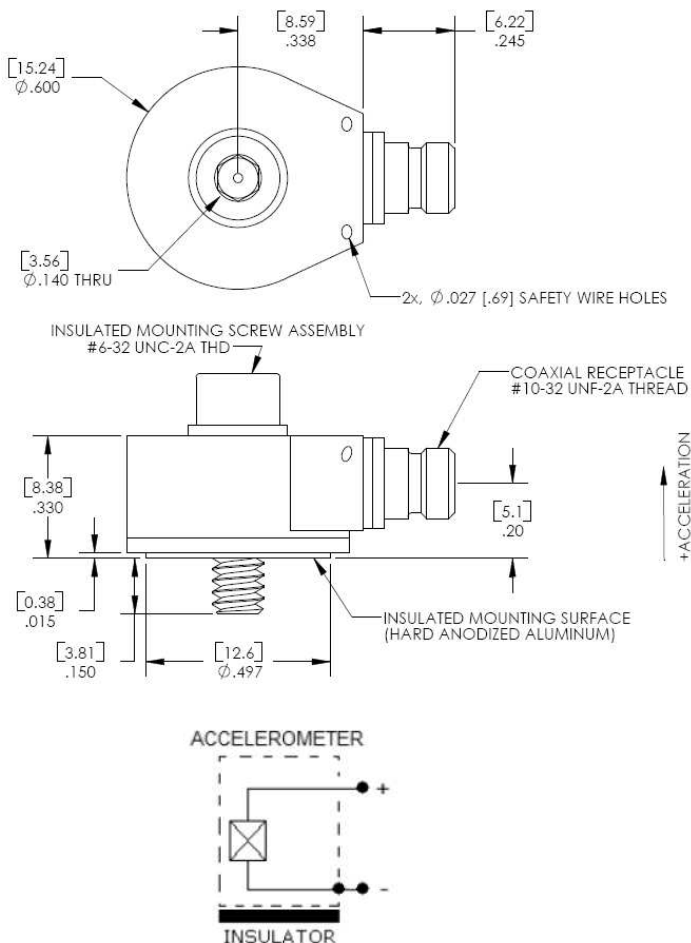




DIMENSIONS



MODEL 7500A ACCELEROMETER

SPECIFICATIONS

- +260°C Charge Output Accelerometer
- 20pC/g output, 15kHz Bandwidth
- Hermetically Sealed
- Through Hole Mount

The Model 7500A is a 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 7500A is hermetically sealed and features the popular through hole mount installation for use with standard mounting screws.

FEATURES

- 7pC/g to 20pC/g Sensitivity
- Wide bandwidth up to >15kHz
- -73°C to +260°C Operating Range
- Hermetically Sealed
- Annular Shear Mode
- Isolated Mounting Surface
- Stable Temperature Response

APPLICATIONS

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

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.

