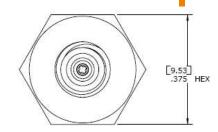
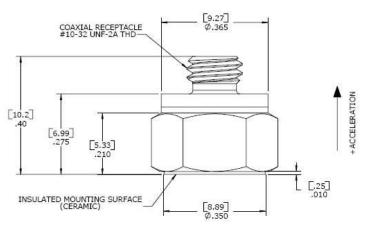


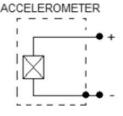




## **DIMENSIONS**







# **MODEL 7508A ACCELEROMETER**

## **SPECIFICATIONS**

- +200°C Charge Output Accelerometer
- 5.6pC/g Output, 7kHz Bandwidth
- Hermetically Sealed
- Miniature, Adhesive Mount

The Model 7508A is a miniature piezoelectric charge mode accelerometer designed for high frequency vibration and shock measurements at temperatures up to +200°C. The accelerometer incorporates an annular shear mode crystal installed with a compression ring that eliminates the usage of epoxies that can affect long term stability at elevated temperatures. Featuring a nominal charge output of 5.6pC/g, the model 7508A offers a high signal to noise ratio in a miniature adhesive mount package.

## **FEATURES**

- Wide bandwidth up to 7kHz
- -73°C to +200°C Operating Range
- Stainless Steel Housing
- Annular Shear Mode
- Adhesive Mounting
- Isolated from Mounting Surface

### **APPLICATIONS**

- Vibration & Shock Monitoring
- High Temp Applications
- Flight Testing
- High Frequency Applications
- Small Structures 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
 1-5000
 ±10%

 Frequency Response (Hz) 2
 0.3-7000
 ±2dB

Natural Frequency (Hz) 32000
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 $\Omega$ ) >100 @100Vdc

Ground Isolation Isolated from Mounting Surface

**ENVIRONMENTAL** 

Temperature Response (%) See Typical Temperature Response Curve

Operating Temperature (°C) -73 to +200 Storage Temperature (°C) -73 to +200

Humidity Hermetically Sealed

**PHYSICAL** 

Sensing Element Ceramic (shear mode)
Case Material Stainless Steel

Electrical Connector 10-32 Coaxial Receptacle

Weight (grams) 3.6
Mounting Adhesive

<sup>1</sup> 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

Optional accessories: 320-XXX Low Noise Cable Assembly, 10-32 to 10-32 (XXX designates length in inches, 10ft

standard)

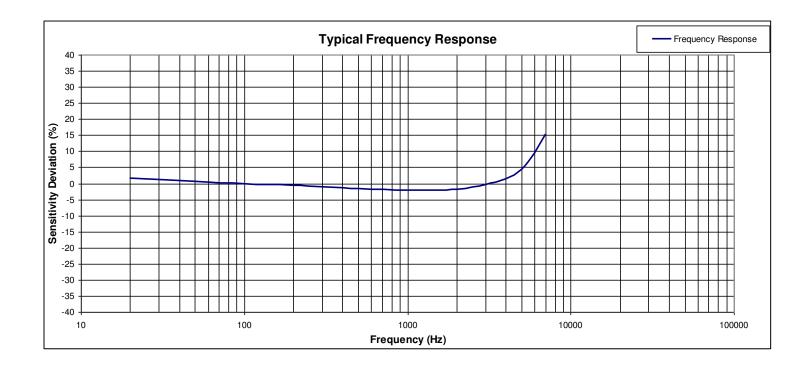
324-XXX Low Noise Cable Assembly, 10-32 to BNC (XXX designates length in inches, 10ft standard)

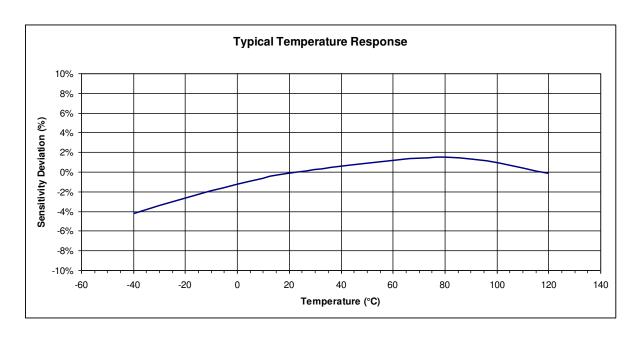
130 In-Line Charge Converter

161A 4-Channel PE & IEPE Signal Conditioner

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.

<sup>&</sup>lt;sup>2</sup> Low-end response of the accelerometer is a function of its associated electronics.





## **ORDERING INFORMATION**

PART NUMBERING Model Number

7508A

#### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity Company 1000 Lucas Way Hampton, VA 23666 Sales and Customer Service Tel: +1-800-745-8008 or +1-757-766-1500 Fax: +1-757-766-4297 t&m@meas-spec.com

#### **EUROPE**

MEAS France SAS a TE Connectivity Company 26 Rue des Dames F78340 Les Clayes-sous-Bois France Sales and Customer Service Tel: +33 (0) 1 79 33 00 Fax: +33(0)1 34 81 03 59 t&m@meas-spec.com

#### **ASIA**

Measurement Specialties (China), Ltd., a TE Connectivity Company No. 26 Langshan Road Shenzhen High-Tech Park (North) Nanshan District, Shenzhen 518057 China Sales and Customer Service Tel: +86 755 3330 5088 Fax: +86 755 3330 5099 t&m@meas-spec.com

#### 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.