21K	28A 225K										
55029		MAG	9.4	9.5	10 FX	PH P			13.8	3400	23K	28A 250K						20		IM	WG	
L3030		MAG	9.4	9.4	10 FX	LI P			13.8	3500	29K	28A 300K						15	3	IM	WG	
L3030D		MAG	9.4	9.4	10 FX	LI P			13.8	3500	28K	28A 300K						15		IM	WG	
JP9-7B		MAG	9.5	9.6	10 FX	MU P			6.3	600	5700	4500 8K						15		IM	WG	
BM1026		MAG	9.5	9.5	10 FX	EE P			6.3	900	16K	15A 50K						15		5600	WG	
BM1027		MAG	9.5	9.6	10 FX	EE P			6.3	900	16K	15A 50K						15		5600	WG	
BM1035		MAG	9.5	9.6	10 MEC	EE P			6.3	800	18K	12A 50K						15		6800	WG	
CV6034		MAG	9.5	9.6	10 FX	GC P			2.0	10A	17K	12A 75K						15		IM	WG	
L3154	=	MAG	9.5	9.5	10 FX	LI P			13.8	3200	22K	28A 225K						15	2	IM	WG	
L3436	=	MAG	9.6	9.6	270 FX	LI P			6.3	500	925	600 100W						20	3	IM	WG	
JP9-2.5C		MAG	9.6	9.6	2 FX	MU P			6.3	500	3800	3000 3K						18		IM	WG	
L4264		MAG	9.6	10.0	MEC	LI P			6.3	2400	8000	8000 20K						15		IM	WG	
MAG10A		MAG	9.6	9.7	5 FX	GC P			6.3	1300	13K	10A 42K						15		IM	WG	
CV214		MAG	9.6	9.7	5 FX	GC P			3.0	2500	16K	10A 45K						13		3250	WG	
M521		MAG	9.6	9.7	10 FX	EE P			3.0	3500	16K	12A 45K						15		3250	WG	
BM1028		MAG	9.6	9.6	10 FX	EE P			6.3	900	16K	15A 50K						15		5600	WG	
BM1029		MAG	9.6	9.7	10 FX	EE P			6.3	900	16K	15A 50K						15		5600	WG	
BM1034		MAG	9.6	9.7	10 MEC	EE P			6.3	800	18K	12A 50K						15		6800	WG	
CV2114		MAG	9.6	9.7	5 FX	GC P			6.3	1300	14K	10A 50K						13		3250	WG	
CV6035		MAG	9.6	9.6	10 FX	GC P			2.0	10A	17K	12A 75K						15		IM	WG	
CV6036		MAG	9.6	9.7	10 FX	GC P			2.0	10A	17K	12A 75K						15		IM	WG	
M523		MAG	9.6	9.7	10 FX	EE P			13.8	3250	23K	28A 225K						15		IM	WG	
BM1030		MAG	9.7	9.7	10 FX	EE P			6.3	900	16K	15A 50K						15		5600	WG	
CV2113		MAG	9.7	9.7	5 FX	GC P			6.3	1300	14K	10A 50K						13		3250	WG	
MAG10		MAG	9.7	9.9	5 FX	GC P			6.3	1300	15K	10A 52K						15		IM	WG	
LK4340		MAG	9.7	9.7	12 FX	LI P			12.6	300	17K	16A 100K						13		IM	WG	
M546		MAG	9.7	9.8	10 FX	EE P			13.8	3250	23K	28A 225K						15		IM	WG	
BM1033		MAG	9.8	9.9	10 MEC	EE P			6.3	800	18K	12A 50K						15		6800	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		QTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR, etc VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
CV2111		MAG	9.8	9.9	5	FX	GC	P	6.3	1300	14K	10A	50K					13	13	3250		WG
CV2112		MAG	9.8	9.8	5	FX	GC	P	6.3	1300	14K	10A	50K					13	13	3250		WG
M547		MAG	9.8	10.0	10	FX	EE	P	13.8	3250	23K	28A	225K					15	15	IM		WG
L3434		MAG	9.9	9.9	100	FX	LI	P	6.3	500	800	550	100W					20	20	3	IM	WG
QKH668		MAG	10.0	10.3		FX	RA	P				150W										
L3853		MAG	10.3	10.7	10	FX	LI	P	12.6	2200	15K	15A						15	15	2	IM	WG
L3854		MAG	11.3	11.7	10	FX	LI	P	12.6	2200	15K	15A						15	15	2	IM	WG
MA2394		MAG	13.0	13.6	12	FX	MA	P	6.3	900	900	550	100W					20	20			WG
MA2398		MAG	13.3	13.4		FX	MA	C	6.3	900	950	60	17W					20	20			WG
MA239		MAG	13.3	13.4	*22	FX	MA	P	6.3	900	850	220	40W					20	20			WG
L4370		MAG	13.3	13.3		FX	LI	P	6.3	1000	950	240	40W					15	15		IM	WG
LK4370		MAG	13.3	13.3	10	FX	LI	P	6.3	1000	900	280	40W					15	15		IM	WG
MA240		MAG	13.7	14.6	130	FX	MA	P	6.3	900	1750	1800	700W					22	22			WG
MA240A		MAG	13.7	14.6	130	FX	MA	P	6.3	900	1750	1800	700W					22	22			WG
MA240B		MAG	13.7	14.6	130	FX	MA	P	6.3	900	1750	1800	1K					20	20			WG
MA245		MAG	15.0	16.0	500	FX	MA	P	6.3	900	1100	140	20W					30	30			WG
L3719		MAG	15.0	15.0	100	FX	LI	P	6.3	900	1800	1750	750W					20	20		IM	WG
L5112		MAG	15.4	15.7	100	MEC	LI	P	6.3	1600	3600	3100	2K								IM	WG
QK1090		MAG	15.5	17.5			RA	C				12W										
L5013		MAG	15.5	16.5	100	MEC	LI	P	6.3	1600	4500	3500	5K								IM	WG
L3958		MAG	15.5	15.5	20	FX	LI	P	6.3	1600	5000	5000	10K								IM	WG
L3759		MAG	15.5	15.5	100	FX	LI	P	12.2	2400	16K	16A	60K								IM	WG
L4328A		MAG	15.5	17.5	10	HY	LI	P	12.6	2400	18K	16A	90K					6	6			WG
L4500		MAG	15.5	17.5		MEC	LI	P	12.6	2400	16K	150K	90K					8	8			WG
7208B	*	MAG	15.5	17.5	10	MEC	LI	P	12.6	3500	18K	19A	125K					10	10			WG
7452		MAG	15.8	16.1	22	FX	RA	P	4.8	13A	24K	50A	70K								IM	WG
RK7630		MAG	15.8	16.2	22	MEC	RA	P	4.8	12A	24K	52A	70K								IM	WG
7208		MAG	15.8	17.2	10	MEC	LI	P	12.6	3500	20K	20A	100K					8	8			WG
L5035		MAG	15.9	16.5	400	MEC	LI	P	6.3	1600	5000	6000	10K								IM	WG
BLM071		MAG	15.9	16.0	10	BL	P		14.0	3200	20K	20A	100K					12	12			WG
BLM143		MAG	16.0	16.2	10	MEC	BL	P	4.7	700		800						20	20			WG
BLM143A		MAG	16.0	16.5	10	MEC	BL	P	4.7	700		1000						20	20			WG
OK1210		MAG	16.0	17.0		RA						100W										
MA257		MAG	16.0	16.5	20	FX	MA	P	5.0	700	2200	1800	1K					25	25			WG
L3358		MAG	16.0	16.5	10	LI	P		6.3	1000	35K	2000	1K					21	21	2	IM	WG
L3496		MAG	16.0	16.5	30	FX	LI	P	6.3	700	3000	1600	1K								IM	WG
L5048		MAG	16.0	16.5	15	MEC	LI	P	4.8	600	3100	2000	1K					8	8			WG
L3359		MAG	16.0	16.5	10	LI	P		6.3	1000	35K	2750	2K					21	21	2	IM	WG
L3916		MAG	16.0	16.5	10	MEC	LI	P	12.6	2400	17K	16A	60K					18	18	2	IM	WG
MA256		MAG	16.0	16.5	10	FX	MA	P	12.6	620	9000	5250	10K									
SFD345		MAG	16.0	17.0	10	MEC	SD	P			12K	11A	30K					6	6		IM	WG
L5029		MAG	16.0	17.5	50	MEC	LI	P	12.6	1700	12K	10A	30K									
SFD322		MAG	16.0	17.0	10	MEC	SD	P	12.6	2400	16K	16A	60K					6	6		IM	WG
L3083A		MAG	16.0	17.0	10	MEC	LI	P	12.6	2400	17K	16A	60K					18	18	2	IM	WG
L3101A		MAG	16.0	17.0	10	MEC	LI	P	12.6	2400	17K	16A	60K					18	18	2	IM	WG
L3951		MAG	16.0	17.0	12	LI	P		12.6	2400	18K	16A	60K					7	7			WG
LK4362		MAG	16.0	17.0	10	MEC	LI	P	12.6	2600	18K	16A	60K					8	8		IM	WG
L4472		MAG	16.0	17.0	10	MEC	LI	P	12.6	2800	16K	16A	65K					10	10		IM	WG
L3874		MAG	16.0	17.0	10	MEC	LI	P	12.6	2400	17K	16A	66K					25	25		IM	WG
L5027		MAG	16.0	17.0	10	MEC	LI	P	12.6	2500	16K	16A	66K									

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REF. VOLTS	CONTROL VOLTS	HEAT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
L3978	=	MAG	16.0	16.5	10	VEC	LI	P	12.6	2400	18K	70K						25	2K	IM	WG	
TV322		MAG	16.0	16.4		FX	TV	P	12.6	2400	16K	16A	75K							IM		
TV325		MAG	16.0	17.0		FX	TV	P	12.6	2400	16K	16A	75K							IM		
L3987	=	MAG	16.0	17.0	12	VEC	LI	P	12.6	2400	18K	16A	75K					7		IM	WG	
L5042		MAG	16.0	16.5	10	VEC	LI	P	12.6	2500	16K	16A	80K									
L3895		MAG	16.0	16.0	10	FX	LI	P	12.6	2500	16K	16A	100K									
VF25		MAG	16.0	17.0	15	FX	FE	P			25K	30A	250K					25		IM	WG	
VF20		MAG	16.0	17.0	10	FX	FE	P			26K	40A	400K					25	8500	WG		
L5049	=	MAG	16.1	16.8	10	VEC	LI	P	12.6	1500	13K	16A	60K					12		IM	WG	
BLM154		MAG	16.2		3	VEC	BL	P	12.6	3300		33W										
L3383	=	MAG	16.2	16.3	30	FX	LI	P	6.3	950	3000	2000	1K					20	2	IM	WG	
L3452	=	MAG	16.2	16.2	30	FX	LI	P	6.3	950	3600	2750	2K							IM	WG	
L3915	=	MAG	16.2	16.3	30	FX	LI	C	6.3	900	3600	2750	2K							IM	WG	
L3645	=	MAG	16.2	16.2	100	FX	LI	P	6.3	950	4000	3750	4K					15		IM	WG	
R9509	=	MAG	16.2	17.2	8	FX	EM	P	6.3	7500	18K	30A	50K					6		IM	WG	
OK116H		MAG	16.3	16.8			RA	C				43W										
L3498	=	MAG	16.3	16.3	30	FX	LI	P	6.3	950	3600	2750	2K							IM	WG	
YJ1140		MAG	16.4	16.6	10	FX	PH	P	12.6	3000	13K	17A	45K							IM	WG	
RK6841	=	MAG	16.4	16.6	10	FX	RA	P	4.0	10A	19K	16A	50K					15		IM	WG	
SFD311		MAG	16.4	16.6	10	FX	SD	P	12.6	2400	16K	16A	60K					6		IM	WG	
TV311		MAG	16.4	16.6	10	FX	TV	P	12.6	2400	17K	18A	100K							IM	WG	
BLM148		MAG	16.5		5	FX	BL	P	12.6	670		5000						25		WG		
MA246A	=	MAG	16.5	16.8	50	FX	MA	P	6.3	900	1100	450	150W					30		WG		
L3816	=	MAG	16.5	16.5	200	FX	LI	P	12.6	2400	12K	17A	25K							IM	WG	
L3738		MAG	16.5	16.5	10	FX	LI	P	12.6	2400	14K	14A	40K									
SFD342		MAG	16.5	16.5	7	FX	SD	P			16K	16A	60K					6		IM	WG	
OKH1172	=	MAG	16.5	16.5	7	FX	RA	P	12.6	2800	18K	17A	60K					10		IM	WG	
L3326	=	MAG	16.5	16.5	10	FX	LI	P	12.6	2400	17K	16A	60K							IM	WG	
OKH1325		MAG	16.5	16.5	7	FX	RA	P			14K	14A	65K					7		WG		
L3950	=	MAG	16.5	16.5	12	FX	LI	P	12.6	2400	18K	16A	65K							WG		
L4419	=	MAG	16.5			FX	LI	P	12.6	2600	16K	16A	65K					12		IM	WG	
