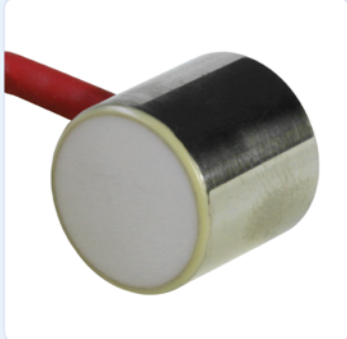


PRODUCT DATA SHEET

R80S Sensor

General Purpose Sensor

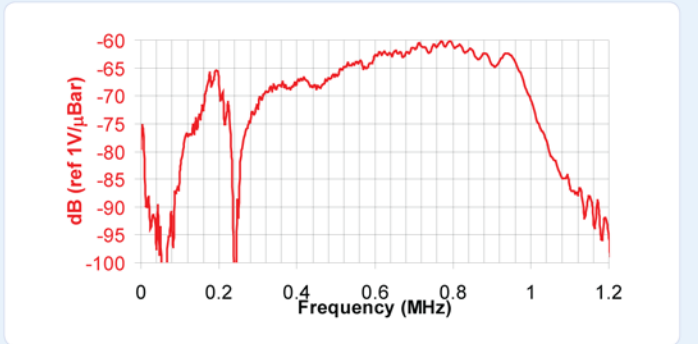
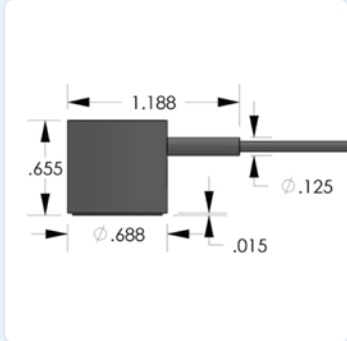


DESCRIPTION AND FEATURES

R80S is a high frequency sensor with a very high sensitivity and bandwidth. It has a very good frequency response over the range of 200 – 1000 kHz. This sensor is an ideal candidate for applications requiring high sensitivity to AE signals and wide bandwidth. This sensor features a rugged steel construction with an integrated coaxial cable exiting on 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. Wideband sensors are well suited for applications requiring high fidelity AE signals for noise discrimination and source identification. It can be easily mounted using epoxy.



OPERATING SPECIFICATIONS

Dynamic

Peak Sensitivity, Ref V/(m/s).....	58 dB
Peak Sensitivity, Ref V/μbar.....	-62 dB
Operating Frequency Range.....	200-1000 kHz
Resonant Frequency, Ref V/(m/s).....	200 kHz
Resonant Frequency, Ref V/μbar.....	800 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.....	18 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	BNC
Connector Locations.....	Side

ORDERING INFORMATION AND ACCESSORIES

R80S.....	R80S
Cable (specify cable length 'XX' m at end of PN).....	1 m
Magnetic Hold-Down.....	MHSTD
Pre-amplifier.....	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm').....	1234-X
Amplifier subsystems ...	AE2A, AE5A or standard AE systems

Sensors include

NIST Calibration Certificate & Warranty

