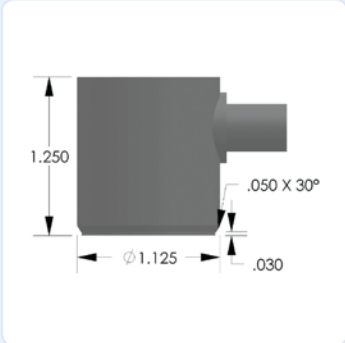


PRODUCT DATA SHEET

SH6 Sensor

Shear Wave Sensor

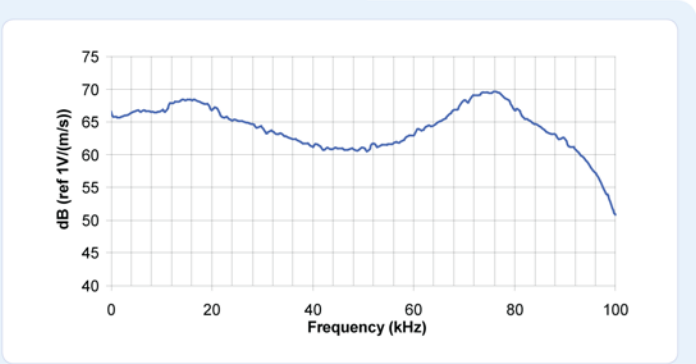


DESCRIPTION AND FEATURES

SH6 is a shear wave mode AE sensor built in a stainless steel cavity with a BNC connector. It has a resonant frequency of 60 kHz and a good sensitivity to shear waves along the polarization direction. Shear mode sensors are capable of detecting in-plane wave motion while being much less sensitive to out of plane motions.

APPLICATIONS

Shear waves play an important role in acoustic emission testing of structures constructed from plates. Shear mode sensors are especially very sensitive to cracking in structures. These sensors are very directional due to the polarization being in the horizontal direction, this property can be used to identify the source of AE signals in structures.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s)..... 70 dB
 Operating Frequency Range 40-100 kHz
 Resonant Frequency, Ref V/(m/s)..... 75 kHz
 Sensing Direction..... Aligned with connector
 Directionality..... +/-10 dB

Environmental

Temperature Range -65 to 177°C
 Shock Limit 500 g
 Completely enclosed crystal for RFI/EMI immunity

Physical

Dimensions..... 1.125"OD X 1.25"H
 29 mm OD X 32 mm H
 Weight 100 grams
 Case Material..... Stainless steel
 Face Material..... Ceramic
 Connector BNC
 Connector Locations..... Side

ORDERING INFORMATION AND ACCESSORIES

SH6 SH6
 Cable (specify cable length 'XX' m at end of PN)..... 1234-X
 Magnetic Hold-Down MHSTD
 Preamplifier..... 0/2/4, 2/4/6
 Amplifier subsystems AE2A, AE5A

Sensors include

NIST Calibration Certificate & Warranty

