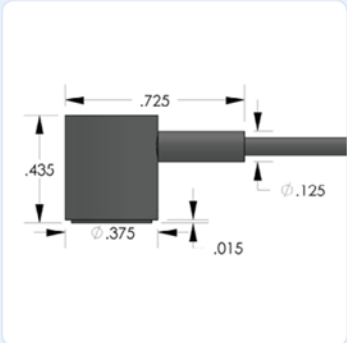


**PRODUCT DATA SHEET**

**Micro30D Sensor**

Miniature Differential Sensor

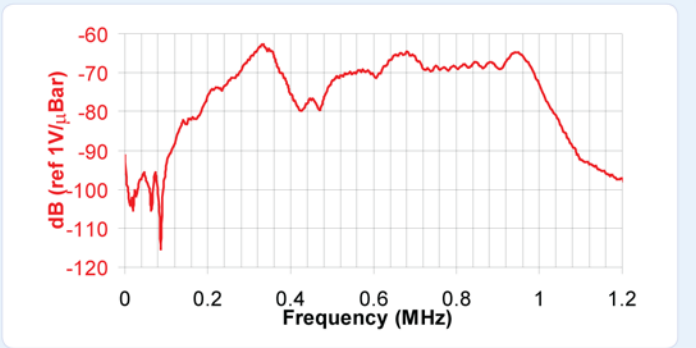


**DESCRIPTION AND FEATURES**

MICRO30D is a differential sensor designed to isolate the sensing terminals electrically from the cavity. This electrical isolation makes the sensor particularly useful for applications where high background electrical noise is a major concern. It has a very good sensitivity and frequency response over the range of 150 – 400 kHz. The two signal leads from the sensing element feed into a differential pre-amplifier which eliminates common-mode noise resulting in a lower noise output from the pre-amplifier. This sensor features a rugged steel construction and a dual BNC connector with an integrated twin axial cable exiting on the side.

**APPLICATIONS**

This sensor is well suited for structural health monitoring of large structures like storage tanks, pipelines etc. 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).....	65 dB
Peak Sensitivity, Ref V/μbar.....	-67.5 dB
Operating Frequency Range.....	150-400 KHz
Resonant Frequency, Ref V/(m/s).....	125 KHz
Resonant Frequency, Ref V/μbar.....	225 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.....	0.375"OD X 0.435"H
	18.4 mm OD X 11 mm H
Weight.....	23 grams
Case Material.....	Stainless steel
Face Material.....	ceramic
Connector.....	Dual BNC
Connector Locations.....	Side

**ORDERING INFORMATION AND ACCESSORIES**

MICRO30D.....	MICRO30D
Cable (specify length '-XX' m at end of PN).....	1 m
Amplifier Subsystems.....	AE2A, AE5A
Pre-amplifier.....	0/2/4, 2/4/6, ILD40

*Sensors include*

NIST Calibration Certificate & Warranty