WX31108		MAG	16.5	16.5	10	FX	WH	P	12.6	2400	16K	16A	65K					8		IM	WG	
WX31128		MAG	16.5	16.5	10	FX	WH	P	12.6	2400	16K	16A	65K					8		IM	WG	
L3976	=	MAG	16.5	16.5	12	FX	LI	P	12.6	2400	18K	18A	110K					10		IM	WG	
OKH1302		MAG	16.6	17.1	10	VEC	RA	P			12K	9500	35K							WG		
L4451		MAG	16.6	17.1		VEC	LI	P	12.6	1700	12K	9500	35K					9		IM	WG	
OKH1368		MAG	17.2	17.2	10	FX	RA	P			12K	9500	35K							WG		
OKH1124	=	MAG	K		3	RA	P		5.2	2500	14K	10A	30K					30		CO	WG	
L4316	=	MAG	23.8	24.3	10	FX	LI	P	5.0	2400	15K	8000	30K					30	15	IM	WG	
6551		MAG	23.8	24.3	7	FX	RA	P	5.0	3200	16K	18A	34K					30		IM	WG	
BLM006		MAG	23.8	24.3	7	FX	RL	P	5.0	2900	14K	15A	40K					30		WG		
SFD315		MAG	23.8	24.3	5	FX	SD	P	16.0	5000	14K	12A	40K					6		IM	WG	
7449A		MAG	23.8	24.2	10	FX	LI	P	5.0	3100	16K	12A	70K					25		IM	WG	
SFD326		MAG	23.8	24.3	5	VEC	SD	P	15.5	5000	15K	30A	120K					6		IM	WG	
L4154		MAG	24.0	24.0	10	FX	LI	P	5.0	3100	14K	25A	65K									
25M10		MAG	24.2	24.7	7	FX	NE	P	5.0	2900	16K	18A	40K					30		IM	WG	
YJ1020		MAG	32.7	33.4	3	FX	PH	P	4.0	3400	14K	16A	25K					40		IM	WG	
YJ1021		MAG	32.7	33.4	3	FX	PH	P	4.0	3400	14K	16A	30K					40		IM	WG	
SFD332		MAG	32.9	33.5	8	VEC	SD	P			18K	16A	50K					5		IM	WG	
8366		MAG	33.0	33.4		FX	LI	P	12.6	2800	12K	25A	50K					40		IM	WG	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	HEAT VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
MG44T2		MAG	34.4	35.4	10			LT P	6.3	2000	10K	6000	6K						60			IM	WG
MG9T3		MAG	34.4	35.4	4	FX		LT P	6.3	4000	15K	16A	40K						45			IM	WG
L3752		MAG	34.4	35.4	4	FX		LI P	6.3	4000	15K	14A	40K						45				WG
55008		MAG	34.5	35.2	5	FX		VV P	5.0	3900	17K	18A	85W						40	10		IM	WG
R6138		MAG	34.5	35.3	4	FX		EM P	6.3	2400	16K	13A	18K									IM	WG
L4218		MAG	34.5	35.0		FX		LI P	6.3	3600	13K	13A	25K						40			IM	WG
5789		MAG	34.5	35.2	6	FX		LI P	6.0	2400	14K	20A	32K						55	15		IM	WG
R9515		MAG	34.5	35.3	4	FX		EM P	6.3	4000	16K	25A	35K						80			IM	WG
SFD320		MAG	34.5	35.2	5	FX		SD P	16.0	4000	14K	14A	40K						10			IM	WG
SFD330		MAG	34.5	35.2	5	MEC		SD P			14K	14A	40K						10			IM	WG
SFD336		MAG	34.5	35.2	5	FX		SD P			15K	14A	40K						10			IM	WG
SFD339		MAG	34.5	35.2	5	MEC		SD P			15K	14A	40K						10			IM	WG
SFD340		MAG	34.5	35.2	5	MEC		SD P			15K	14A	40K						10			IM	WG
7093		MAG	34.5	35.2	3	FX		P	5.0	3900	13K	16A	40K						35			IM	WG
SFD335		MAG	34.5	35.2	5	FX		SD P			18K	16A	70K						8			IM	WG
8153		MAG	34.5	35.2	5	FX		AM P	5.0	3900	600K	20A	80K						50			IM	WG
SFD301		MAG	34.5	35.2	5	FX		SD P	16.0	4000	23K	22A	100K						20	5		IM	WG
SFD361		MAG	34.5	35.2	8	MEC		SD P			21K	20A	100K						8			IM	WG
L3750		MAG	34.5	35.2	10	FX		LI P	6.3	11A	20K	25A	100K						8			IM	WG
SFD327		MAG	34.5	35.2	5	MEC		SD P	16.0	4000	23K	25A	150K									IM	WG
VF55		MAG	34.6	35.4	15	FX		FE P			23K	20A	100K						45			10K	WG
MA206		MAG	34.7	35.0	3	FX		MA P	12.6	3000	13K	10A	16K						40			IM	WG
L4306		MAG	34.7	35.0	8	MEC		LI P	6.3	3500	20K	110K							30			IM	WG
L4064A		MAG	34.7	35.0	8	FX		LI P	6.3	3500	21K	24A	125K						30			IM	WG
7619		MAG	34.8		10	FX		LI P	12.6	2800	13K	20A	40K						40			IM	WG
MG31T4		MAG	34.8	34.8	10	FX		LI P	6.3	11A	22K	28A	100K						40			IM	WG
L3751		MAG	34.9	34.9	10	FX		LI P	6.3	2000	9500	3500	5K						45			IM	WG
L3856		MAG	34.9	34.9	10	FX		LI P	6.3	7500	15K	15A	40K						45			IM	WG
L3753		MAG	34.9	34.9	4	FX		LI P	6.3	7500	21K	25A	100K						45			IM	WG
R9685		MAG	39.5	40.3	4	FX		EM P	6.3	4000	16K	25A	35K						80			IM	WG
BL235		MAG	51.0	54.0	12	FX		BL P	6.3	3100	15K	8000	10K						75			WG	WG
BL236		MAG	54.0	57.0	12	FX		BL P	6.3	3100	15K	8000	10K						75			WG	WG
BL237		MAG	57.0	60.0	12	FX		BL P	6.3	3100	15K	8000	10K						75			WG	WG
BL246		MAG	68.0	71.5	5	FX		BL P	6.3	2800		9000	8K						75			WG	WG
BL221		MAG	69.0	70.5	5	FX		BL P	6.3	2800		9000	10K						75			WG	WG
HA51		TWA	0.2	0.5				HU C	6.3	1500	300	10	50	350	50	250	20					IM	CO
MA2015		TWA	0.2	0.4				MA C	12.6	4000	2400	1800	1100	2000	24	37	40					IM	CO
STP234		TWA	0.2	0.5				SP C	12.6	2500	590	85	2000				25						CO
MA2016		TWA	0.2	0.4				MA C	12.6	2000	500	175	10W										CO
TH9134		TWA	0.2	0.4				TV C	14.5	8000	1900	1400	500W				18					IM	CO
TH9144		TWA	0.2	0.4	200			TV P	12.6	6500	1750	3500	1K									CO	CO
MA2003		TWA	0.3	0.9				MA C	15.0	3000	2200	1600	1K				3K	30				CO	CO
MA2014		TWA	0.4	1.0				MA C	12.6	4000	2400	1800	1100	2000					27				CO
E3080		TWA	0.4	0.7				GC C	6.3	4000		600	50W	3500					3K	30		IM	CO
WJ323		TWA	0.4	0.5				WJ C	12.5	2200	2000	550	150W						2K	40		IM	CO
STL405		TWA	0.4	1.0				SP C	12.6	2500	1800	700	200W						33			500	CO
YH1020		TWA	0.4	1.0				SH C	6.3	2500		650	200W	3300					3K	32		IM	CO
VAL138G		TWA	0.4	0.7				VA C	6.3	6200	2000	1000	250W						40			IM	CO
STP271		TWA	0.4	0.7				SP C	12.6	3000	1550	900	250W						45			500	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
MA2010	= TWA		0.4	0.7				MA C	12.5 2800		800 250W				2K 27							CO
MA2009	= TWA		0.4	1.0				MA C	12.5 2800		650 300W				2K 27							CO
1W50								TO C	6.3 8500		900 400W		4000 100		4K 32					IM		CO
VA138B	= TWA		0.4	0.7				VA C	12.6 2750		1000 400W				33			350		IM		CO
TH9136	= TWA		0.4	0.8	3			TV C	12.6 6500		1900 1400 500W				20							CO
L3844	TWA		0.4	0.4	10			LI P	18.0 2500		12K 4000	4K			37							CO
L3674	TWA		0.4	0.4	600			LI P			5K				37					IM		CO
WJ278	TWA		0.5	1.0				WJ C			2	120U			25	5				IM		CO
HA72	TWA		0.5	1.0				HU C	6.3 1200	30	2	2	400		120 25	8			820			CO
HA86	TWA		0.5	1.0				HU C	6.3 1000	30	2	2	430		120 25	7						CO
WJ397	= TWA		0.5	2.1				WJ C				2			25	6						CO
HA40	TWA		0.5	1.0				HU C	6.3 1000	50	2	3	400		120 25	15			820			CO
HA45	TWA		0.5	1.0				HU C	6.3 1000	50	2	3	400		120 25	10			820			CO
HA7	TWA		0.5	1.0				HU C	6.3 1400	90	4	10	270		120 30	20			300			CO
HA36	TWA		0.5	1.0				HU C	6.3 1400	175	8	20	300		300 20				IM			CO
HA-69	TWA		0.5	1.0				HU C	6.3 600	200	10	50	200		200 30	17			IM			CO
HA8	TWA		0.5	1.0				HU C	7.0 2200	500	60	1000	500		500 30				560			CO
HA-50	TWA		0.5	1.0				HU C	7.0 2200	600	60	1000	600		600 30	20			IM			CO
HA106	TWA		0.5	1.0				HU C	7.0 2200	600	60	1000	600		600 30	13			IM			CO
HA111	TWA		0.5	1.0				HU C	7.0 2200	500	60	1000	700		350 30	20			IM			CO
EM779	= TWA		0.5	1.1				EI C	6.3 600	3000	23	1000	3000		40 30	34			IM			CO
SL257	TWA		0.5	1.0				SP C	6.3 2500	750	80	2000			24	32	40		IM			CO
W45B/5E								ST C	6.3 2800		750 200W	3100 1K			33							CO
VA141A	TWA		0.5	1.0				VA C		2100	700 200W				26			500		IM		CO
VA651A	TWA		0.5	0.9				VA C		2100	600 200W				2K 26					IM		CO
TV651G	TWA		0.5	0.9		VT		TV C	6.5 5500	2200	650 250W				30							CO
VA132	= TWA		0.5	1.0				VA C	12.6 2750	2300	750 400W				31			500		IM		CO
X1044A	TWA		0.5	1.0				EI C	6.3 600	2050	30	2K	2050		2K 60	34						CO
QKw574	TWA		0.5	0.7	90			RA P	6.0 6000	10K	2500	3K			30				650			CO
QKw1192	TWA		0.5	0.7	90			RA P		10K	28A	3K			30							CO
VA134B	TWA		0.5	0.6	700			VA P	9.0 3900	15K	3000	5K			40			100		IM		CO
MA2017	TWA		0.5	1.0				MA C	12.6 3000	6000	4500	5K	4500		27							CO
QKw1193	TWA		0.5	0.7	84			RA P		40K	50A	200K			20							CO
QKw575	TWA		0.5	0.7	84			RA P		40K	50A	300K			20							CO
WJ324	TWA		0.6	0.8	100			WJ P	12.0 5000	9500	5200	10K	9500		10K 37				IM			CO
1W65																						CO
WJ352	TWA		0.7	0.8		FX		KK C	6.3 2000	1600	180	40W	1800		2K 30							CO
MA2011	TWA		0.7	1.7				WJ C	10.0 2000	2000	600 150W	2000			2K 37				IM			CO
1W20								MA C	12.6 1700	2200	800 350W				2A							CO
A1350V1	TWA		0.7	0.7				NE C	6.3 3300	2700	650 400W	3300	40		3K 38				IM			CO
	TWA		0.8	1.6				RC C	6.3 200		2	10	500		30 13				IM			CO
SL4441	TWA		0.8	1.5				SP C	6.3 1700	600	55 2500				53 36				IM			CO
A1317	TWA		0.8	1.0				RC C	6.3 950		55 20W	1650			30				IM			CO
VA6019	= TWA		0.9	1.6				VA C	7.8 1250	2300	200 60W				43 35				IM			CO
VA137C/D	TWA		0.9	1.0	700			VA P	19.0 2500	15K	3000	7K	250		47			130		IM		CO
