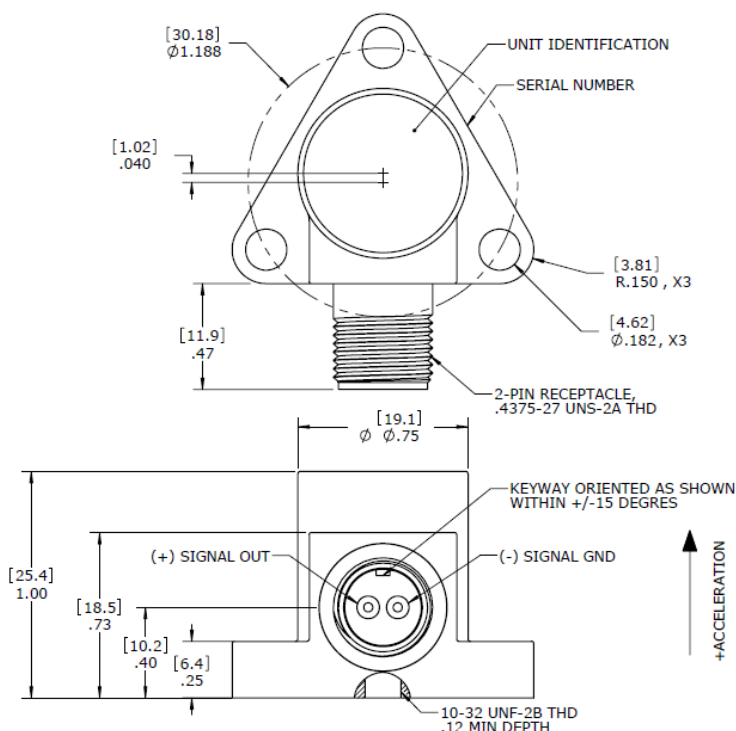




DIMENSIONS



MODEL 7550A ACCELEROMETER

SPECIFICATIONS

- ◆ High Temperature PE Accelerometer
- ◆ 20pC/g and 50pC/g Sensitivity
- ◆ +300°C Operating Range
- ◆ Exceptional Thermal Performance

The Model 7550A is a high temperature piezoelectric charge mode accelerometer designed for long term health usage monitoring on turbine engines. The accelerometer incorporates an annular shear mode crystal that provides stable thermal response up to +300°C with output sensitivity options of 20pC/g & 50pC/g. The model 7550A is hermetically sealed and features the ARINC three hole mounting configuration.

FEATURES

- ◆ 20pC/g to 50pC/g Sensitivity
- ◆ Wide bandwidth up to 12kHz
- ◆ Case Isolated, Internally Shielded
- ◆ Annular Shear Mode
- ◆ ARINC Three Hole Mount
- ◆ Hermetically Sealed

APPLICATIONS

- ◆ Land Gas Turbines
- ◆ Power Plants
- ◆ Aircraft Engines
- ◆ Industrial Applications
- ◆ High Temperature Testing

PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters

DYNAMIC

Dash Number	-50	-20
Sensitivity (pC/g)	50	20
Sensitivity (pC/g)	40	14.5
Frequency Response (Hz) ²	0.5-6000	0.5-9000
Frequency Response (Hz) ²	0.1-9000	0.1-12000
Natural Frequency (Hz)	26000	30000
Non-Linearity (%FSO)	±1/1000g	±1/1000g
Transverse Sensitivity (%)	<5	<5
Dynamic Range (g) ¹	±500	±1250
Shock Limit (g)	5000	5000

Notes

Typical
Minimum
±10%
±2dB

ELECTRICAL

Capacitance (pF)	1050
Insulation Resistance (MΩ)	>100
Grounding	Case Isolated, Internally Shielded

Nominal
@100Vdc

ENVIRONMENTAL

Temperature Response (%)	See Typical Temperature Response Curve
Operating Temperature (°C)	-54 to +300
Storage Temperature (°C)	-54 to +300
Humidity	Hermetically Sealed, IP67

