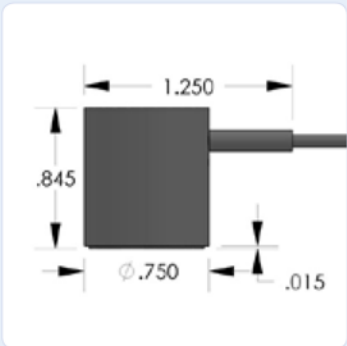


**PRODUCT DATA SHEET**

**R6D Sensor**

General Purpose Differential Sensor

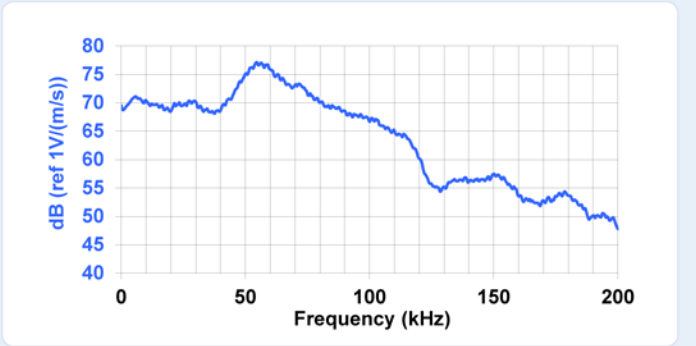


**DESCRIPTION AND FEATURES**

R6D 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. It has a very good sensitivity and frequency response over the range of 35 – 100 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**

The sensor can be used in applications that require very good EMI shielding, high sensitivity at low frequencies. Typical applications for the sensor include monitoring big power transformers, large steel and concrete structures.



**OPERATING SPECIFICATIONS**

*Dynamic*

Peak Sensitivity, Ref V/(m/s).....	75 dB
Peak Sensitivity, Ref V/ $\mu$ bar.....	-64 dB
Operating Frequency Range.....	35-100 kHz
Resonant Frequency, Ref V/(m/s).....	55 kHz
Resonant Frequency, Ref V/ $\mu$ bar.....	90 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.....	0.85"OD X 0.75"H
	22 mm OD X 19 mm H
Weight.....	34 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	Dual BNC
Connector Locations.....	Side
Grounding.....	Internal (isolated from casing)

**ORDERING INFORMATION AND ACCESSORIES**

R6D.....	R6D
Cable (specify length 'XX' m at end of PN).....	1 m
Preamp to System Cable (specify length in 'm').....	1234-X
Magnetic Hold-Down.....	MHSTD
Amplifier subsystems ... AE2A, AE5A or standard AE systems	
Preamplifier.....	0/2/4, 2/4/6
Amplifier Subsystems.....	AE2A or AE5A

*Sensors include*

NIST Calibration Certificate & Warranty