WJ328-1	TWA		1.0	2.4				WJ C	10.0						35 12				IM			CO
WJ268-2	TWA		1.0	2.6				WJ C							25 6				IM			CO
WJ280	TWA		1.0	2.6				WJ C							35 8				IM			CO
WJ268	TWA		1.0	2.0				WJ C				120U			25 5				IM			CO
HA14	TWA		1.0	2.0				HU C	6.3 800	120	2	2	500		200 25	10			1000			CO
HA17	TWA		1.0	2.0				HU C	6.3 800	120	2	2	500		200 25	15			1000			CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
HA73		TWA	1.0	2.0				HU C	6.3	800	150	2	2	500		200	25	8				1000	CO
HA80		TWA	1.0	2.0				HU C	6.3	800	150	2	3	500		200	25	7					CO
HA85		TWA	1.0	2.0				HU C	6.3	1000	150	3	5	400		250	25	14				IM	CO
WJ294		TWA	1.0	2.0				WJ C	5.0							25	8					IM	CO
M2102C		TWA	1.0	2.0				EC C	6.3	250	400	2	5		50	500	25	15				IM	CO
M2102G		TWA	1.0	2.6				EC C	6.3	230	400	2	5		50	500	25	13				IM	CO
M5139		TWA	1.0	2.0				EC C	6.3	230	150	1500		5	700	50	450	25	10			IM	CO
HA5		TWA	1.0	2.0				HU C	6.3	1300	150	4	10	370	5	220	30				400	CO	
HA31		TWA	1.0	2.0				HU C	6.3	1400	180	6	10	220		220	30					IM	CO
A1294		TWA	1.0	2.0				RC C	6.3	600		2	10	500		325	35	12				IM	CO
A1350		TWA	1.0	2.6				RC C	6.3	200		2	10	500			30	12				IM	CO
F4123A		TWA	1.0	2.0				CS C			600	2	10				35	12					CO
HA78		TWA	1.0	2.0				HU C	7.0	1700	800	70	500	200	50	1K	30	25				IM	CO
A1268		TWA	1.0	2.0				RC C	6.3	1350		6	600	600		1K	25					IM	CO
RA106		TWA	1.0	2.0				WT C	6.3	1500	550	25	1000	850		850	30			1		CO	CO
RA130		TWA	1.0	2.0				WT C	6.3	1500	1000	45	1000	1000		1K	30			1		CO	CO
L3845		TWA	1.0	2.0				LI C					1000			40							CO
4021		TWA	1.0	2.0				RC C	6.3	1850	1200	25	1000	900	100	1K	27				IM	CO	CO
F4087		TWA	1.0	2.0				CS C			1200	30	1000			32							CO
HA18		TWA	1.0	2.0				HU C	7.0	1400	550	75	2000	850		850	33				750	CO	CO
HA53		TWA	1.0	2.0				HU C	7.0	1700	600	75	2000	1200	100	1K	30				IM	CO	CO
HA-55		TWA	1.0	2.0				HU C	7.0	1700	800	60	2000	1000		1K	33	20				IM	CO
HA104		TWA	1.0	2.0				HU C	7.0	1700	800	60	2000	1000		1K	30	15				IM	CO
HA112		TWA	1.0	2.0				HU C	7.0	1700	700	60	2000	1100	50	1K	33	20				IM	CO
STL2221		TWA	1.0	2.0				SP C	6.3	3200	1000	35	2000		30	50	35					IM	CO
HA107		TWA	1.0	2.0				HU C	7.0	1700	800	70	5000	1000		1K	30	20				IM	CO
HA101		TWA	1.0	2.0				HU C	7.0	2000	1000	100	10W	1400		1K	30	20				IM	CO
HA109		TWA	1.0	2.0				HU C	7.0	2000	800	100	10W	1500		1K	30	15				IM	CO
RA125		TWA	1.0	2.0				WT C	6.3	1500	1400	80	10W	2000		2K	30			1		CO	CO
4053		TWA	1.0	2.0				RC C	6.3	1750		70	10W	2200		2K	25					IM	CO
F4134		TWA	1.0	2.0				CS C	6.3	1300	1400	50	10W	1600		2K	33	30				IM	CO
L5036		TWA	1.0	2.0				LI C					10W			30							CO
VA614G		TWA	1.0	2.0				VA C	6.3	1650	1500	120	20W			1K	35	30				IM	CO
VA614H		TWA	1.0	2.0				VA C	6.3	1500	1500	120	20W			50	30					IM	CO
VA624G		TWA	1.0	2.0				VA C	6.3	5000	2900	300	100W			2K	30	35				IM	CO
WJ340		TWA	1.0	2.0	100			WJ P	7.5	2200	5200	2000	1K		200	30					525	CO	
A1217		TWA	1.1	1.4				RC C	5.0	650		1500	5000	600	20	300	20	5				800	CO
F2075		TWA	1.1	1.8				IT C	6.3	3200		40	2000	1000	35	1K	45					IM	CO
STL199		TWA	1.1	1.6	45			SP P	6.3	2300	14K	5500	5K			40						700	CO
STL260		TWA	1.2	1.4	75			SP P	6.3	2500	2000	200			48	60						IM	CO
F4064A		TWA	1.2	1.4				CS C			300	1	1500			25	4					IM	CO
A1056V2		TWA	1.2	1.4				RC C	5.0	700		2700	2500	600		250	20	4				800	CO
N1017M		TWA	1.2	1.4	VT			EE C	6.3	360	600	2500	2	600		400	26	6				450	CO
411H		TWA	1.2	1.4				HP C			550	28	1000			770						IM	CO
WJ237-1		TWA	1.2	1.8				WJ C	4.5	1000	800	20	2000	450								IM	CO
410H		TWA	1.2	1.8				HP C	4.5	1000	650	28	2000			36						IM	CO
OK1164		TWA	1.2	1.8				RA C			850	80	6500			25						IM	CO
F4061		TWA	1.2	1.4				CS P														IM	CO
392H		TWA	1.2	2.4				CS P	6.3	2200	2800	400	80W		45	33						IM	CO
F4063		TWA	1.2	1.4				CS P			12K	4500	4K			27							CO

TYPE NUMBER	SYMBO	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM VOLTAGE	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTAGE	HEX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MHz	kHz																			
VA133G		TWA	1.2	1.4	600		VA	P	12.6	3800	15K	3000	5K	500	500	47	47		150		IM	CO	
VA233G		TWA	1.2	1.4	600		VA	P	12.6	3800	15K	3000	5K	250	250	47	47				IM	CO	
QKW1013		TWA	1.2	1.4	800		RA	P			10K	2700	5K			50	50				380	CO	
STL161		TWA	1.2	1.4	61		SP	P	6.3	2300	14K	5500	6K			43	43				700	CO	
QKW1203		TWA	1.2	1.4	200		RA	P			16K	6000	20K			43	43					CO	
VA1315		TWA	1.2	1.7	40		VA	P	11.0	4200	28K	10A	30K	500	500	43	43		500		IM	CO	
391H		TWA	1.3	2.3			HP	C			550	220	500			30	30				IM	CO	
WJ370		TWA	1.4	2.3			WJ	C				1000				20	20	4			IM	CO	
WJ227-6		TWA	1.4	1.6			WJ	C	5.0	800	1700	45	12W	1000	1000	2K	25				IM	CO	
A1308		TWA	1.5	4.5			RC	C	6.3	700		4	10	500	425	33	33				IM	CO	
314-H		TWA	1.5	2.5			HP	C	4.5	250	725	25	2000	400		33	33				IM	CO	
TL4		TWA	1.5	3.0		VT	TE	C	6.3	1000	850	70	12W	1300		1K	45		30		600	CO	
218-H		TWA	1.5	2.0			HP	C	5.2	380	1550	73	20W	1220		26	26				IM	CO	
TH9125		TWA	1.5	2.5	200		TV	P	12.6	6500	10K	1000	2K			200	25	15			1000	CO	
HA19		TWA	1.6	2.6			HU	C	6.3	800	120	2	3	500		500	30					CO	
HA22		TWA	1.6	2.6			HU	C	6.3	1000	400	4	10	500		500	30				300	CO	
HA39		TWA	1.6	2.6			HU	C	7.0	1200	450	25	1000	1250		1K	30				600	CO	
A1217V4		TWA	1.7	1.9			RC	C	5.0	650		1500	5000	600		25	5				800	CO	
TM52		TWA	1.7	2.3			GC	C	5.5	500	550	5000	2	750	100	750	30	11			450	CO	
WJ237		TWA	1.7	2.0			WJ	C	3.0	750	90J	20	2700	460		780	30	35			IM	CO	
QK1038		TWA	1.7	2.7			RA	C				5000				2K	33				IM	CO	
QKW103		TWA	1.7	2.7			WT	C	6.3	1500	1400	40	7000	1900		32							
F4017		TWA	1.7	2.7			CS	C			1900	40	7000			40	30				1000	CO	
6868		TWA	1.7	4.0		VT	IT	C	6.3	2500	1500	75	10W	1750	250		25		20			CO	
VC611		TWA	1.7	2.3			CV	C	6.3	1500	2800	50	15W	2900		25						CO	
VC612A		TWA	1.7	2.3			CV	C	6.3	1500	2800	50	15W			40			20		IM	CO	
4054		TWA	1.7	2.7			RC	C	6.3	1750		70	17W	2000		28					IM	CO	
TM510		TWA	1.7	2.3			GC	C	6.3	1750	1700	75	18W	3000		7	2K	30			IM	CO	
7642		TWA	1.7	2.3			C		6.3	1750	1700	75	18W	3000		7	2K	30			IM	CO	
RM2		TWA	1.7	2.3			SH	C	6.3	900		100	20W	1500	30	2K	40				500	CO	
24401		TWA	1.7	2.3			TO	C	6.3	900	1700	80	20W	2700	20	3K	40				IM	CO	
TM512		TWA	1.7	2.7			GC	C	6.3	1750	2500	75	20W	2100		2K	33	30					
RM129		TWA	1.7	2.7			WT	C	6.3	1500	2000	80	20W	2000		2K	30		1			CO	
LD-637		TWA	1.7	2.3			NE	C	6.3	1050	2500	55	20W	2000	50	3K	32	27			IM	CO	
F4130		TWA	1.7	2.7			CS	C	6.3	1300	1600	60	20W	2700		3K	30	30			IM	CO	
YH1000		TWA	1.7	2.3			TE	C	6.3	550	1700	85	22W	2000		1K	30					CO	
TM51		TWA	1.7	2.3		VT	GC	C	4.2	4300	2600	90	25W	2600		2K	35	25		35	600	CO	
LD745		TWA	1.7	2.3			NE	C	6.3	900	2700	65	29W	2000	40	3K	35	25			IM	CO	
TL2200/01		TWA	1.7	2.1			TE	C	11.0	3800		1200	1K	4800		26	30					CO	
X3036		TWA	1.7	2.1			EI	C	5.6	3800	13K	1000	1K			25						CO	
394H		TWA	1.8	2.6			HP	C	5.2	300	1425	26	5000	950		20					IM	CO	
345H		TWA	1.8	3.2			HP	C	5.4	330	1310	50	10W	940		27					IM	CO	
F2036		TWA	1.8	4.0			IT	C	6.3	2500		70	10W	1400		1K	30				IM	CO	
210H		TWA	1.8	2.6			HP	C	5.2	300	1525	67	20W	950		26					IM	CO	
A1309		TWA	1.9	4.1			RC	C	6.3	1400		30	1000	1100		1K	35				IM	CO	
AL311		TWA	1.9	4.1			RC	C	6.3	1300		35	1000	1100		1K	35				IM	CO	
QKW1143		TWA	2.0	4.0			TV	C	12.6	7000	12K	2000	4K			27	8				IM	CO	
TH9110		TWA	2.0	4.0			WJ	C	5.0			1200				35	8				IM	CO	
WJ295		TWA	2.0	4.5			WJ	C														CO	
WJ281		TWA	2.0	4.5			WJ	C														CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM DR VOLTS	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			GHZ																				
			MIN	MAX																			
WJ269		TWA	2.0	4.0				WJ C	5.8	1100	150	2	1200		1	400	450	25	6			IM	CO
HA89		TWA	2.0	4.0				HU C															CO
WJ343	=	TWA	2.0	8.0				WJ C					1				25	7					
HA11		TWA	2.0	4.0				HU C	6.3	1100	150	2	3	475		475	25	15					CO
WJ353	=	TWA	2.0	4.0				WJ C					4				28	8					CO
