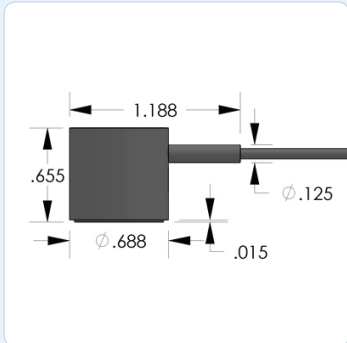
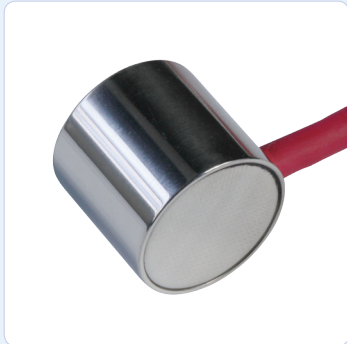


R50S Sensor

General Purpose Sensor

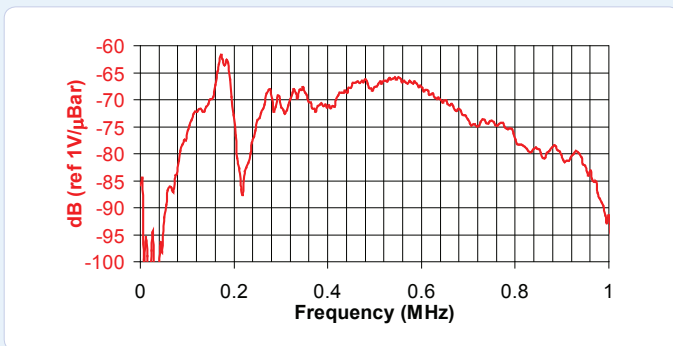


DESCRIPTION AND FEATURES

R50S is designed as a narrow band sensor to have a very high sensitivity to AE signals. It has a very good frequency response over the range of 100 – 700 kHz. This sensor features a rugged steel construction with an integrated coaxial cable exiting from the side with a BNC connector. The small size of the sensor makes it particularly suitable for mounting in tight spaces.

APPLICATIONS

This sensor is well suited for structural health monitoring of large structures like storage tanks, pipelines etc. Narrow band sensors are well suited for applications requiring the sensor to pick up low level AE signals. It can be easily mounted using epoxy.



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
Directionality	+/-1.5 dB

Environmental

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

Physical

Dimensions	0.7"OD X 0.65"H 18 mm OD X 17 mm H
Weight	20 grams
Case Material	Stainless steel
Face Material	Ceramic
Connector	BNC
Connector Locations	Side

ORDERING INFORMATION AND ACCESSORIES

R50S	R50S
Cable (specify length '-XX' m at end of PN)	1 m
Magnetic Hold-Down	MHSTD
Pre-Amplifier	0/2/4, 2/4/6
Amplifier subsystems	AE2A, AE5A or standard AE systems
Preamp to System Cable (specify length in 'm')	1234-X

Sensors include

NIST Calibration Certificate & Warranty

