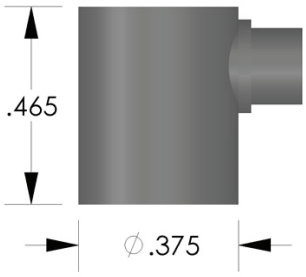
Micro80 Sensor

Very Wideband Frequency Miniature Sensor

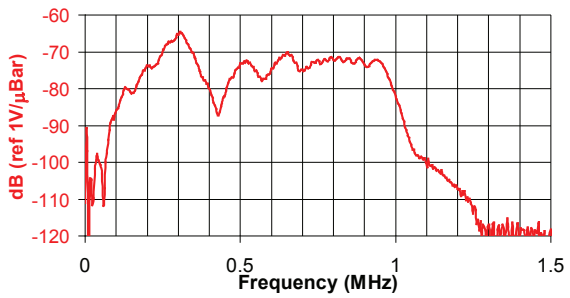


DESCRIPTION AND FEATURES

Micro80 sensor has a good frequency response over the range of 200 – 900 kHz. It has good sensitivity to AE signals even in presence of high background noise. Its small size and high bandwidth makes the sensor an ideal candidate for applications that have size and weight constraints on the sensors. The sensor features a small diameter, microdot connector exiting from the side of the sensor.

APPLICATIONS

The high sensitivity and bandwidth makes them ideal for structural health monitoring of critical structures like aircrafts, storage tanks etc. Typical applications include monitoring for fatigue and corrosion cracking in metals, delaminations and fiber breakage in composites. It can be mounted easily using epoxy.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s) ..... 57 dB
Peak Sensitivity, Ref V/µbar ..... -65 dB
Operating Frequency Range ..... 200-900 kHz
Resonant Frequency, Ref V/(m/s) ..... 250 kHz
Resonant Frequency, Ref V/µbar ..... 325 kHz
Directionality ..... +/- 1.5 dB

Environmental

Temperature Range ..... -65 to 177ºC
Shock Limit ..... 500 g
Completely enclosed crystal for RFI/EMI immunity

Physical

Dimensions ..... 0.4"OD X 0.5"H
10 mm OD X 12 mm H
Weight ..... 5 grams
Case Material ..... Stainless steel
Face Material ..... Ceramic
Connector ..... Microdot, 10-32
Connector Locations ..... Side

ORDERING INFORMATION AND ACCESSORIES

Micro80 ..... Micro80
Cable (specify cable length) 1232-1
Preamp to System Cable 1234-X
Pre-amplifier 0/2/4, 2/4/6
Amplifier Subsystems AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

ISO 9001

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