

**PRODUCT DATA SHEET**

**R15D Sensor**

General Purpose Differential Sensor

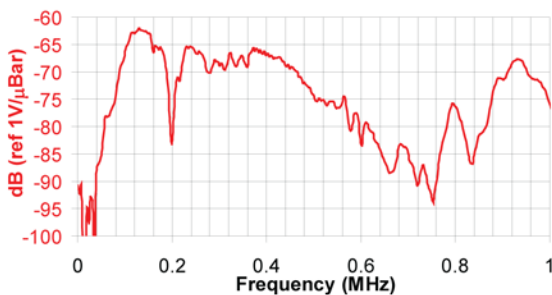
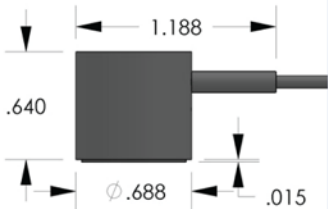


**DESCRIPTION AND FEATURES**

R15D 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 50 – 400 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. Typical applications for the sensor include monitoring big power transformers, large steel and concrete structures.



**OPERATING SPECIFICATIONS**

*Dynamic*

Peak Sensitivity, Ref V/(m/s).....	58 dB
Peak Sensitivity, Ref V/μbar.....	-62 dB
Operating Frequency Range.....	50-400 kHz
Resonant Frequency, Ref V/(m/s).....	75 kHz
Resonant Frequency, Ref V/μbar.....	150 kHz

*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.....	25 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	Dual BNC
Connector Locations.....	Side
Grounding.....	Internal (isolated from casing)

**ORDERING INFORMATION AND ACCESSORIES**

R15D.....	R15D
Cable (specify cable length 'XX' m at end of PN).....	1 m
Preamp to System Cable (specify length in 'm').....	1234-X
Magnetic Hold-Down.....	MHSTD
Pre-amplifier.....	0/2/4, 2/4/6, IL40D
Amplifier subsystems ...	AE2A, AE5A or standard AE systems

*Sensors include*

NIST Calibration Certificate & Warranty

