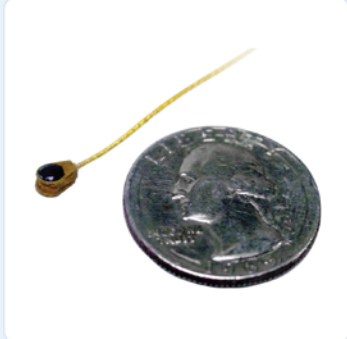


PRODUCT DATA SHEET

S9225 Sensor

Miniature Sensor

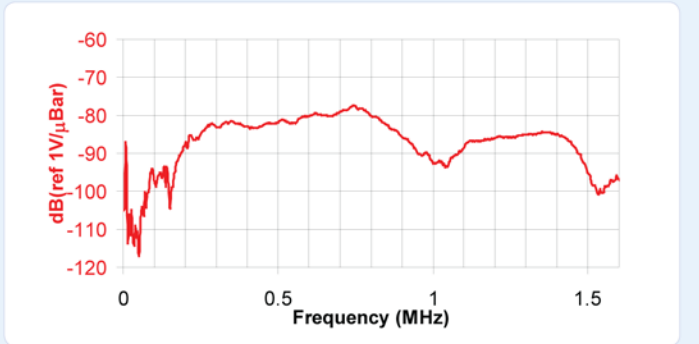
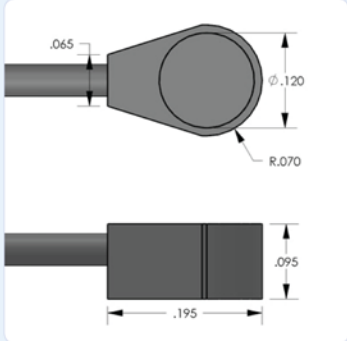


DESCRIPTION AND FEATURES

S9225 miniature sensor with a size of 3.6 mm x 2.4 mm is the smallest AE sensor on offer. It has good sensitivity and a very wide bandwidth. Its small size and negligible weight makes it an ideal candidate for applications imposing severe constraints on the size and weight of the sensors. The sensor features an anodized aluminum cavity with an integral coaxial cable exiting from the side of the sensor with a BNC connector to interface with instrumentation.

APPLICATIONS

The sensor is ideally suited for structural health monitoring of critical infrastructure like aircrafts, tanks etc. It can be used in any application with a noisy environment and requiring a small sensor and very high bandwidth for frequency analysis of the AE signal sources and noise discrimination. It can easily be mounted using epoxy and can be mounted in small and tight spaces.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	48 dB
Peak Sensitivity, Ref V/μbar.....	-77.5 dB
Operating Frequency Range.....	300-1800 kHz
Resonant Frequency, Ref V/(m/s).....	250 kHz
Resonant Frequency, Ref V/μbar.....	600 kHz
Directionality.....	+/- 1.5 dB

Environmental

Temperature Range.....	-54 to 121°C
Shock Limit.....	500 g
Completely enclosed crystal for RFI/EMI immunity	

Physical

Dimensions.....	0.15"OD X 0.1"H
	3.6 mm OD X 2.4 mm H
Weight.....	<1 gram (10 grams with cable & connector)
Case Material.....	Anodized Aluminum
Face Material.....	Anodized Aluminum
Connector.....	BNC on integral cable
Connector Locations.....	Side

ORDERING INFORMATION AND ACCESSORIES

S9225.....	S9225
Cable (specify cable length).....	0.6 m
Preamplifier.....	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm').....	1234-X
Amplifier Subsystems.....	AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