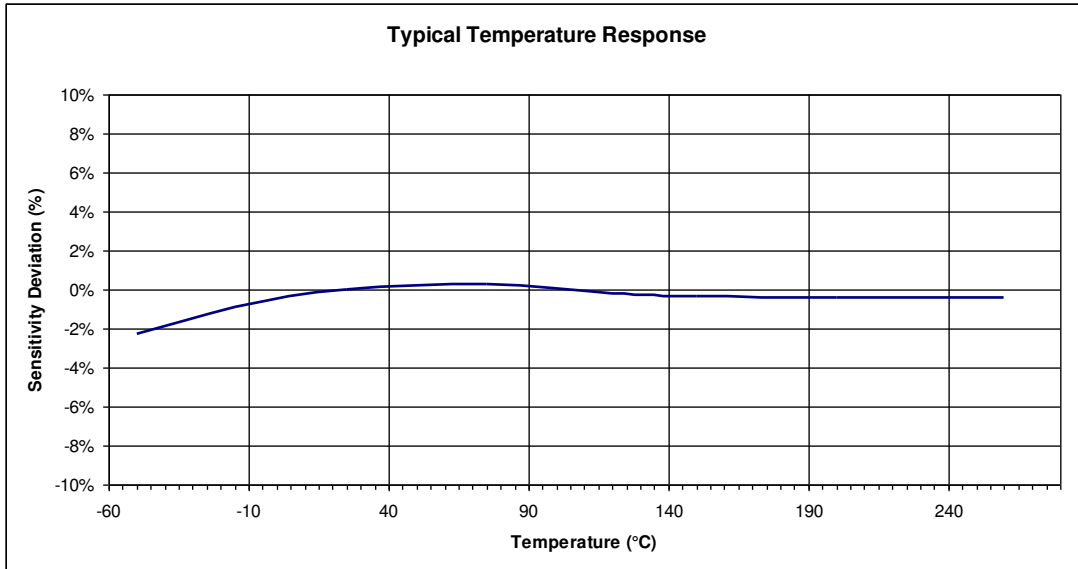
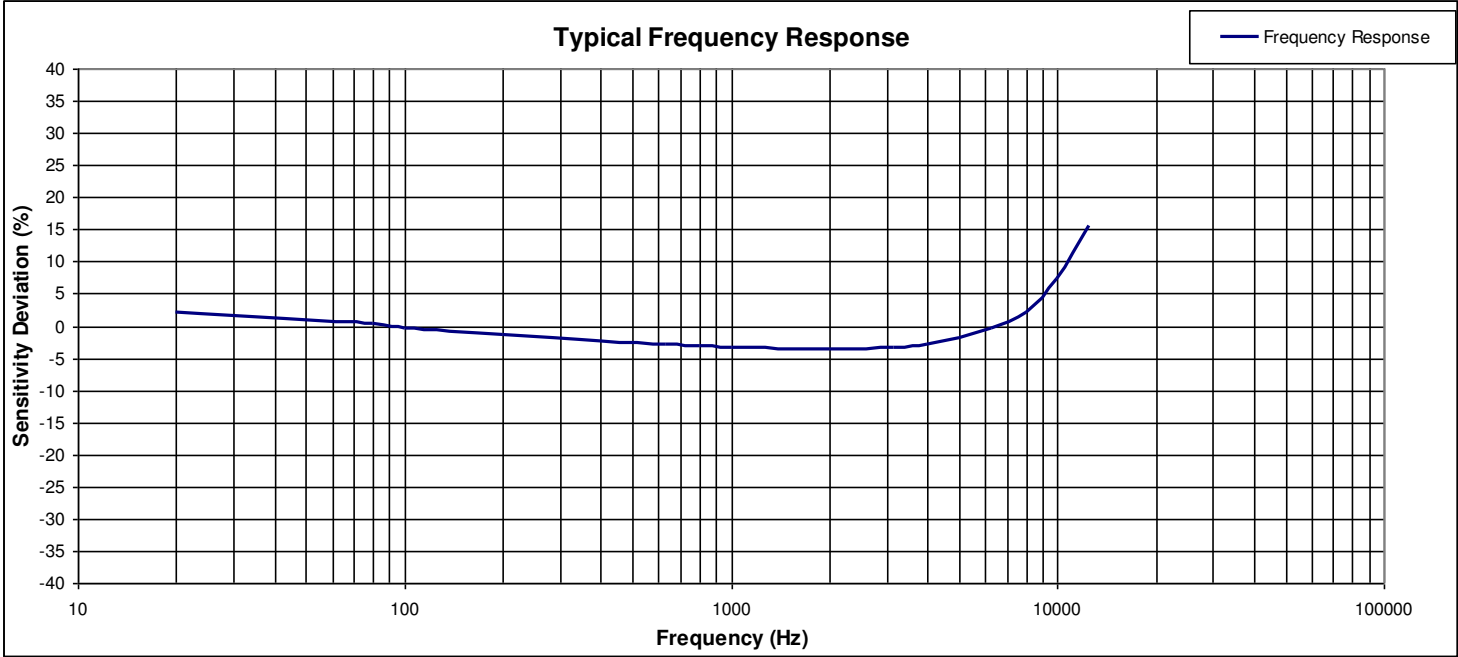
Parameters				Notes
DYNAMIC				
Dash Number	-20	-13	-7	
Sensitivity (pC/g)	20	13	7.0	Typical
Sensitivity (pC/g)	14.5	9.0	5.0	Minimum
Frequency Response (Hz) ²	1-6000	1-10000	1-12000	±10%
Frequency Response (Hz) ²	0.1-10000	0.1-12000	0.1-15000	±2dB
Natural Frequency (Hz)	30000	33000	43000	
Non-Linearity (%FSO)	±1/1000g	±1/1000g	±1/1000g	
Transverse Sensitivity (%)	<5	<5	<5	
Dynamic Range (g) ¹	±1250	±2000	±3500	
Shock Limit (g)	10000	10000	10000	
ELECTRICAL				
Capacitance (pF)	1050	1050	1050	Nominal
Insulation Resistance (MΩ)	>100	>100	>100	@50Vdc
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	Stainless Steel			
Electrical Connector	10-32 Coaxial Receptacle			
Weight (grams)	10			
Mounting	Through Hole (#6 insulated cap screw)			
Mounting Torque	8 lb-in (1.0 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-A03381	1x #6-32 Insulated Mounting Screw Assembly (1/2 inch length)
Optional accessories:	320-XXX	Low Noise Cable Assembly, 10-32 to 10-32 (XXX designates length in inches, 10ft standard)
	324-XXX	Low Noise Cable Assembly, 10-32 to BNC (XXX designates length in inches, 10ft standard)
	130	In-Line Charge Converter
	161A	4-Channel PE & IEPE Signal Conditioner
	AC-A03389	Triaxial Mounting Block
	AC-A03388	Adhesive Mounting Adaptor
	AC-A03472	Magnetic Mounting Adaptor

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.



ORDERING INFORMATION

PART NUMBERING Model Number+Sensitivity

7500A-GG

|

| _____ (20 is 20pC/g)

Example: 7500A-20

Model 7500A, 20pC/g

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.