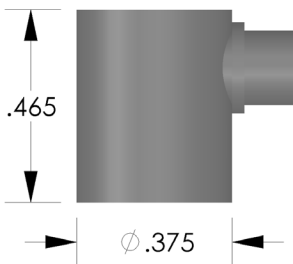


PRODUCT DATA SHEET

Micro30F Sensor

Wideband Frequency Miniature Sensor

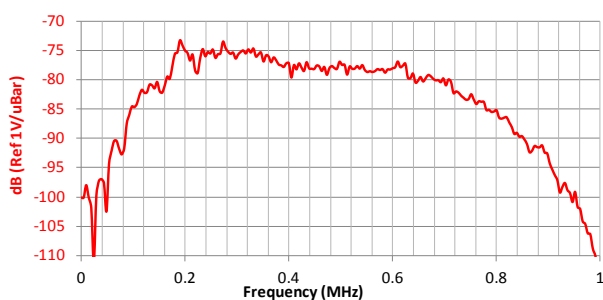


DESCRIPTION AND FEATURES

The F-series sensors are designed to incorporate the latest advances in materials and transducer design principles. These sensors unlike the resonant micro sensors (μ -series) have a very high sensitivity and flat response in the bandwidth of operation. μ 30F sensor has a good frequency response over the range of 150 – 700 kHz. It has good sensitivity to AE signals even in presence of high background noise. Its small size and good 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

This sensor is well suited for applications requiring miniature sensors that can be mounted into tight spaces. Typical applications include structural health monitoring of large structures like storage tanks, pipelines etc. Flat response of these sensors help eliminate the sharp rise and fall in the sensitivity with frequency commonly seen in resonant sensors, providing additional information for engineers to analyze. Wideband sensors are well suited for research applications where a high fidelity AE response is required. It can be easily mounted using epoxy.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	55 dB
Peak Sensitivity, Ref V/μbar.....	-72 dB
Operating Frequency Range.....	150-700 kHz
Resonant Frequency, Ref V/(m/s).....	300 kHz
Resonant Frequency, Ref V/μbar.....	300 kHz
Directionality.....	+/-1.5 dB

Environmental

Temperature Range.....	-65 to 177°C
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
Connector Locations.....	Side

ORDERING INFORMATION AND ACCESSORIES

Micro30F.....	Micro30F
Cable (specify length in 'm').....	1232-1
Pre-amplifier.....	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm').....	1232-X
Amplifier Subsystems.....	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty



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