HA62		TWA	2.0	4.0				HU C	6.3	1000	150	2	5	700		500	25	10					CO
L508H		TWA	2.0	4.0				FX	6.3	300	500	2	5				33	12		2K	IM		CO
M5102		TWA	2.0	4.0				EC C	6.3	250	400	2	5		50	500	30	10			IM		CO
HA1		TWA	2.0	4.0				HU C	6.3	1000	350	4	10	525		525	30				300		CO
HA54		TWA	2.0	4.0				HU C	6.3	1000	200	2	10	800		500	30	12			IM		CO
A1200V3		TWA	2.0	4.0				RC C	6.3	3000		1	10	500			31	16			IM		CO
A1295		TWA	2.0	4.0				RC C	6.3	600		1	10	500		475	35	13			IM		CO
A1313		TWA	2.0	4.0				RC C	6.3	700		4	10	500		425	30				IM		CO
A1322		TWA	2.0	6.0				RC C	6.3	700		4	10	780			35				IM		CO
A1327		TWA	2.0	4.0				RC C	6.3	200		3	10	450			36	17			IM		CO
4017		TWA	2.0	4.0				RC C	6.3	600	550	1	10	1000	100	1K	30	16			IM		CO
F4100A		TWA	2.0	4.0				CS C			600	2	10				35	12					CO
L5014		TWA	2.0	4.0				LI C	6.3	250	400	3	10			400	30			IM		CO	
M5103		TWA	2.0	4.0				EC C	6.3	250	400	2	10		50	500	30	15		IM		CO	
M5104		TWA	2.0	4.0				EC C	6.3	250	400	2	10		50	500	30	20		IM		CO	
HA29		TWA	2.0	4.0				HU C	6.3	1000	350	4	20	525		525	35				IM		CO
PA6		TWA	2.0	4.0				HU C	7.0	1200	600	20	100	1000	100	1K	25				IM		CO
MA2012		TWA	2.0	4.0				MA C	12.6	3000	3000	800	300				27						CO
HA2		TWA	2.0	4.0				HU C	7.0	1000	450	25	1000	1100		1K	30	30			600		CO
PA6		TWA	2.0	4.0	12			HU P	7.0	1200	600	50	1000	1000	150	1K	30				IM		CO
HA30		TWA	2.0	4.0				HU C	7.0	1200	450	25	1000	1100		1K	30				IM		CO
HA100B		TWA	2.0	4.0				HU C	7.0	1200	600	25	1000	1000		1K	35	13			IM		CO
RW107		TWA	2.0	4.0				WT C	6.3	1500	600	40	1000	1100		1K	33			2			CO
HA113		TWA	2.0	4.0				HU C	7.0	1200	600	30	1000	1200	50	1K	30	20			IM		CO
STS284		TWA	2.0	4.0				SP C	6.3	650	950	33	1000		37		53	35			IM		CO
EM1006	=	TWA	2.0	4.0				EI C	6.3	600	1350	30	1000	1350	50	1K	60	34			IM		CO
A1201V1		TWA	2.0	4.0				RC C	6.3	1300		20	1000	1145			30				IM		CO
F4088		TWA	2.0	4.0				CS C			1500	30	1000				32						CO
L5070	=	TWA	2.0	4.0				LI C	6.3	900	950	40	1000		20		50				IM		CO
HA59		TWA	2.0	4.0				HU C	7.0	1200	450	25	2000	1100		1K	35	20			IM		CO
HA117		TWA	2.0	4.0				HU C	6.3	1200	600	30	2000	1200	50	1K	35	20			IM		CO
A1138V1		TWA	2.0	4.0				RC C	6.3	1300		20	2000	1250			38				IM		CO
A1243		TWA	2.0	4.0				RC C	6.3	1450		30	2000	1200		1K	30				IM		CO
A1314		TWA	2.0	4.0				RC C	6.3	1500		35	2000	1150		1K	33				IM		CO
A1323		TWA	2.0	6.0				RC C	6.3	1350		30	2000	1600			33				IM		CO
F2086	=	TWA	2.0	16.0				IT C	6.3	1250	3200	70	2000	2000	800	200	40	40			IM		CO
L3499	=	TWA	2.0	4.0				LI C	6.3	1500	1000	35	2000				36				IM		CO
L3971	=	TWA	2.0	4.0				LI C	6.3	900	1000	40	2000		70		50				IM		CO
L5007		TWA	2.0	4.0				LI C	6.3	1000	1000	40	2000				36				IM		CO
524H		TWA	2.0	4.0				HP C			1200	35	4000				30				IM		CO
A1312		TWA	2.0	4.0				RC C	5.0	500		30	5000	800		1K	30				IM		CO
PA10		TWA	2.0	4.0				HU P	7.0	1200	700	60	10W	1100		1K	30				IM		CO
HA102		TWA	2.0	4.0	12			HU C	7.0	1200	1000	100	10W	1500		1K	35	30			IM		CO
RW126		TWA	2.0	4.0				WT C	6.3	1500	1200	60	10W	2000		2K	33			2			CO
L3663		TWA	2.0	4.0				LI C	6.3	1500	1750	80	10W				33				IM		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, ETC. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	
			MIN	MAX																			
F4135 L5010 6826 F7338 WJ227-5	=	TWA	2.0	4.0			CS	C	6.3	1300	1400	55	10W	2300		2K	33	30				IM	CO
		TWA	2.0	4.0			LI	C	6.3	1000	1850	100	10W	100			33					IM	CO
		TWA	2.0	4.0	50 VT		IT	P	6.3	5000	7500	2500	10W	9000	300		30			2K	1200	CO	
		TWA	2.0	4.0	50		IT	P	6.3	5000	8500	2500	10W	9000	300		40				1200	CO	
		TWA	2.0	4.0			WJ	C	5.0	800	1800	47	13W	1100		2K	35					IM	CO
F7347 WJ217 VA615G VA615H A1320	=	TWA	2.0	4.0	50		IT	P	6.3	5200	8000	2500	15W	300			30			4K	1200	CO	
		TWA	2.0	4.0			WJ	C	6.3	750	2600	70	20W	1900		2K	30				IM	CO	
		TWA	2.0	4.0			VA	C	6.3	900	1800	110	20W		2K	35	30				IM	CO	
		TWA	2.0	4.0			VA	C	6.3	900	1800	85	20W		50	30					IM	CO	
		TWA	2.0	4.0			RC	C	5.0	500		38	20W	1000			30				IM	CO	
L5005 6825 VA625G A1316 EM108	=	TWA	2.0	4.0			LI	C	6.3	5000	8500	2500	20W	9000	300			33			2K	1200	CO
		TWA	2.0	4.0	50 VT		VA	C	6.3	3000	3500	250	100W		3K	30	35					IM	CO
		TWA	2.0	4.0	12		RC	P	6.3	2500		30	100W	3500		3K	28					IM	CO
		TWA	2.0	4.0	20		EI	P	6.3	3000	8000	1300	1K	200		8K	30					IM	CO
		TWA	2.0	4.0	20		EI	P	6.3	3000	8000	1300	1K			8K	30					IM	CO
312H 313H/7640 340H 350H	=	TWA	2.0	4.0	50		HP	P	6.3	2200	7100	1200	1K	90			30					IM	CO
		TWA	2.0	4.0	60		HP	P	6.3	3500	7100	1200	1K			30						IM	CO
		TWA	2.0	4.0	100		HP	P	6.3	2800	7100	1200	1K			30						IM	CO
		TWA	2.0	4.0	100		HP	P	6.3	2200	7100	1200	1K	90			30					IM	CO
		TWA	2.0	4.0	100		HP	P	6.3	2200	7100	1200	1K				30						IM
WJ362 F2057 F2062 F2065 A1078-V10	=	TWA	2.0	4.0	50		WJ	P	6.3	3000	8000	2000	1K	8000			40						CO
		TWA	2.0	4.0	100		IT	P	6.3	3000	8000	2000	1K	8000	100		30					IM	CO
		TWA	2.0	4.0	100		IT	P	6.3	3000	8000	2000	1K	8000			30					IM	CO
		TWA	2.0	4.0	100		IT	P	6.3	3000	8000	2000	1K	8000			31					IM	CO
		TWA	2.1	2.4			RC	C	5.0	650		1500	2500	400		500	20	8				800	CO
WJ355 A1207V26 F4024 QK1165 214H	=	TWA	2.2	2.3			WJ	C				150U	120U			25	4					IM	CO
		TWA	2.2	2.3			RC	C					1	800		375	20	5				800	CO
		TWA	2.2	4.3			CS	C	6.3	450	500	2	60	600		600	42	12				IM	CO
		TWA	2.2	2.6			RA	C				900	40	8000			27					IM	CO
		TWA	2.2	2.4			HP	C															CO
QKW1033 220H 4056 212H WJ274-2	=	TWA	2.2	2.7			RA	C	6.3	500	1300	54	10W	900	300	1K	43	33				IM	CO
		TWA	2.2	2.4			HP	C	5.2	270	1300	50	13W	770			27					IM	CO
		TWA	2.2	3.0			RC	C	5.0	500		38	13W	1000		1K	35					IM	CO
		TWA	2.2	2.4			HP	C			1425	60	20W			30						IM	CO
		TWA	2.2	2.4			WJ	C	3.0	920	1680	52	20W	1120		2K	30	35					IM
WJ1014 WJ269-1 8379 HA37 M5159	=	TWA	2.2	2.4			WJ	C					20W			30	35					IM	CO
		TWA	2.3	4.5			WJ	C								25	6					IM	CO
		TWA	2.3	2.7			RC	C	5.0	650	500	150U	1	600	20	500	28	5				650	CO
		TWA	2.3	4.4			HU	C	5.4	1000	150	2	3	700		475	25	10				IM	CO
		TWA	2.3	4.4			EC	C	6.3	250	400	2	5		50	500	30	10					IM
M5106 M5107 3M402 Tw57 3M20	=	TWA	2.3	4.4			EC	C	6.3	250	400	2	10			50	500	30	15			IM	CO
		TWA	2.3	4.4			EC	C	6.3	250	400	2	10			50	500	30	20			IM	CO
		TWA	2.3	2.9			TO	C	6.3	900	1700	80	18W	2700		20	3K	38				IM	CO
		TWA	2.4	3.6			GC	C	3.5	4000	2500	25	2000	3000		2K	30					IM	CO
		TWA	2.4	3.2			TO	C	6.3	700	2800	45	5000	2800	20	3K	35						IM
A1078-V1 N1045W A1297 W9/2E EM1060	=	TWA	2.5	4.0			RC	C	5.0	650		150U	250U	400		500	20	8				800	CO
		TWA	2.5	4.1			EE	C	5.0	320	500	350U	3	500		450	28	8				525	CO
		TWA	2.5	3.5			RC	C	6.3	700		4	5	500			14					IM	CO
		TWA	2.5	4.1			ST	C	5.0	500	1000	500U	20	650	100	450	42	10				550	CO
		TWA	2.5	11.0			EI	C	6.3	600	3000	35	500	3000	40	3K	30	34					IM

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTAGE	CONTROL VOLTS	HELIAX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
Em116		TWA	2.9	3.1	200			El P	6.3	3000	7500	2000	2K									IM	CO
511H		TWA	2.9	3.1	200			HP P	6.3	4000	10K	2000	2K	10K		10K	36					IM	CO
QKw1269		TWA	2.9	3.1	300			IT P	6.3	3000	34K	12A	60K									IM	CO
F2073		TWA	2.9	3.1	200			RA P	8.0	8000												700	WG
8128		TWA	2.9	3.1	210																		
321H		TWA	2.9	3.2	60			HP P	57K	28A	250K											IM	WG
226H		TWA	3.0	5.0				HP C	450	2	50											IM	CO
224H		TWA	3.0	5.0				HP C	650	4	200											IM	CO
384H		TWA	3.0	5.0				HP C	4.5	260	1320	23	4000	610								IM	CO
6W86		TWA	3.0	6.8				HI C	6.3	1000	2500	35	5000	2600	50	2K	23					700	
215H		TWA	3.0	5.0				HP C	4.5	1660		26	6000	640								IM	CO
379H		TWA	3.0	3.5				HP C	3.5	720	1610	77	20W	1000		1K	30			260		IM	CO
VA125D		TWA	3.0	3.2				VA P	120K	75A	2M											IM	CO
4W62		TWA	3.2	3.9		FX		KK C	6.3	850	3000	40	16K	1600		43	35					WG	WG
TW56		TWA	3.3	3.3				GC C	3.5	4000	2500	20	1000	3000		2K	20	30				CO	CO
RW4		TWA	3.3	4.3				SH C	6.3	900		65	10W	1200	30	2K	39	25				700	WG
537H		TWA	3.3	3.7	50			HP P	6.3	2300	7100	1200	1K									IM	CO