PHYSICAL

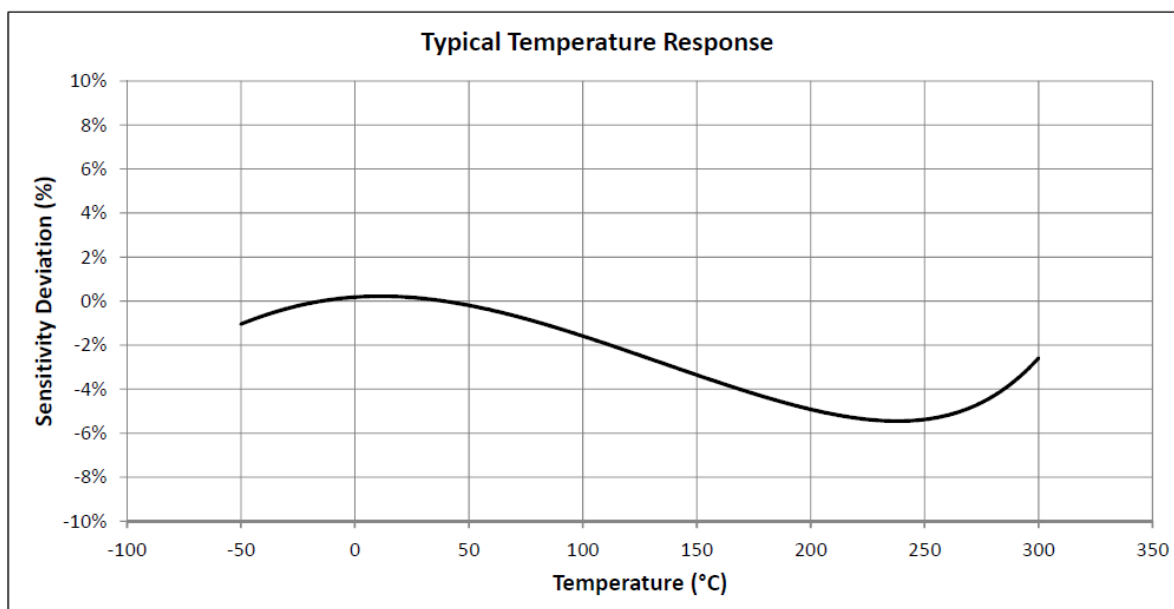
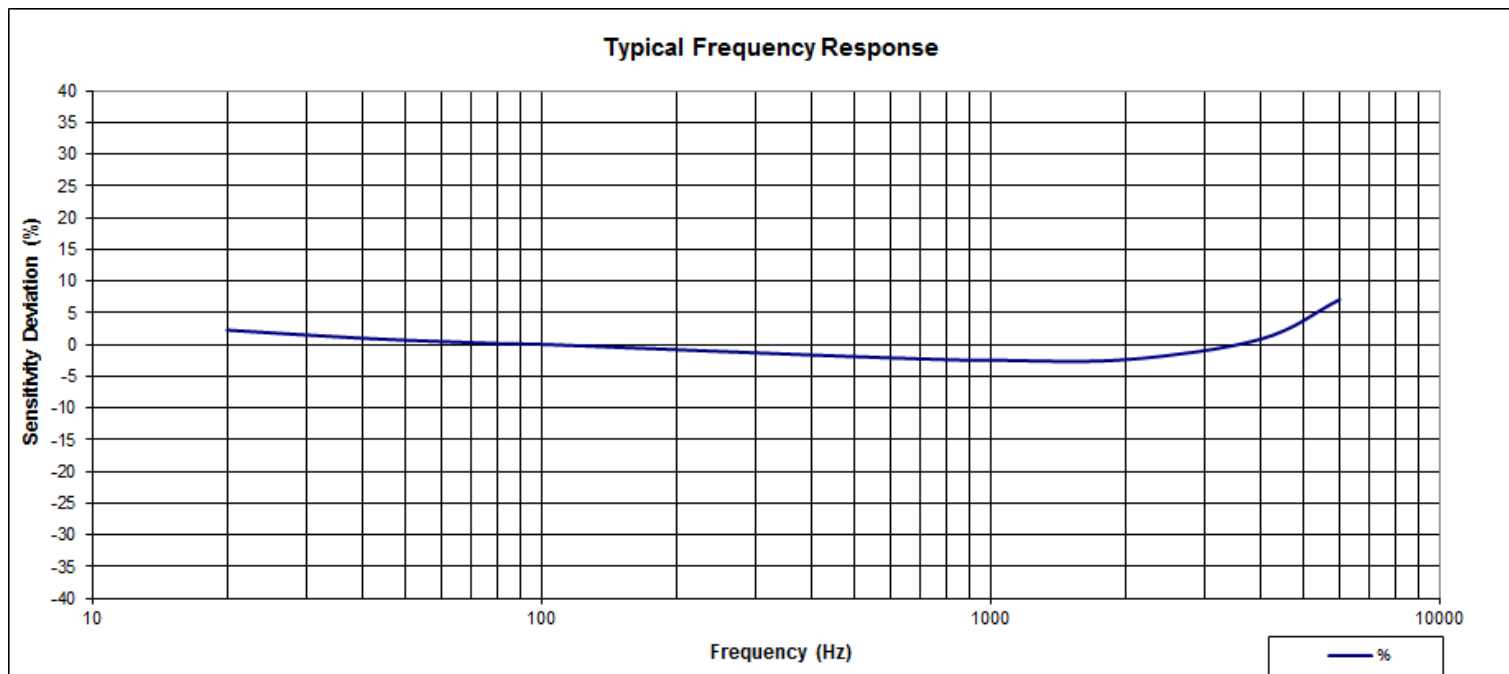
Sensing Element	Ceramic (shear mode)
Case Material	Stainless Steel
Electrical Connector	2-Pin Receptacle, 7/16-27 UNS Thread
Weight (grams)	72
Mounting	3x #8-32 Socket Head Cap Screw
Mounting Torque	18 lb-in (2.0 N-m)

¹ Operating range over which the accelerometer meets the linearity specifications

² Low-end response of the accelerometer is a function of its associated electronics.

Calibration supplied:	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit
Supplied accessories:	AC-A05080	3x #8-32 (1/2" length) Socket Head Cap Screw
Optional accessories:	326-XXX 161A	Mating Cable Assembly (XXX designates length in inches, 10ft standard), Rated to +260°C 4-Channel PE & IEPE Signal Conditioner

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ORDERING INFORMATION

PART NUMBERING Model Number+Sensitivity

7550A-GG

|

| _____ Sensitivity (50 is 50pC/g)

Example: 7550A-50

Model 7550A, 50pC/g

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