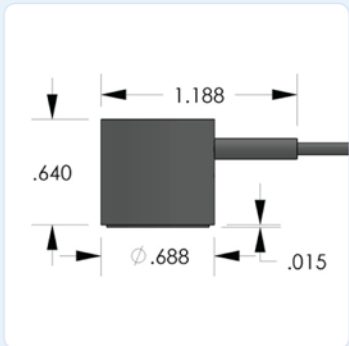


PRODUCT DATA SHEET

R50D Sensor

General Purpose Differential Sensor

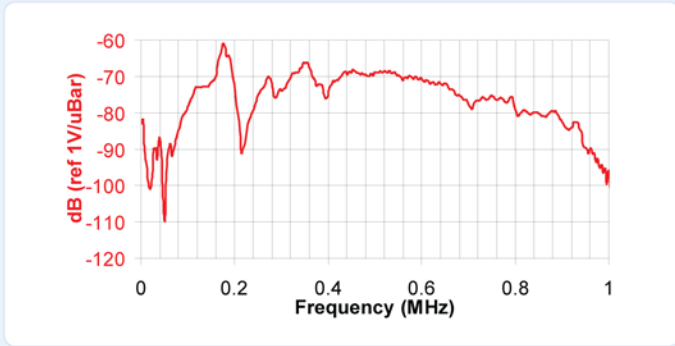


DESCRIPTION AND FEATURES

R50D 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 100 – 700 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).....	62 dB
Peak Sensitivity, Ref V/μbar.....	-62 dB
Operating Frequency Range.....	100-700 kHz
Resonant Frequency, Ref V/(m/s).....	100 kHz
Resonant Frequency, Ref V/μbar.....	500 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.....	
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	Dual BNC
Connector Locations.....	Side
Grounding.....	Internal (isolated from casing)

ORDERING INFORMATION AND ACCESSORIES

R50D.....	R50D
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
Amplifier subsystems ...	AE2A, AE5A or standard AE systems

Sensors include

NIST Calibration Certificate & Warranty