AI212		TWA	3.4	5.6				RC C	6.3	600		1	10	1070		1K	24	17				IM	CO
STS276		TWA	3.4	3.6				SP C	6.3	650	1100	33	1500		37		53	35				IM	CO
TL6		TWA	3.4	4.5				TE C	6.3	1000	1000	33	6500	1600		1K	38					550	WG
YH1090		TWA	3.4	4.2				PH C	6.3	1050		65	23W	1300		2K	40	25				IM	CO
F2060		TWA	3.4	3.6	100			IT P	6.3	3000	8000	2000	2K	8000								IM	CO
AL207V29		TWA	3.5	4.0				RC C	5.0	650		150U	1	800			25	5				800	CO
L3849		TWA	3.5	5.5	12			LI P	6.3	1000	4000	250	50W									IM	CO
VC707A		TWA	3.6	4.2				CV C	6.3	3500		1	18	3300	20	3K	40					IM	WG
W775G		TWA	3.6	4.2				ST C	6.3	1000	2K	80	30	1800	50	3K	46					IM	WG
N1025M		TWA	3.6	4.2		VT		EE C	6.3	360	800	2	100	800	50	800	33	21				400	CO
W773G		TWA	3.6	4.2				ST C	6.3	700		40	7000	3050	3K	3K	30					500	WG
W774G		TWA	3.6	5.0				ST C	6.3	730		40	15W	2000	3K	3K	42					IM	WG
N1056		TWA	3.6	5.0				EE C	6.3	800		50	16W	3500	150	3K	40	27				WG	WG
RW42		TWA	3.6	4.2				SH C	6.3	800		70	16W	1500	20	2K	38					CO	CO
LD-597A		TWA	3.6	4.2				NE C	6.3	700	3200	35	16W	1700	50	3K	33					IM	WG
4W80		TWA	3.6	4.2				NE C	6.3	700	3200	45	20W	2000	50	3K	33					IM	WG
LD-508B		TWA	3.6	4.2				NE C	6.3	700	3200	45	20W	2000	50	3K	40	25				IM	WG
WJ335		TWA	3.7	4.2				WJ C	3.0	500	550	3	100	350		500	45					IM	CO
WJ250		TWA	3.7	4.4				WJ C	3.0	580	860	16	2500	575		770	35					IM	CO
WJ333		TWA	3.7	4.2				WJ C	5.0	500	1500	23A	4000	650		1K	35					IM	CO
LB4-20		TWA	3.7	4.2		VT		MU C	6.3	1000	2600	70	10W	2000	250	3K	39	30				WG	WG
N1048M		TWA	3.8	4.4		VT		EE C	5.0	A 30	0	200U	500U	800		220	25	6				CO	CO
N1031		TWA	3.8	4.2				EE C	6.3	360		600U	2	1000	75	600	25	8				550	WG
TP0430		TWA	3.8	4.2				CS C			2000	40	6000										
F4066		TWA	3.8	4.2				CS C			2000	40	6000										
N1033		TWA	3.8	4.8		VT		EE C	6.3	710	2800	30	7000	2500		2K	37					550	WG
55340		TWA	3.8	4.2				AM P	6.3	800	1500	55	8000	1500								600	WG
WJ238-1		TWA	3.8	4.3				WJ C	6.3	750	2200	56	10W	1900		2K	25					IM	CO
WJ238		TWA	3.8	4.1				WJ C	6.3	750	2750	96	20W	1900		2K	27					IM	CO
4W61		TWA	3.8	4.2		FX		KK C	6.3	850	3000	40	16K	1600		3K	35					WG	WG
STC134		TWA	3.9	6.0				SP C	6.3	1100	1850	50	5000									IM	CO
WJ286		TWA	4.0	8.0				WJ C	6.3	1100	1850	50	5000									IM	CO
WJ331-1		TWA	4.0	8.0				WJ C	10.0													IM	CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	I _k	P _o	COLLECTOR VOLTAGE	CONTROL VOLTAGE	HELIX VOLTAGE	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																		
WJ271	TWA		4.0	8.0				WJ C	6.3	1100	500	2	2400			25	6			IM		CO
HA47	TWA		4.0	8.0				HU C	5.0	1100	500	2	850			700	25	10				CO
HA32	TWA		4.0	8.0				HU C	5.0	1100	500	2	3			700	25	15		1000		CO
WJ296	TWA		4.0	8.0				WJ C				5				25	9			IM		CO
MS108	TWA		4.0	8.0				EC C	6.3	300	600	2	5			50	850	30	11	IM		CO
HA3	TWA		4.0	8.0				HU C	6.3	1000	450	2	10			800	30					CO
HA26	TWA		4.0	8.0				HU C	6.3	1000	450	2	10			800	30			400		CO
HA28	TWA		4.0	8.0				HU C	6.3	1000	450	2	10			800	30			IM		CO
HA-84	TWA		4.0	8.0				HU C	6.3	1000	500	3	10			800	30	14		IM		CO
A1360	TWA		4.0	8.0				RC C	6.3	220		2	10			30	17			IM		CO
A1361	TWA		4.0	8.0				RC C	6.3	800		2	10			30				IM		CO
M2033	= TWA		4.0	8.0				EC C	6.3	230	450	3	10			800	20		2K	400		CO
M207A	= TWA		4.0	8.0				EC C	6.3	230	450	3	10			800	30	25		400		CO
M207E	TWA		4.0	8.0				EC C	6.3	250	500	3	10			800	30			IM		WG
M207S	TWA		4.0	8.0				EC C	6.3	230	500	3	10			800	30	30		400		CO
4020	TWA		4.0	7.0				RC C	6.3	600	1100	2	10			1K	28	18		IM		CO
F4101A	TWA		4.0	8.0				CS C		850		1	10			700	30	13				CO
L5015	TWA		4.0	8.0				LI C	6.3	250	700	4	10			700	30			IM		CO
MS110	TWA		4.0	8.0				EC C	6.3	300	600	2	10			50	850	30	15	IM		CO
MS112	TWA		4.0	8.0				EC C	6.3	300	600	2	10			50	850	30	20	IM		CO
M207H	TWA		4.0	8.0				EC C	6.3	230	500	3	20			800	30	30		IM		CO
L3470	TWA		4.0	8.0				LI C	6.3	700	900	3	20			36			4K	IM		CO
F4025	= TWA		4.0	7.0				CS C	6.3	450	800	1	40			800	40	12		IM		CO
A1189	TWA		4.0	7.0				RC C	6.3	1350		12	100			2K				IM		CO
HA6	TWA		4.0	8.0				HU C	7.0	1300	700	20	500			1K	30			IM		CO
HA35	TWA		4.0	8.0				HU C	7.0	1300	700	20	500			2K	30			IM		CO
HA56	TWA		4.0	8.0				HU C	7.0	1200	450	30	1000			2K	33	25		IM		CO
HA105	TWA		4.0	8.0				HU C	7.0	1000	800	25	1000			2K	33	18		IM		CO
HA114	TWA		4.0	8.0				HU C	6.3	1200	1550	30	1000			2K	33	25		IM		CO
QOK542	TWA		4.0	8.0				RA C	6.3	1000	1500	40	1000			1500	300	35		IM		CO
EM1010	= TWA		4.0	8.0				EL C	6.3	600	2600	30	1000			2600	40	30	34	IM		CO
EM1011	= TWA		4.0	8.0				EL C	6.3	600	2600	30	1000			2600	40	30	34	IM		CO
EM1025	= TWA		4.0	12.0				EL C	6.3	600	3000	25	1000			40	40	34		IM		CO
M2407A	TWA		4.0	8.0				EC C	6.3	500	2500	30	1000			50	2K	30	35	800		CO
M2407BB	TWA		4.0	8.0				EC C	6.3	500	2000	30	1000			50	2K	30	35	IM		CO
M2407D	TWA		4.0	8.0				EC C	6.3	500	2000	30	1000			50	2K	30	35	IM		CO
M2407DS	TWA		4.0	8.0				EC C	6.3	500	2000	30	1000			50	2K	30	35	IM		CO
L3711	TWA		4.0	8.0				LI C	6.3	1100	1600	25	1000			45	36			IM		CO
L3763	TWA		4.0	8.0				LI C	6.3	1000	1700	30	1000			35	60			IM		CO
L5071	= TWA		4.0	8.0				LI C	6.3	900	1500	35	2000			35	60			IM		CO
HA118	TWA		4.0	8.0				HU C	6.3	1200	1550	30	2000			2K	30	25		IM		CO
F2009	TWA		4.0	8.0	400			IT P	6.3	2500		5	2000			2K	33			IM		CO
M2407CC	TWA		4.0	8.0				EC C	6.3	500	2000	30	2000			50	2K	30	35	IM		CO
M2407GA	TWA		4.0	8.0				EC C	6.3	500	2000	30	2000			50	2K	30	35	IM		CO
L3471	TWA		4.0	8.0				LI C	6.3	1100	2300	35	2000			36				IM		CO
L5009	= TWA		4.0	8.0				LI C	6.3	900	2100	35	2000			50				IM		CO
EM1015	= TWA		4.0	8.0				EL C	6.3	600	2600	40	3000			2K	60	34		IM		CO
EM1016	= TWA		4.0	8.0				EL C	6.3	600	2600	40	3000			2K	30	34		IM		CO
HA103	TWA		4.0	8.0				HU C	7.0	1200	2000	80	5W			3K	35	35		IM		CO
A282	TWA		4.0	8.0				IT C	6.3	1500	3000	55	10W			2H				1200		CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
623H		TWA	4.0	8.0				HP C	6.3	330	2900	60	10W				30					IM	CO
X1021	=	TWA	4.0	8.0				ET C	6.3	1200	2900	90	10W		30		40	35			IM	CO	
QK1129		TWA	4.0	8.0				RA C	6.3	1250	3250	55	10W	3200	50	3K	35	30			IM	CO	
QK1245		TWA	4.0	8.0				RA C					10W										
QK1330		TWA	4.0	8.0	200			RA P		1675			10W	1105		1K	40					CO	
F2019		TWA	4.0	8.0				IT C	6.3	2000	3000	65	10W							4K	IM	CO	
L5011		TWA	4.0	8.0				LI C	6.3	1000	3000	55	10W		100		33		5		IM	CO	
L3657		TWA	4.0	8.0				LI C	6.3	1200	2500	55	10W				33				IM	CO	
VA616G		TWA	4.0	8.0				VA C	6.3	900	2500	95	20W			3K	35	30			IM	CO	
VA616H		TWA	4.0	8.0				VA C	6.3	900	2500	85	20W				50	30			IM	CO	
L5083	=	TWA	4.0	8.0				LI C					20W				40					WG	
WJ364		TWA	4.0	8.5				WJ C					35W	1900		5K	23				IM	CO	
WJ364-3		TWA	4.0	8.0				WJ C					50W				26				IM	CO	
VA626G		TWA	4.0	8.0				VA C	6.3	3200	4500	200	100W			4K	30	35			IM	CO	
382H		TWA	4.0	8.0	200			HP P			9500	1700	1K				30				IM	CO	
X1059		TWA	4.0	8.0	10			ET P	6.3	600	2700	35	2K	2700	12	3K	38	34			IM	CO	
N1016M		TWA	4.1	7.0		VT		EE C	6.3	360	800	400U	4	800		650	40	9			520	CO	
F4149		TWA	4.2	4.6				CS P		70K		40A	500K				23						
M5160		TWA	4.3	7.4				EC C	6.3	250	600	2	5		50	850	30	10			IM	CO	
M5111		TWA	4.3	7.4				EC C	6.3	300	600	2	10		50	850	30	15			IM	CO	
M5113		TWA	4.3	7.4				EC C	6.3	300	600	2	10		50	850	30	20			IM	CO	
616H	=	TWA	4.3	5.1				HP C			2900	65	20W				40				IM	CO	
A1205		TWA	4.4	5.0				RC C	6.3	1350		27	1000	1600		1K	37				IM	CO	
YH1050		TWA	4.4	5.0		VT		TE C	6.3	350	1000	22	3000	1200		1K	30				IM	CO	
7537		TWA	4.4	5.0					6.3	800	1500	55	6000	1500		1K	34	30			600	WG	
260H	=	TWA	4.4	5.0				HP C	4.6	260	2600	45	12W	1100			33					CC	
A1359		TWA	4.4	5.0				RC C	5.0	520		40	15W	1050			30				IM	CO	
WJ349		TWA	4.5	6.5				WJ C					120U				25	5			IM	CO	
WJ349-2		TWA	4.5	5.0				WJ C					2				30	4			IM	CO	
M2407B		TWA	4.5	6.5				EC C	6.3	500	2500	30	2000		50	2K	30	35			IM	CO	
WJ364-1		TWA	4.5	9.0				WJ C					10W				23				IM	CO	
