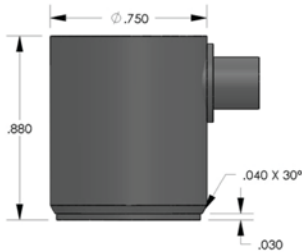


**PRODUCT DATA SHEET**

**R6α Sensor**

General Purpose, 60 kHz Resonant Frequency Sensor



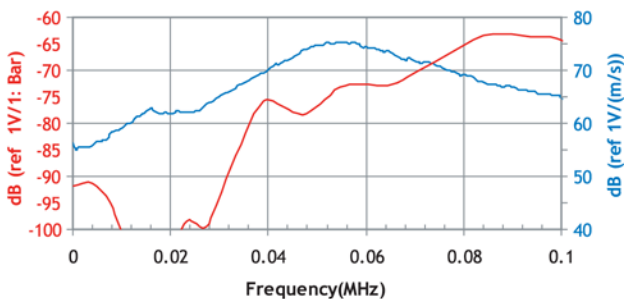
**DESCRIPTION AND FEATURES**

The R6α is a narrow band resonant sensor with a high sensitivity. The sensor cavity is machined from a solid stainless steel rod, making the sensor extremely rugged and reliable. The ceramic face along with a 30 degree chamfer to cavity electrically isolates the sensor cavity from the structure under test assuring a low noise operation.

The compact size of the sensor makes it readily suitable for deploying in tight spaces for monitoring. The Alpha series family of sensors features an SMA connector versus the Microdot connectors found on MISTRAS' RXX series of sensors. The alpha series includes R3α, R6α, R15α, R30α, R50α, R80α and WSα sensors.

**APPLICATIONS**

This sensor can be used on metal and FRP structures such as pipelines or storage tanks in petroleum, refineries, chemical plants, and offshore platforms, due to its high sensitivity and low resonance frequency properties.



**OPERATING SPECIFICATIONS**

*Dynamic*

Peak Sensitivity, Ref V/(m/s).....	75 dB
Peak Sensitivity, Ref V/μbar.....	-64 dB
Operating Frequency Range.....	35-100 kHz
Resonant Frequency, Ref V/(m/s).....	55 kHz
Resonant Frequency, Ref V/μbar.....	90 kHz
Directionality.....	+/-1.5 dB

*Environmental*

Temperature Range.....	-65 to 175°C
Shock Limit.....	500 g
Completely enclosed crystal for RFI/EMI immunity	

*Physical*

Dimensions.....	0.75"OD X 0.88"H
	19 mm OD X 22.4 mm H
Weight.....	38 grams
Case Material.....	Stainless steel
Face Material.....	Ceramic
Connector.....	SMA
Connector Locations.....	Side
Seal.....	Epoxy

**ORDERING INFORMATION AND ACCESSORIES**

R6α.....	R6α or R6α
Magnetic Hold-Down.....	MHR15A
Sensor to Preamp Cable (1 or 2 meters).....	1232-X-SMA
Amplifier subsystems ... AE2A, AE5A or standard AE systems	
Preamplifier.....	0/2/4, 2/4/6
Preamp to System Cable (specify length in 'm').....	1234 - X

*Sensors include*

NIST Calibration Certificate & Warranty

