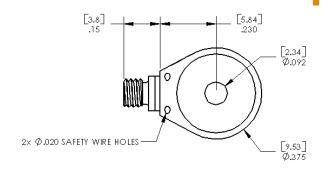
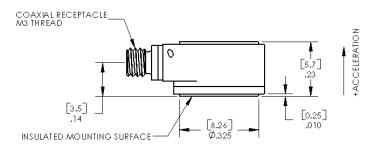


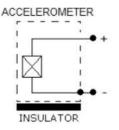




DIMENSIONS







MODEL 7501A ACCELEROMETER

SPECIFICATIONS

- +260°C Charge Output Accelerometer
- 5.6pC/g output, 15kHz Bandwidth
- Hermetically Sealed
- Miniature, Lightweight (2.1gm)

The Model 7501A is a miniature piezoelectric charge mode accelerometer with an operating temperature range to +260°C. The accelerometer is designed for high frequency vibration and shock measurements and offers a wide bandwidth to >10kHz with 5.6pC/g nominal output. The model 7501A features a hermetically sealed titanium housing and the popular through hole mount configuration.

FEATURES

- 73°C to +260°C Operating Range
- Wide bandwidth up to >10kHz
- Titanium Housing
- Annular Shear Mode
- Isolated Mounting Surface
- Through Hole Mount

APPLICATIONS

- Vibration & Shock Monitoring
- High Temp Applications
- Flight Testing
- High Frequency Applications
- Gearbox Vibration Monitoring

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
 Notes

 Sensitivity (pC/g)
 5.6
 Typical

 Sensitivity (pC/g)
 4.0
 Minimum

 Frequency Response (Hz) 2
 1-8000
 ±10%

 Frequency Response (Hz) 2
 0.5-10000
 ±2dB

Natural Frequency (Hz) 46000
Non-Linearity (%FSO) ±1/1000g
Transverse Sensitivity (%) <5
Dynamic Range (g) 1 ±4000
Shock Limit (g) 10000

ELECTRICAL

Capacitance (pF) 560 Nominal Insulation Resistance (M Ω) >100 @100Vdc

Ground Isolation Isolated from Mounting Surface

ENVIRONMENTAL

Temperature Response (%) See Typical Temperature Response Curve

Operating Temperature (°C) -73 to +260 Storage Temperature (°C) -73 to +260

Humidity Hermetically Sealed

PHYSICAL

Sensing Element Ceramic (shear mode)

Case Material Titanium

Electrical Connector M3 Coaxial Receptacle

Weight (grams) 2.1

Mounting Through Hole (#2 insulated cap screw)

Mounting Torque 5 lb-in (0.6 N-m)

Operating range over which the accelerometer meets the linearity specifications

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit

Supplied accessories: AC-A03230 1x #2-56 Insulated Mounting Screw Assembly (3/8 inch length)

Optional accessories: 321-XXX Low Noise Cable Assembly, M3 to 10-32 (XXX designates length in inches, 10ft standard)

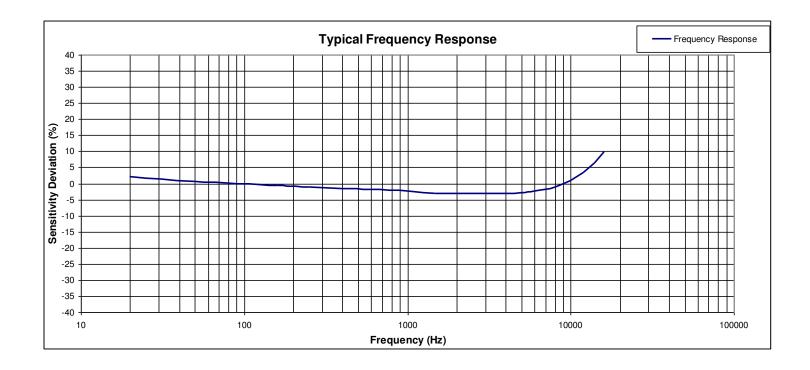
130 In-Line Charge Converter

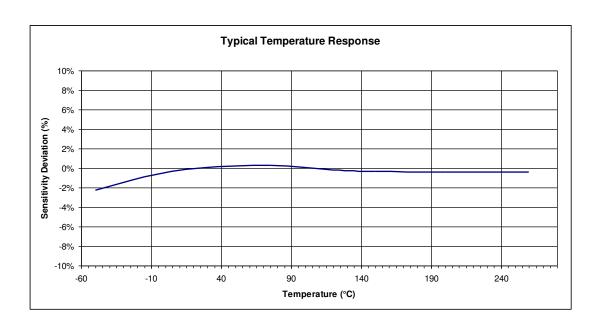
161A 4-Channel PE & IEPE Signal Conditioner

AC-A04018 Triaxial Mounting Block

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





ORDERING INFORMATION

PART NUMBERING Model Number

7501A

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