WJ364-2		TWA	4.5	9.0				WJ C					20W				33				IM	CO	
WJ239		TWA	4.5	5.5				WJ C	6.3	800	2800	67	25W	1550		3K	25				IM	CO	
QK1095		TWA	4.5	8.0	150			RA P	6.3	5000	11K	1750	1K	11K		11K	36				IM	CO	
QK1054	=	TWA	4.8	6.5				RA C			3000	50	10W	2950	300	3K	35	30			IM	CO	
TH9116		TWA	4.8	5.8	3			TV P	7.5	5500	16K	4000	6K				37					CO	
M2203E		TWA	5.0	6.5				EC C			450	3				900	30				IM	CO	
6M87		TWA	5.0	6.8				HI C	6.3	400	400	300U	2	1100		800	25	11			600		
6M85		TWA	5.0	6.8				HI C	6.3	300	1000	3	80	1100		1K	30				600		
A1189V1		TWA	5.0	6.0				RC C	6.3	1400		10	100	1025			33				IM	CO	
EM778		TWA	5.0	11.0				ET C	6.3	600	3000	23	1000	3000	40	3K	60	34			IM	CO	
L5004		TWA	5.0	11.0				LI C	6.3	900	2000	30	1000		60	2K	60				IM	CO	
8198	=	TWA	5.0	11.0				ET C	6.3	600	3000	25	1000	3000	40	3K	60	34			IM	CO	
L3996	=	TWA	5.0	7.0				LI C	6.3	900	1700	30	2000		65	60					IM	CO	
M2407C		TWA	5.0	6.0				EC C	6.3	500	2000	30	5000		50	2K	30	35			IM	CO	
M2407CA		TWA	5.0	6.0				EC C	6.3	500	2000	30	5000		50	2K	30	35			IM	CO	
F7847		TWA	5.0	6.0				IT C	6.3	2200	3000	70	10W				27				1200	CO	
TH9128		TWA	5.0	6.0	3			TV P	6.3	450	3300	130	30W				34					CO	
WJ231-5	=	TWA	5.0	8.5				WJ C	5.5	800	4750	62	38W	2000		5K	40	30			IM	CO	
QK1336		TWA	5.0	12.0	200			RA P			11K		1K	4K	90		40					CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	B _{MAX} DR	I _k	P _o	COLLECTOR V _{dc} VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
X320		TWA	5.0	6.0	50		IT	P	6.3	3000	11K 2000	2K											
STC124	=	TWA	5.2	5.8	30	FX	SP	P	6.3	3000	13K 3700	1K									1500		CO
VA139A		TWA	5.2	5.9	200		VA	P	8.0	4200	15K 2500	5K									1000		WG
WJ341		TWA	5.3	6.0			WJ	C	12.0	3000	14K 1000	1000		14K		14K	10						WG
WJ349-3		TWA	5.4	5.9			WJ	C				2					30	4				IM	CO
STC279		TWA	5.4	5.9			SP	C	11.0	1000	1175	7	250		150		33	35				IM	
M24078A		TWA	5.4	5.9			EC	C	6.3	500	2000	30	1000		50	2K	30	35				IM	CO
L3769		TWA	5.4	11.0			LI	C				1000					60					IM	CO
L3957	=	TWA	5.4	10.7			LI	C	6.3	800	2300	35	2000		70		60					IM	CO
L3972		TWA	5.4	10.7			LI	C	6.3	800	2300	35	2000				55					IM	CO
WJ248		TWA	5.4	5.9	20		WJ	P	12.0	2000	24K 4600	5000				24K	50					IM	
WJ249		TWA	5.4	5.9	20		WJ	P	12.0	2400	22K 3300	5000				22K	50					IM	
F2084	=	TWA	5.4	11.0			IT	C	6.3	1250	3600	70	10W	2000	800	200	60	40				IM	CO
STC278		TWA	5.4	5.9	100		SP	P	6.3	750	5400	200	50W		200		37	50				IM	CO
STC152	=	TWA	5.4	5.9	20		SP	P	6.6	3000	15K 4500	2K					28				1850		CO
F7848		TWA	5.4	5.9	50		IT	P	6.3	5600	17K 3700	2K					27				2000		CO
F2032		TWA	5.4	5.9	50		IT	P	6.3	4000	23K 4600	10K		12K		12K	28						
WJ228	=	TWA	5.4	5.9	280		WJ	P	12.5	2500	27K 7000	20K		250	23K	43					IM		WG
306-H		TWA	5.4	5.9	200		HP	P				94A	4M				32					500	WG
VA126		TWA	5.4	5.9	20		VA	P	7.5	33A	135K	94A	4M										
VA146		TWA	5.4	5.9	20		VA	P	7.5	33A	145K	88A	4M										
M2105H		TWA	5.5	11.0			EC	C	6.3	230	700	2	10		50	1K	20	17				IM	CO
VA617S		TWA	5.5	11.0			VA	C	6.3	900	3200	85	20W			3K	45	30				IM	CO
VA617H		TWA	5.5	11.0			VA	C	6.3	900	3200	85	20W				50	30				IM	CO
WJ354		TWA	5.5	9.0			WJ	C	7.0	2000	6900	185	100W	4500		7K	33						CO
621H		TWA	5.5	5.9	100		HP	P	9.5	5500	37K	11A	50K	450			50					IM	WG
622H		TWA	5.5	5.9	250		HP	P	9.5	5500	37K	11A	50K		50		50					IM	WG
L3977		TWA	5.7	8.4			LI	C	6.3	900	1900	30	3000		50	2K	50					IM	CO
WJ356		TWA	5.8	6.2			WJ	C									25	4				IM	CO
7W10		TWA	5.8	7.8			TO	C	6.3	550	120	1	10	1300	20	1K	25					IM	WG
A1358		TWA	5.8	6.4			RC	C	6.5	1350		27	3000	1500			35					IM	CO
W5/3G		TWA	5.8	6.5		MEC	ST	C	6.3	700		50	10W	2000		3K	43	30	15			IM	WG
N1029		TWA	5.8	7.2			EE	C	6.3	800	3300	40	10W	3300	150	3K	43					IM	WG
W5/1G		TWA	5.8	7.2			ST	C	6.3	730		40	12W	2000	3K	3K	40					IM	WG
WJ321		TWA	5.8	7.2			WJ	C	6.3	700	2300	57	13W	2000		3K	36	27					
RW80		TWA	5.8	8.5			SH	C	6.3	900		50	15W	1500	40	1K	40					800	WG
YH1110		TWA	5.8	8.5			TE	C	6.3	800		50	15W	1450	40	3K	40	22				800	CO
LD-605		TWA	5.8	7.2			NE	C	6.3	600	2600	40	19W	2000	35	3K	40	25				IM	WG
6W51		TWA	5.8	6.4			NE	C	6.3	600	2700	40	20W	2000	40	3K	40					IM	WG
TwC14		TWA	5.8	6.5		MEC	GC	C	6.3	1200		45	20W	1800		3K	40	28				IM	WG
RW81		TWA	5.8	8.5			SH	C	6.3	800		60	20W	1300	50	3K	39					IM	WG
N1055		TWA	5.8	7.0			EE	C	6.3	800		50	20W	4000	150	4K	40	27				IM	WG
W5/2G		TWA	5.8	8.2		MEC	ST	C	6.3	700		55	25W	3700		3K	45	28				IM	WG
QKw825		TWA	5.9	7.4			RA	C	6.3	1000	1500	40	3000	300		1K	35					IM	WG
QKw998		TWA	5.9	7.1			RA	C	6.3	1300	1550	30	3000	1500		1K	38					IM	WG
625-H		TWA	5.9	6.4			HP	C			1500	22	4000				50					IM	CO
L86-10		TWA	5.9	6.4		VT	MU	C	6.3	950	3000	46	5000	1800	350	3K	35	30				WG	
L86-12		TWA	5.9	7.1		VT	MU	C	6.3	900	1900	40	5000	1700	8	3K	37	25				WG	
L86-15		TWA	5.9	6.4		VT	MU	C	6.3	950	3000	46	7500	1800	350	3K	38	30				WG	
MA2002		TWA	5.9	6.4			MA	C	6.3	900	2500	40	8000	1700		3K	34	28				IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM 2R VOLTS	I _k	P _o	COLLECTOR REFLECTOR etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
LB6-20		TWA	5.9	6.5	VT			MU C	6.3	850	3000	50	10W	2000	250	4K	38	30					WG
QK4928	=	TWA	5.9	7.1				RA C			3000	50	10W	2950	300	3K	35	28				IM	CO
QK41058	=	TWA	5.9	6.4				RA C	6.3	1000	3100	55	10W	1800	50	3K	37	28				IM	WG
F4056		TWA	5.9	8.4				CS C			2400	40	10W				24					IM	IM
LD-550A		TWA	5.9	7.2				NE C	6.3	600	2600	35	11W	1600	50	3K	33	25				IM	WG
TWC13	=	TWA	5.9	6.4				GC C	6.3	800		45	15W	1700	100	4K	40	27					WG
YH1131		TWA	5.9	6.4				TE C	6.3	900		35	15W	1800	50	3K	40				850	WG	
TAC5		TWA	5.9	6.4				GC C	4.0	3800		50	20W	3500	100	4K	37	27					WG
F4059		TWA	5.9	6.4				CS C	6.3	800	650	55	20W	4000	100		35	23			IM	WG	
YH1030		TWA	5.9	7.2				AM C	6.3	800	2500	70	25W	2000			38	30			600	WG	
624H		TWA	5.9	6.4				HP C			4800	300	200W				30					WG	
YH1040		TWA	5.9	6.4				SH C	7.0	2500		1000	2K	17K	150	15K	30				IM	WG	
YH1041		TWA	5.9	6.4				SH C	6.5	2500		1	3K	10K		18K	30				IM	WG	
614H	=	TWA	5.9	6.4				HP C	10.5			3000	10K	800			40				IM	IM	
7486		TWA	6.0	7.0				HI C	6.3	1000	2600	30	5000	2700	50	3K	25				700	CO	
217H	=	TWA	6.0	8.0				HP C	3.5	400	1600	25	5000	800			40				IM	CO	
8476A		TWA	6.0	7.8				NE C	6.3	1100	2200	30	10W	3200	30	3K	40				IM	WG	
TP0410		TWA	6.0	7.5				CS C			2600	40	10W				24				IM	WG	
QK1028		TWA	6.0	8.0				RA C					10W									CO	
F2095	=	TWA	6.0	8.0	VT			IT P	6.3	2300	12K	1400	1K		90		36				IM	CO	
M2407CB		TWA	6.3	6.5				EC C	6.3	500	2000	30	5000		50	2K	30	35				IM	CO
TWC527		TWA	6.3	6.6				GC C	6.5	8000	30K	1500	5K	11K			38			50		WG	
TWC827		TWA	6.3	6.4				GC C	6.5	8000	30K	1500	8K	12K			38			50		WG	
74402		TWA	6.4	7.1				TO C	6.3	600	2700	50	16W	3700	20	4K	40				IM	WG	
VA604C		TWA	6.5	6.8				CV C	6.3				15	3400		3K	33	27				WG	
8W86		TWA	6.5	7.8				HI C	6.3	1000	2500	35	3000	2600	50	2K	33				800	WG	
7462		TWA	6.5	7.8		FX		KK C	6.3	800	3000	40	12K	1600		3K	38					WG	
WJ284-1		TWA	6.8	9.5				WJ C	7.0	2000	6500	252	142W	5000		6K	30				IM	CO	
F4026	=	TWA	6.9	11.1				CS C	6.3	450	900	1	30	1000		1K	42	12				CO	
TWC5B		TWA	6.9	7.4				GC C	4.0	3800		50	20W	3500	100	4K	37	27				WG	
TWC14B		TWA	6.9	7.4	MEC			GC C	6.3	1200		45	20W	1800		3K	40	28				WG	
X1132	=	TWA	7.0	8.0	102			ET P									43				IM	WG	
HA61		TWA	7.0	14.0				HU C	6.3	1100	500	2	1	1300		1K	25	15			1000	CO	
HA4		TWA	7.0	12.4				HU C	6.3	1200	600	2	10	1300	50	1K	30				400	CO	
HA60		TWA	7.0	11.0				HU C	6.3	1500	500	2	10	1300		1K	25	14				CO	
A1304		TWA	7.0	11.0				RC C	6.3	220		750U	10	1200		30	10				IM	CO	
A1351		TWA	7.0	11.0				RC C	6.3	250		800U	10	1380		40					IM	CO	
M2105J		TWA	7.0	11.0				EC C	6.3	250	600	2	10		50	1K	30	11				CO	
M2106S	=	TWA	7.0	11.0				EC C	6.3	230	800	2	10	1200	50	1K	33	20				CO	
M2106I		TWA	7.0	10.8				EC C	6.3	250	800	2	10		50	1K	30	15				CO	
M2106J		TWA	7.0	10.8				EC C	6.3	250	800	2	10		50	1K	30	20				CO	
M2201A	=	TWA	7.0	12.4				EC C	6.3	230	450	3	10	1200		1K	25	30			400	CO	
