

Model 7502A Accelerometer



+260°C Charge Output Accelerometer
1.8pC/g output, 14kHz Bandwidth
Hermetically Sealed
Miniature, Lightweight (0.8gm)



The **Model 7502A** is a miniature piezoelectric charge mode accelerometer designed for high frequency vibration and shock measurements. The accelerometer incorporates an annular shear mode crystal that provides stable thermal response up to +260°C. The model 7502A is hermetically sealed and features a nominal charge output of 1.8pC/g. The miniature and light weight Titanium package renders the accelerometer ideal for applications requiring minimal mass loading.

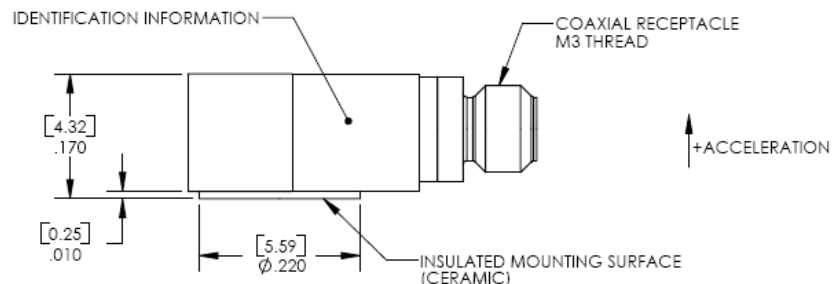
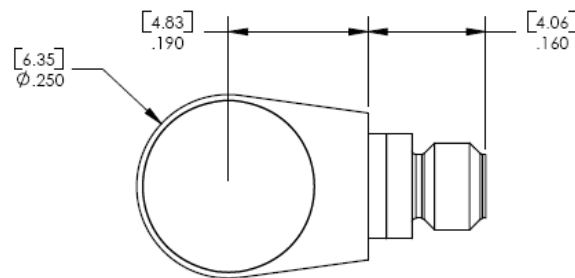
FEATURES

- ±5000g Dynamic Range
- Wide bandwidth up to 14kHz
- -73°C to +260°C Operating Range
- Adhesive Mount
- Titanium Housing
- Annular Shear Mode
- Isolated Mounting Surface

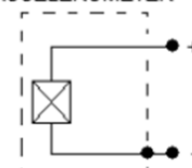
APPLICATIONS

- Vibration & Shock Monitoring
- High Temp Applications
- Flight Testing
- High Frequency Applications
- Small Structures Monitoring

dimensions



ACCELEROMETER



Model 7502A Accelerometer

performance specifications

All values are typical at +24°C, 100Hz unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1003 for Plug & Play AC Accelerometers.

Parameters

DYNAMIC

		Notes
Sensitivity (pC/g)	1.8	Typical
Sensitivity (pC/g)	1.0	Minimum
Frequency Response (Hz) ²	1-10000	±10%
Frequency Response (Hz) ²	0.1-14000	±2dB
Natural Frequency (Hz)	48000	
Non-Linearity (%FSO)	±1/1000g	
Transverse Sensitivity (%)	<5	
Dynamic Range (g) ¹	±5000	
Shock Limit (g)	10000	

ELECTRICAL

Capacitance (pF)	240	Nominal
Insulation Resistance (MΩ)	>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)	0.8
Mounting	Adhesive

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.

