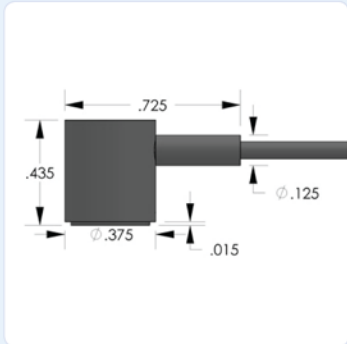


PRODUCT DATA SHEET

Micro80D Sensor

Miniature Differential Sensor

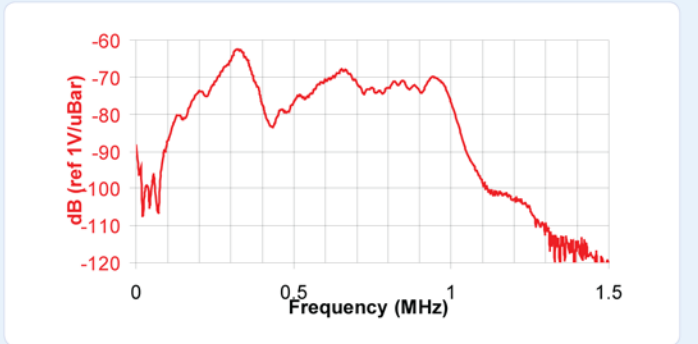


DESCRIPTION AND FEATURES

MICRO80D 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. The sensor has a very high sensitivity and bandwidth. It has a good frequency response over the range of 175–900 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).....	57 dB
Peak Sensitivity, Ref V/μbar.....	-65 dB
Operating Frequency Range.....	175-900 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 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.....	Dual BNC
Connector Locations.....	side

ORDERING INFORMATION AND ACCESSORIES

Micro80D.....	Micro80D
Cable (specify length '-XX' m at end of PN).....	1 m
Pre-amplifier.....	0/2/4, 2/4/6, 1220, IL40D
Amplifier Subsystems.....	AE2A, AE5A
Cable (Pre-amplifier to system).....	1243-X

Sensors include

NIST Calibration Certificate & Warranty