M2201L		TWA	7.0	11.0				EC C	6.3	300	500	3	10			1K	33	30				CO	
M2201M		TWA	7.0	11.0				EC C	6.3	300	500	3	10			1K	30	30				CO	
L5023	=	TWA	7.0	12.0	MEC			LI C	6.3	250	800	6	10				30				IM	CO	
M5114		TWA	7.0	11.0				EC C	6.3	300	600	2	10		50	1K	30	15				CO	
M5115		TWA	7.0	11.0				EC C	6.3	300	600	2	10		50	1K	30	20				CO	
M5116		TWA	7.0	11.0				EC C	6.3	300	800	2	10		50	1K	30	15				CO	
M5117		TWA	7.0	11.0				EC C	6.3	300	800	2	10		50	1K	30	20				CO	
M5118		TWA	7.0	10.8				EC C	6.3	300	600	2	10		50	1K	30	15				CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	V _A	I _k	P _o	COLLECTOR, REFLECTOR, etc VOLTS	CONTROL VOLTS	MELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
M5138		TWA	7.0	10.8				EC	6.3	250	600	2	10	50	1K	30	10				IM		CO
W3M0Q/1D		TWA	7.0	11.5				ST	6.3	500	600	500U	15	1200	1K	39	10				IM		CO
W3M0Q/1F		TWA	7.0	11.5				ST	6.3	500	600	500U	15	1200	1K	39	10				IM		WG
M2201K		TWA	7.0	12.4				EC	6.3	230	500	3	20		1K	30	30			4K	400		CO
L3611		TWA	7.0	11.0				LI	6.3	700	1500	2	20			36					IM		CO
TW8		TWA	7.0	11.5				GC	6.0	10A		10	1000	2800	30	3K	30						WG
HA108		TWA	7.0	11.0				HU	7.0	1100	1000		20	1000	2400	2K	30	20			IM		CO
HA115		TWA	7.0	12.4				HU	6.3	1500	1800	20	1000	2500	50	2K	30	30			1000		CO
M2403F		TWA	7.0	12.4				EC	6.3	500	2500	30	1000		50	2K	30	35					CO
M2403KA		TWA	7.0	11.0				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
M2403L		TWA	7.0	12.4				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
M2403LB		TWA	7.0	12.4				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
M2403C		TWA	7.0	12.4				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
L5045		TWA	7.0	11.0				MEC	6.3	900	1600	25	1000		60	33				4K	IM		CO
L5072		TWA	7.0	12.0				LI	6.3	900	2100	35	1000		35	50					IM		CO
HA57		TWA	7.0	12.4				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
M2403E		TWA	7.0	11.0				EC	6.3	500	2000	30	1000		50	2K	30	35			IM		CO
M2403H		TWA	7.0	11.0				EC	6.3	500	2000	30	2000		50	2K	30	35			IM		CO
L3612		TWA	7.0	11.0				LI	6.3	1100	2500	30	2000			36				4K	IM		CO
L3998		TWA	7.0	11.0				LI	6.3	900	2300	37	2000			36					IM		CO
L5026		TWA	7.0	10.0				LI	6.3	500	2150	30	2000	1000		2K	60				IM		CO
L87-5		TWA	7.0	7.5		VT		MU	6.3	900	2600	46	4000	1800	350	3K	34	30					WG
WJ244		TWA	7.0	8.2				WJ	3.1	900	1180	27	5000	540	1K	34					IM		CO
EM1030		TWA	7.0	11.0				EI	6.3	600	3400	34	5000	3400	40	3K	60	34			IM		CO
EM1031		TWA	7.0	11.0				EI	6.3	600	3400	40	5000	3400	40	3K	30	34			IM		CO
M2404F		TWA	7.0	11.0				EC	6.3	500	3600	50	5000		50	4K	30	35			IM		CO
M2404H		TWA	7.0	11.0				EC	6.3	500	3600	60	5000		50	4K	30	35			1200		CO
M2404O		TWA	7.0	11.0				EC	6.3	500	3600	60	5000		50	4K	30	35			1200		CO
N1038		TWA	7.0	8.5				EE	6.3	800	3300	40	10W	3300	150	3K	40				IM		WG
F2090		TWA	7.0	11.0				IT	6.3	1670	3600	70	10W	450		43	33				IM		CO
M2404G		TWA	7.0	10.0				EC	6.3	500	3600	60	10W		50	4K	30	35			1250		CO
M2404SA		TWA	7.0	8.0				EC	6.3	500	3600	60	10W		50	4K	30	35			1200		CO
M2404L		TWA	7.0	11.0				EC	6.3	500	3600	60	10W		50	4K	30	35			IM		CO
M2404C		TWA	7.0	11.0				EC	6.3	500	3500	10W		50	4K	30	35				IM		CO
L3879		TWA	7.0	12.0				LI	6.3	900	3500	85	20W	3150			36				IM		CO
L3928		TWA	7.0	11.0				LI	6.3	1700	2900	60	10W	100		40					IM		CO
L5006		TWA	7.0	10.0				LI	6.3	1000	3200	70	10W			55					IM		CO
L5043		TWA	7.0	11.0				MEC	6.3	1000	3500	90	10W	80		60					IM		CO
W4/2G		TWA	7.0	8.5				ST	6.3	730		40	15W	2000	3K	47					IM		WG
VA618G		TWA	7.0	12.4				VA	6.3	900	3500	85	20W	3150		35	30				IM		CO
VA618H		TWA	7.0	12.4				VA	6.3	900	3200	85	20W			50	30				IM		CO
F2552		TWA	7.0	11.0				IT	6.3	1250	3600	70	20W	3200	800	200	65	40			IM		CO
L5073		TWA	7.0	11.0				LI	6.3	900	3500	85	20W			60					IM		CO
WJ231		TWA	7.0	8.5				WJ	5.0	600	4800	65	35W	1900		5K	41				IM		CO
L3815		TWA	7.0	11.0	100	MEC		LI	6.3	1000	7000	700	200W			30					IM		WG
QKW1011		TWA	7.0	11.0	100			RA	6.3	3500	11K	1500	1K			40					IM		CO
QKW1132		TWA	7.0	11.0	100			RA	6.3	3500	11K	2000	1K	11K		11K	40				IM		CO
QKW1309		TWA	7.0	11.0	200			RA	6.3	3500	11K	2000	1K	11K		11K					IM		CO
F2041		TWA	7.0	11.0	100			IT	6.3	4000		1800	1K	10K	100	10K	33						CO
F2048		TWA	7.0	11.0	50			IT	6.3	4000		1800	1K	10K	100	10K	33						CO

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM DR VOLTS	I _k	P _o	COLLECTOR REFLECTOR e.v. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD	CAVITY
			MIN.	MAX.																		
F2085 L3994 F7340 8609 X1131	=	TWA	7.0	11.0	100		IT P	6.3	2300	12K	1600	1K	300		300		36				IM	CO
		TWA	7.0	11.0	100		LI P	6.3	1400	10K	1500	1K	150	10K	36					IM	CO	
		TWA	7.0	11.0	50		IT P	6.3	4000		1800	1K	10K	100	10K	30					IM	CO
		TWA	7.0	11.0	100		RA P	6.3	3500		2000	1K	150	295	12K	40					IM	CO
		TWA	7.0	8.0			EI C	6.3	300	1600	16	3K	575				1K	40	28			IM
M2404N RW70 OKW1049 YH1130 8W403	=	TWA	7.1	8.5			EC C	6.3	500	3600	60	10				4K	35	35			IM	CO
		TWA	7.1	7.8			SH C	6.3	850		35	4000	1800	100		2K	38				IM	WG
		TWA	7.1	8.5			RA C		3250		50	10W	3200	300		3K	37	28			IM	CO
		TWA	7.1	7.7			TE C	6.3	900		30	10W	1300	50		3K	40			850	WG	
		TWA	7.1	7.9			TO C	6.3	600	2700	50	12K	3700	20		4K	40			IM	WG	
WJ130 WJ130-1 WJ251 LD-5508 YH1080		TWA	7.2	7.8			WJ C					2500				36				IM	CO	
		TWA	7.2	7.8			WJ C				14	2500	650			2K	36			IM	CO	
		TWA	7.2	7.8			WJ C				14	2500	650			2K	36			IM	CO	
		TWA	7.2	8.5			NE C	6.3	600	2500	33	10W	1600	40		3K	40	28			IM	WG
		TWA	7.4	8.5			PH C				50	15W	2000			4K	37	27				
TWC5A TWC14A M2204AF A1203 M2411D		TWA	7.4	7.8			GC C	4.0	3800		50	20W	3500	100		4K	37	27			IM	WG
		TWA	7.4	7.8		MEC	GC C	6.3	1200		45	20W	1800			3K	40	28			IM	WG
		TWA	7.5	8.5			EC C			450		3				1K	18			400	CO	
		TWA	7.5	11.0			RC C	6.3	850		12	1000	2950			32				IM	CO	
		TWA	7.5	11.0			EC C	6.3	500	2000	20	1000				3K	30	35			IM	WG
A1181 L88-20 WJ332-2 WJ345-1 WJ345		TWA	7.5	11.2	50		RC P	6.3	1250		6	25W	6500	7K		27				IM	WG	
		TWA	7.7	8.5		VT	MU C	6.3	850	3000	50	10W	2000	250		4K	38	30			IM	WG
		TWA	8.0	12.0			WJ C		10.0							35	12			IM	CO	
		TWA	8.0	12.0			WJ C									25	6			IM	CO	
		TWA	8.0	12.0			WJ C					1200				25	7			IM	CO	
WJ276 WJ287 WJ297 M5162 HA20		TWA	8.0	12.0			WJ C					2400			25	6				IM	CO	
		TWA	8.0	12.0			WJ C					2400			35	10			IM	CO		
		TWA	8.0	12.0			WJ C						5			27	10			IM	CO	
		TWA	8.0	12.4			EC C	6.3	250	800	2	5		50		1K	30	12			IM	WG
		TWA	8.0	12.4			HU C	6.3	1200	450	2	10	1300			1K	30			IM	CO	
WJ384 OK1026 A1140 M2201B M2201BA	=	TWA	8.0	12.0			WJ C					10				25	8					
		TWA	8.0	12.0			RA C					10										
		TWA	8.0	12.0		VT	RC C	6.3	850	500	800U	10	1500			2K	33			IM	WG	
		TWA	8.0	12.4			EC C	6.3	230	435	3	10	1200			1K	30	30			400	CO
		TWA	8.0	12.4			EC C	6.3	300	500	3	10			1K	30	30			IM	CO	
M2201BB M2201C M2201E F4102A WJ363		TWA	8.0	12.4			EC C	6.3	300	500	3	10				1K	30	30			IM	CO
		TWA	8.0	11.0			EC C	6.3	230	450	3	10	1200			1K	30	30			400	CO
		TWA	8.0	12.4			EC C	6.3	230	500	3	10			1K	30	30					
		TWA	8.0	12.0			CS C			1000	1	10			35	14						
		TWA	8.0	12.0			WJ C					20	500	2400			30	10				
WJ403 WJ399 M2201H HA71 HA9	=	TWA	8.0	12.0			WJ C					20				25	9				IM	CO
		TWA	8.0	12.0			WJ C					40				28	11			IM	CO	
		TWA	8.0	12.4			EC C	6.3	300	500	3	50				1K	30	30			IM	CO
		TWA	8.0	12.4			HU C	7.0	1200	800	8	100	2300			2K	25			1000	CO	
		TWA	8.0	11.0			HU C	6.3	1200	1800	20	500	2400			2K	33					
HA21 EM1045 EM1046 M2403I 4041		TWA	8.0	11.0			HU C	7.0	1200	2200	20	500	2400			2K	33			IM	CO	
		TWA	8.0	12.0			EI C	6.3	600	2950	23	1000	2950	40		3K	60	34		IM	CO	
		TWA	8.0	12.0			EI C	6.3	600	2950	25	1000	2950	40		3K	30	34		IM	CO	
		TWA	8.0	12.4			EC C	6.3	500	2000	30	1000		50		2K	30	35		IM	CO	
		TWA	8.0	12.0			RC C	6.3	850		12	1000	3000			32				IM	CO	

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, etc. VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