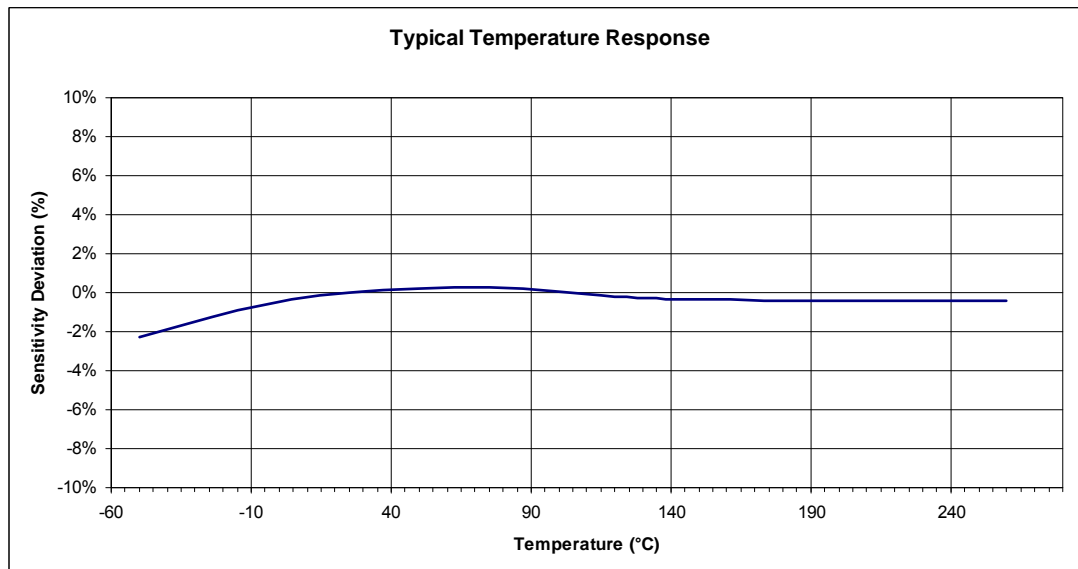
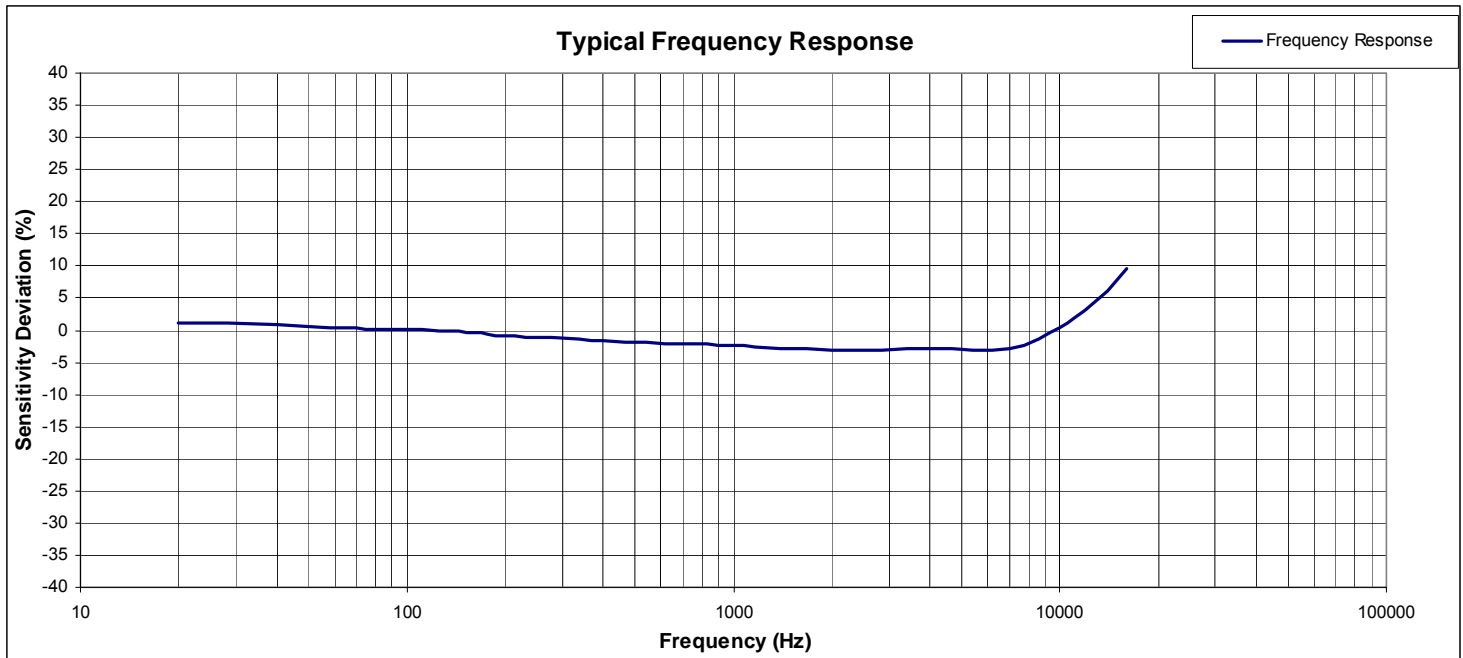
Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit

Optional accessories: 321-XXX Low Noise Cable Assembly, M3 to 10-32 (XXX designates length in inches, 10ft standard)
130 In-Line Charge Converter
161 4-Channel PE & IEPE Signal Conditioner

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.

Model 7502A Accelerometer

performance specifications



ordering info

PART NUMBERING Model Number
7502A

北京赛斯维测控技术有限公司
北京市朝阳区望京西路48号
金隅国际C座1002
电话：+86 010 8477 5646
传真：+86 010 5894 9029
邮箱：sales@sensorway.cn
<http://www.sensorway.cn>