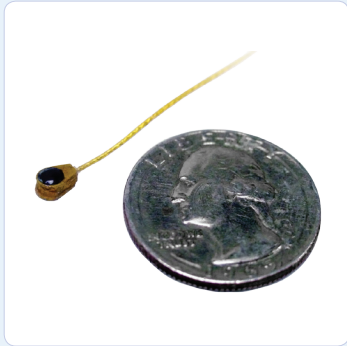


**PRODUCT DATA SHEET**

**S9225 Sensor**

Miniature Sensor

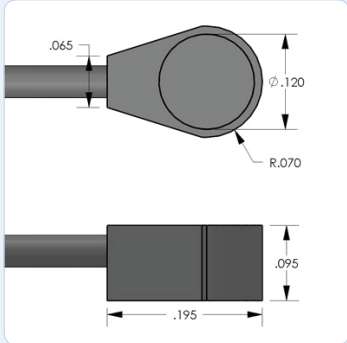


**DESCRIPTION AND FEATURES**

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/ $\mu$ bar..... -77.5 dB  
 Operating Frequency Range..... 300-1800 kHz  
 Resonant Frequency, Ref V/(m/s)..... 250 kHz  
 Resonant Frequency, Ref V/ $\mu$ bar..... 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*

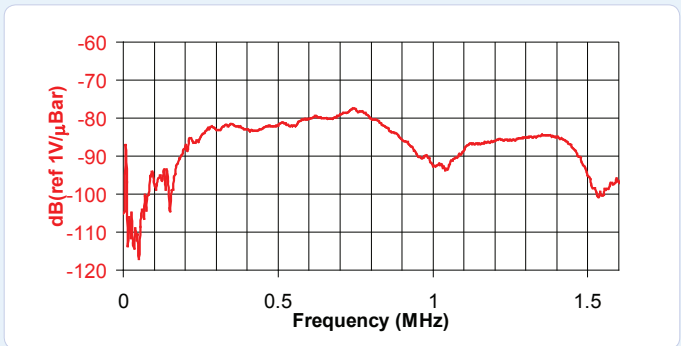
Dimensions..... 0.15"OD X 0.1"H  
 3.6 mm OD X 2.4 mm H  
 Weight..... <1 gram (10 grams with cable & connector)  
 Case Material..... Anodized Aluminum  
 Face Material..... Anodized Aluminum  
 Connector..... BNC on integral cable  
 Connector Locations..... Side

**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



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