HA125		TWA	8.0	11.0				HU C	6.3	1500	1800	20	2000	2500	50	2K	30	35				IM	CO
M2403LC		TWA	8.0	12.4				EC C	6.3	500	2000	30	2000	50	2K	30	35					IM	CO
M2404I		TWA	8.0	12.4				EC C	6.3	500	3600	60	2000	50	4K	30	35				1200	CO	
M2404P		TWA	8.0	12.4				EC C	6.3	500	3600	60	2000	50	4K	30	35				1200	CO	
L5008		= TWA	8.0	12.0				LI C	6.3	900	2100	40	2000	40			36				IM	CO	
EM1050		= TWA	8.0	12.0				EI C	6.3	600	3500	30	3000	3500	50	4K	60	34				IM	CO
EM1051		= TWA	8.0	12.0				EI C	6.3	600	3500	30	3000	3500	50	3K	30	34				IM	CO
AL181V2		TWA	8.0	11.0	50			RC P	6.3	1300		5	3000	6500			30				IM	WG	
L3703		= TWA	8.0	10.0				LI C					4000				33					IM	CO
732H		TWA	8.0	10.0				HP C			1800	30	5000				40					IM	CO
F2018		TWA	8.0	12.0				IT C	6.3	2000		50	5000	3900	30	4K	25					IM	CO
STX2971		TWA	8.0	9.6				SP C	6.3	2000	2500	40	5500	250			36	35				IM	CO
F2072		= TWA	8.0	12.0				VT	IT C	6.3	1500	4200	60	10W	400		30				IM	CO	
M2404C		TWA	8.0	11.0				EC C	6.3	500	3600	60	10W	50	4K	30	35				1250	CO	
M2404KA		TWA	8.0	11.0				EC C	6.3	500		60	10W	50	4K	30	35				1200	CO	
M2404N		TWA	8.0	9.6				EC C	6.3	500	3600	60	10W	50	4K	30	35				1200	CO	
6996		TWA	8.0	9.6				VT	IT C	6.3	2300	3400	50	10W	3500	250	30	35			1300	CO	
VA628G		TWA	8.0	12.4				VA C	6.3	3200	5400	220	100W								IM	CO	
WJ284		TWA	8.0	12.0				WJ C	6.3	2600	7150	210	142W	4500	7K	36					IM	CO	
310H		= TWA	8.0	11.0	200			HP P	5.5	2800	11K	2200	1K	150			40				IM	WG	
L3614		TWA	8.0	11.0	200			LI P	6.3	1700	11K	2000	1K				30					CO	
L3954		TWA	8.0	11.0	100			LI P	6.3	1450	11K	1750	1K	100			33				IM	CO	
L5022		TWA	8.0	10.0	100			LI P	6.3	1400	10K	1500	1K	150	10K	36					IM	CO	
L5041		TWA	8.0	12.0	100			LI P	6.3	1400	11K	1600	1K	160	11K	33				4K	IM	CO	
L5089		TWA	8.0	12.0	100	FX		LI P	6.3	1450	11K	2000	2K	200			40					IM	CO
TXW16		TWA	8.0	9.3	60			GC P	7.0	9000		50	5K	25K			25K	40		500		WG	
710H		TWA X						HP C	12.0	2400	19K	2200	8K				50					WG	
HA44		TWA	8.2	12.4				HU C	6.3	1100	500	2	1	1250	1K	25	15				1000	CO	
HA23		TWA	8.2	12.4				HU C	6.3	1100	500	2	3	1250	1K	25	10				1000	CO	
HA10		TWA	8.2	12.4				HU C	7.0	1200	800	8	100	2300	2K	25					1000	CO	
F2087		= TWA	8.2	12.4				IT C	6.3	1250	3600	70	15W	1500	800	200	60	40				IM	CO
YH1120		TWA	8.2	8.5				TE C	6.3	900		50	20W	1400	50	3K	45				850	WG	
OKW1331		TWA	8.2	10.0	50			RA P					1K			35						WG	
722H		= TWA	8.4	9.2				HP C	7.5	2800	11K	1200	1K				40					WG	
723H		= TWA	8.4	9.2	22			HP P	7.5	2800	10K	1200	1K				40					WG	
739H		TWA	8.4	9.2	50			HP P			48K	21A	200K				12					WG	
WJ345-2		TWA	8.5	9.6				WJ C									25	6				IM	CO
9W90		TWA	8.5	9.5				NE C	6.0	450	20	200U	3	1200	5	840	23	6			800	WG	
F4065		TWA	8.5	9.6				CS C			660	600U	5				30	8				IM	CO
L5086		= TWA	8.5	9.6	FX			LI C	6.3	850	2300	30	2000	60			55	30		1K		IM	WG
L3898		TWA	8.5	9.6				LI C					6000				22						CO
OK1059		TWA	8.5	10.5				RA C					10W									IM	WG
L3472		TWA	8.5	9.6				LI C	6.3	1200	3000	60	10W				36					IM	CO
F2088		= TWA	8.5	9.6				IT C	6.3	1250	3600	70	25W	2000	800	200	65	40				IM	CO
725H		TWA	8.5	9.6	500			HP P			11K	2000	2K				40					IM	WG
OKW1276		TWA	8.5	9.6	200			RA P	6.3	3500	11K	2000	2K	11K			11K	40				IM	CO
VAX803T1		= TWA	8.5	9.6	100			VA P	10.0	2500	24K	5000	10K		325		40					IM	WG
VAX803T2		= TWA	8.5	9.6	100			VA P	10.0	2500	24K	5000	10K		325		40					IM	WG
726H		TWA	8.5	9.5	50			HP P	11.0	3800	30K	9000	25K		250		40					IM	WG
307H		TWA	8.5	9.5	100			HP P	9.5	5200	37K	10A	50K				50					IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR REFLECTOR VOLTS	CONTROL VOLTS	HEX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH MHz	MAGNETIC FIELD 0.1 mT	COUPLING
			MIN	MAX																		
STX4630		TWA	8.7	9.0			SP	C	11.0	1000	2300	22	2000				40				IM	
308H		TWA	8.7	9.7	100		HP	P	11.0	3800	25K	6400	15K		250		50				IM	WG
718H		TWA	8.8	9.0	50		HP	P	9.5	5200	39K	9400	100K				45				IM	WG
713H		TWA	8.9	9.1	100		HP	P	9.5	5200	39K	9400	100K			1K	15				IM	WG
M2204AE		TWA	9.0	10.2			EC	C			450	3									400	CO
M2204E		TWA	9.0	10.0			EC	C			450	3				1K	30				400	CO
M2204FE		TWA	9.0	10.2			EC	C			450	3				1K	15				IM	WG
714H		TWA	9.3	9.5	50		HP	P	11.0	3800	26K	6800	40K		250		16				IM	WG
719H		TWA	9.3	9.5	50		HP	P	11.0	3800	26K	6800	40K		250		45				IM	WG
M5163		TWA	10.0	20.0			EC	C	6.3	250	500	2	4		50	1K	25	18			IM	WG
11W18		TWA	10.0	12.0			TO	C	6.3	550	1400	10	1000	2700	50	3K	32				IM	WG
M2405DA		TWA	10.0	20.0			EC	C	6.3	500		35	1000		50	3K	30	35			IM	WG
M2405H		TWA	10.0	20.0			EC	C	6.3	500	1000	35	1000		50	3K	30	35			IM	WG
11W30		TWA	10.0	12.0			TO	C	6.3		2200	26	4000	3000	50	3K	40				IM	WG
M2204AG		TWA	10.2	10.5			EC	C			450	3				1K	18				400	CO
M2204FG		TWA	10.2	10.5			EC	C			450	3				1K	18			50	IM	CO
WJ350		TWA	10.5	12.5			WJ	C								40	50					
11W15		TWA	10.7	11.7			NE	C	6.3	450	1100	10	1500	2500	20	2K	30				IM	WG
LD690		TWA	10.7	11.7		FX	NE	C	6.3	600	1700	19	4000	1500	35	3K	38	25			IM	WG
11W62		TWA	10.7	11.7			KK	P	6.3	750	2300	20	4500	1500		3K	35				IM	WG
11W70		TWA	10.7	11.7			NE	C	6.3	600	1800	22	6000	2000	30	4K	34				IM	WG
LO593A		TWA	10.7	11.7			NE	C	6.3	600	1800	22	6000	2000	35	4K	35	25			IM	WG
LO746		TWA	10.7	11.7			NE	C	6.3	600	2400	30	11W	2000	35	4K	40	27			IM	WG
W3/2G		TWA	10.7	13.2			ST	C	6.3	820		35	12W	2000	3K	4K	45				IM	WG
M2404PA		TWA	11.0	12.4			EC	C	6.3	500	3500		5000		50	4K	30	35			IM	CO
LO749		TWA	11.7	13.5			NE	C	6.3	600	1700	20	5000	2000	35	4K	40	27			IM	WG
WJ307		TWA	12.0	18.0			WJ	C				2400				25	10				IM	CO
WJ342		TWA	12.0	18.0			WJ	C	5.0			5				25	11				IM	CO
A1215		TWA	12.0	18.0			RC	C	6.3	850		3	10	2200		2K	30				IM	CO
A1225		TWA	12.0	18.0			RC	C	6.3	850		15	1000	4100		4K	30				IM	CO
VA619G		TWA	12.0	18.0			VA	C	6.3	900	4000	50	10W			4K	35	30			IM	WG
VA619H		TWA	12.0	18.0			VA	C	6.3	900	4000	50	10W			45	30				IM	WG
818H		TWA	12.0	14.0			HP	C			3000	40	10W			35					IM	CO
HA24		TWA	12.4	16.0			HU	C	6.3	1200	450	2	5	1300	50	1K	25				400	CO
M5120		TWA	12.4	18.0			EC	C	6.3	300	500	2	5		50	1K	25	14			IM	WG
M5121		TWA	12.4	18.0			EC	C	6.3	300	500	2	5		50	1K	30	17			IM	WG
M2204A		TWA	12.4	18.0			EC	C	6.3	230	600	4	10			1K	30	30			400	WG
M22083		TWA	12.4	18.0			EC	C	6.3	230	500	4	10			1K	30	30			IM	WG
M2405A		TWA	12.4	18.0			EC	C	6.3	500	3300	30	1000		50	3K	30	35			1200	WG
M2405B		TWA	12.4	18.0			EC	C	6.3	500	3300	35	1000		50	3K	30	35			IM	WG
M2405F		TWA	12.4	18.0			EC	C	6.3	500	3300	30	1000		50	3K	30	35			1200	WG
M24059B		TWA	12.4	18.0			EC	C	6.3	500		40	2000		50	3K	30	35			IM	WG
M5046		TWA	12.4	18.0			EC	C	6.3	230	3100	40	3000		50	4K	30	35			IM	WG
M2405E		TWA	12.4	18.0			EC	C	6.3	500	3300	30	5000		50	3K	30	35			IM	WG
VA629G		TWA	12.4	18.0			VA	C	6.3		6000	200	100W			6K	33	35			IM	CO
M5047		TWA	13.5	13.5			EC	C	6.3	500	1000	35	4000		50	3K	30	35			IM	WG
M24059A		TWA	14.0	18.0			EC	C	6.3	500		35	2000		50	3K	30	35			IM	WG
817H		TWA	15.3	15.8			HP	C			20K	2500	8K			36					IM	WG
820H		TWA	16.0	17.0	100		HP	P			20K	1500	5K			28	13				IM	WG
WJ393		= TWA		18.0	26.5		WJ	C					1								IM	WG

TYPE NUMBER	SYMBOL	KIND	FREQUENCY		DUTY RATIO	TUNE	MFR	OPERATION	E _f	I _f	BEAM OR ANODE VOLTS	I _k	P _o	COLLECTOR, REFLECTOR, &c VOLTS	CONTROL VOLTS	HELIX VOLTS	GAIN	NOISE FACTOR	PULLING	BANDWIDTH	MAGNETIC FIELD	CAVITY	COUPLING
			MIN	MAX																			
M5164		TWA	18.0	26.5				EC C	6.3	250	1750	2	5		50	3K	20	23			IM		WG
M5165		TWA	20.0	40.0				EC C	6.3	250	1750	2	1		50	3K	20	25			IM		WG
M2116C		TWA	34.5	35.5				EC C	6.3	250	1750	2	4		50	3K	20	25			IM		WG
812H		TWA	52.0	55.0				HP C			12K	120	150W								IM		WG
813H		TWA	54.5	55.5				HP C			25K	400	1K								IM		WG
814H		TWA	90.0	99.0				HP C			15K	160	100W								IM		WG
HA34		TWM	2.0	4.0				HU C	6.3	1000	200	6	2	550		550					550		CO
HA16		TWM	8.8					HU C	7.0	1200	550	25	2	1200		1K	5				600		CO

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