

PRODUCT DATA SHEET

Micro100S Sensor

Miniature Sensor

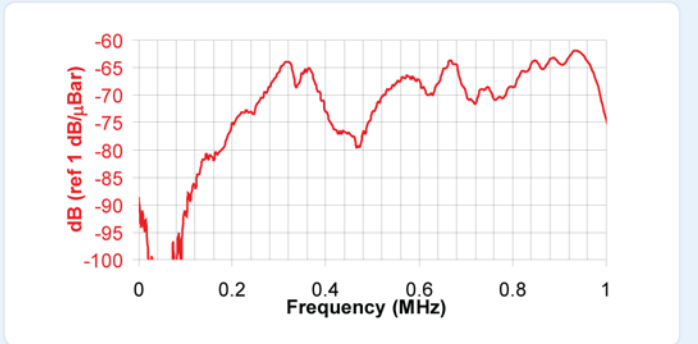
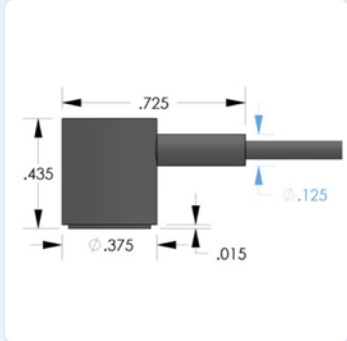


DESCRIPTION AND FEATURES

MICRO100S sensor has a good frequency response over the range of 200–950 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, an integrated coaxial cable with a BNC 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).....	56 dB
Peak Sensitivity, Ref V/μbar.....	-61 dB
Operating Frequency Range.....	200-950 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.....	0.7"OD X 0.65"H
.....	18 mm OD X 17 mm H
Weight.....	18 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	BNC
Connector Locations.....	Side

ORDERING INFORMATION AND ACCESSORIES

Micro100S.....	Micro100S
Cable (specify cable length in 'XX m).....	1 m
Pre-amplifier.....	0/2/4, 2/4/6
Amplifier Subsystems.....	AE2A, AE5A
Cable (Pre-amplifier to system).....	1234-X

Sensors include

NIST Calibration Certificate & Warranty

