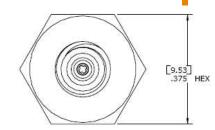
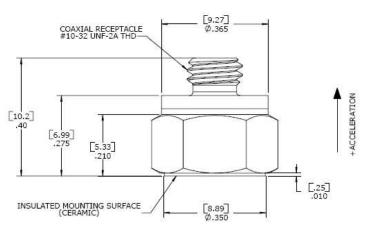


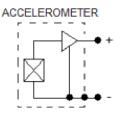




## **DIMENSIONS**







# **MODEL 7108A ACCELEROMETER**

## **SPECIFICATIONS**

- IEPE Accelerometer
- Wide Bandwidth to 10kHz
- 10-32 Top Connector
- Miniature, Adhesive Mount

The Model 7108A is a miniature adhesive mount IEPE accelerometer available in ±50g to ±500g dynamic ranges. The accelerometer features a welded hermetic stainless steel construction with a 10-32 top connector. The model 7108A incorporates a stable piezo-ceramic crystal in annular shear mode, installed with a compression ring that eliminates the usage of epoxies that can affect long term stability. The accelerometer has an operating range of -55°C to +125°C and a flat frequency response to 10kHz.

## **FEATURES**

- ±50g to ±500g Dynamic Range
- Wide bandwidth up to 10kHz
- Welded Stainless Steel
- Hermetically Sealed
- -55°C to +125°C Operating Range
- Annular Shear Mode
- Isolated from Mounting Surface

## **APPLICATIONS**

- Vibration & Shock Monitoring
- Laboratory Testing
- Modal Applications
- High Frequency Applications

## PERFORMANCE SPECIFICATIONS

All values are typical at +24°C, 80Hz and 4mA excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters				
DYNAMIC				Notes
Range (g)	±50	±500		
Sensitivity (mV/g)	100	10		±10%
Frequency Response (Hz)	1-8000	1-8000		±10%
Frequency Response (Hz)	0.5-10000	0.5-10000		±2dB
Natural Frequency (Hz)	32000	32000		
Non-Linearity (%FSO)	±1	±1		
Transverse Sensitivity (%)	<5	<5		
Shock Limit (g)	5000	5000		
ELECTRICAL				
Compliance Voltage (Vdc)	18 to 30	18 to 30		
Excitation Current (mA)	2 to 10	2 to 10		
Bias Voltage (Vdc)	8 to 12	8 to 12		Room Temperature
Bias Voltage (Vdc)	6 to 14	6 to 14		-55 to +125°C
Output Impedance (Ω)	<100	<100		
Full Scale Output Voltage (V)	±5	±5		
Residual Noise (g RMS)	0.0004	0.0008		Broadband 1Hz to 10kHz
Discharge Time Constant (sec)	0.8 to 1.2			
Ground Isolation	Isolated from Mounting Surface			

#### **ENVIRONMENTAL**

Temperature Response (%) See Typical Temperature Response Curve

Operating Temperature (°C) -55 to +125 Storage Temperature (°C) -55 to +125

Humidity Hermetically Sealed

#### **PHYSICAL**

Ceramic (shear mode) Sensing Element Case Material Stainless Steel

10-32 Coaxial Receptacle **Electrical Connector** 

Weight (grams) 3.6 Mounting Adhesive

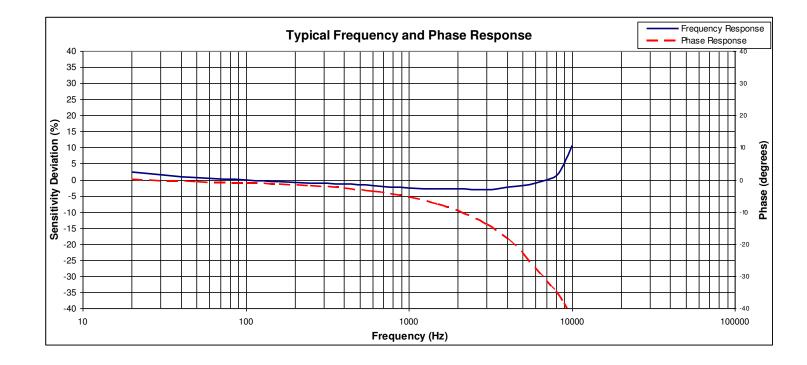
Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit

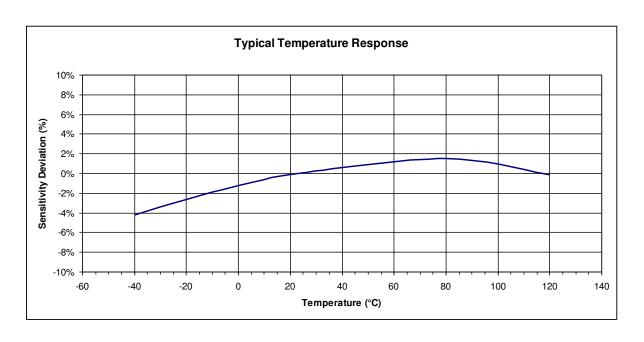
Optional accessories: 310-XXX Cable Assembly, 10-32 to 10-32 (XXX designates length in inches, 10ft standard) Cable Assembly, 10-32 to BNC (XXX designates length in inches, 10ft standard)

314-XXX

161A 4-Channel PE & IEPE Signal Conditioner

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## **ORDERING INFORMATION**

PART NUMBERING Model Number+Range

7108A-GGGG I I\_\_\_\_\_ Range (0050 is 50g)

Example: 7108A-0050

Model 7108A, 50g

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