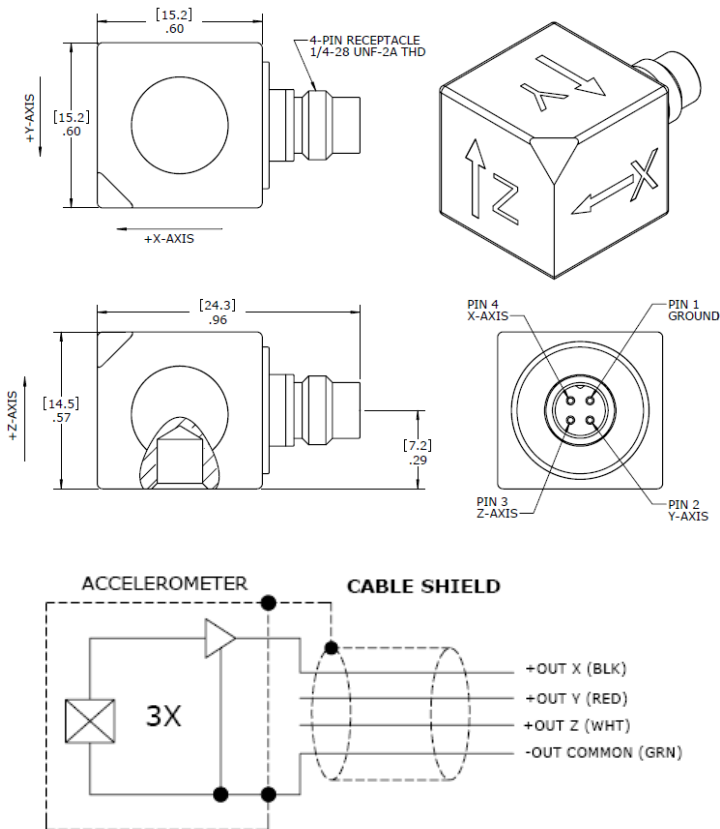




## DIMENSIONS



# MODEL 7132AHT ACCELEROMETER

## SPECIFICATIONS

- Triaxial IEPE Accelerometer
- -55°C to +163°C Range
- Hermetically Sealed, Titanium
- $\pm 50g$  to  $\pm 500g$  Dynamic Ranges

The Model 7132AHT is a high temperature miniature triaxial IEPE accelerometer available in  $\pm 50g$  to  $\pm 500g$  dynamic ranges. The accelerometer features a hermetically sealed titanium construction with a 4-pin Microtech connector interface. The model 7132HT incorporates stable piezo-ceramic crystals in annular shear mode with an operating temperature range of -55°C to +163°C. The accelerometer offers a flat frequency response up to >10kHz.

## FEATURES

- 4-pin Connector Interface
- Wide bandwidth up to 10kHz
- Adhesive or Stud Mounting
- -55°C to +163°C Operating Range
- Annular Shear Mode Crystals
- Stable Temperature Response

## APPLICATIONS

- Vibration & Shock Monitoring
- Laboratory Testing
- High Temperature Testing
- High Frequency Applications
- General Purpose Usage
- Automotive Testing

**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**

	±50	±100	±500	±2000	<b>Notes</b>
Range (g)	±50	±100	±500	±2000	
Sensitivity (mV/g)	100	50	10	2.5	±10%
Frequency Response (Hz)	1.5-6000	1.5-6000	1.5-7000	1.5-8000	±10%
Frequency Response (Hz)	0.8-8000	0.8-8000	0.8-9000	0.8-10000	±2dB
Natural Frequency (Hz)	37000	37000	37000	37000	
Non-Linearity (%FSO)	±1	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	<5	
Shock Limit (g)	5000	5000	5000	5000	

**ELECTRICAL**

Compliance Voltage (Vdc)	22 to 30	22 to 30	22 to 30	22 to 30	
Excitation Current (mA)	2 to 10	2 to 10	2 to 10	2 to 10	
Bias Voltage (Vdc)	9 to 13	9 to 13	9 to 13	9 to 13	Room Temperature
Bias Voltage (Vdc)	6 to 15	6 to 15	6 to 15	6 to 15	-55 to +163°C
Output Impedance (Ω)	<100	<100	<100	<100	
Full Scale Output Voltage (V)	±5	±5	±5	±5	
Residual Noise (g RMS)	0.001	0.0012	0.002	0.005	Broadband 1Hz to 10kHz
Warm-up Time (sec)	<1.5				To Within 10% of Bias
Ground Isolation <sup>1</sup>	Case Grounded				

**ENVIRONMENTAL**

Temperature Response (%)	See Typical Temperature Response Curve
Operating Temperature (°C)	-55 to +163
Storage Temperature (°C)	-55 to +163
Humidity	Hermetically Sealed

**PHYSICAL**

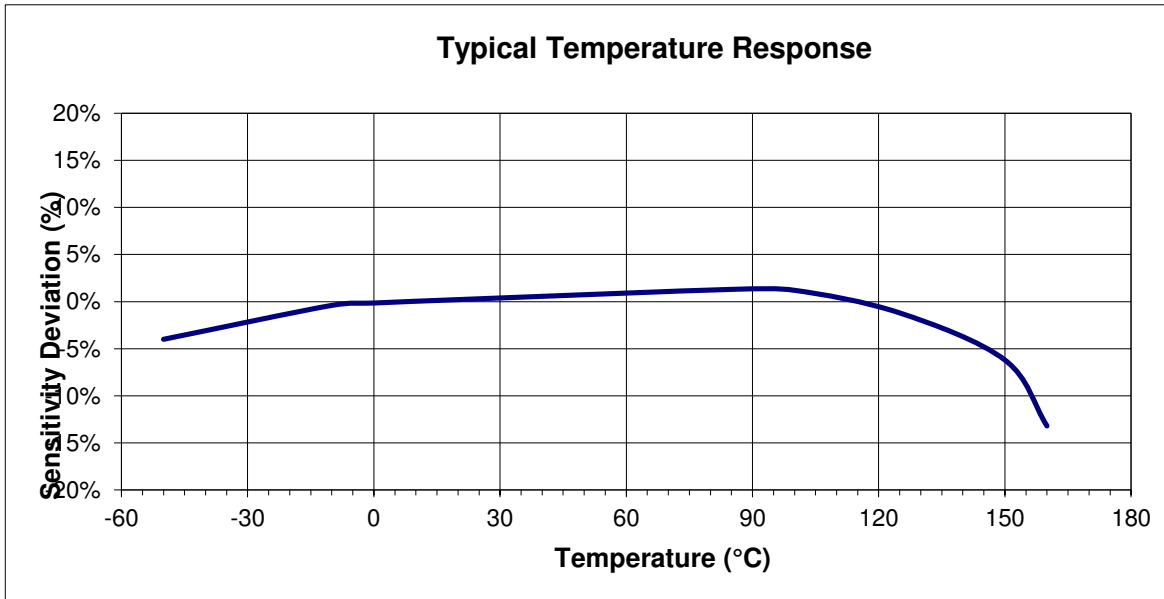
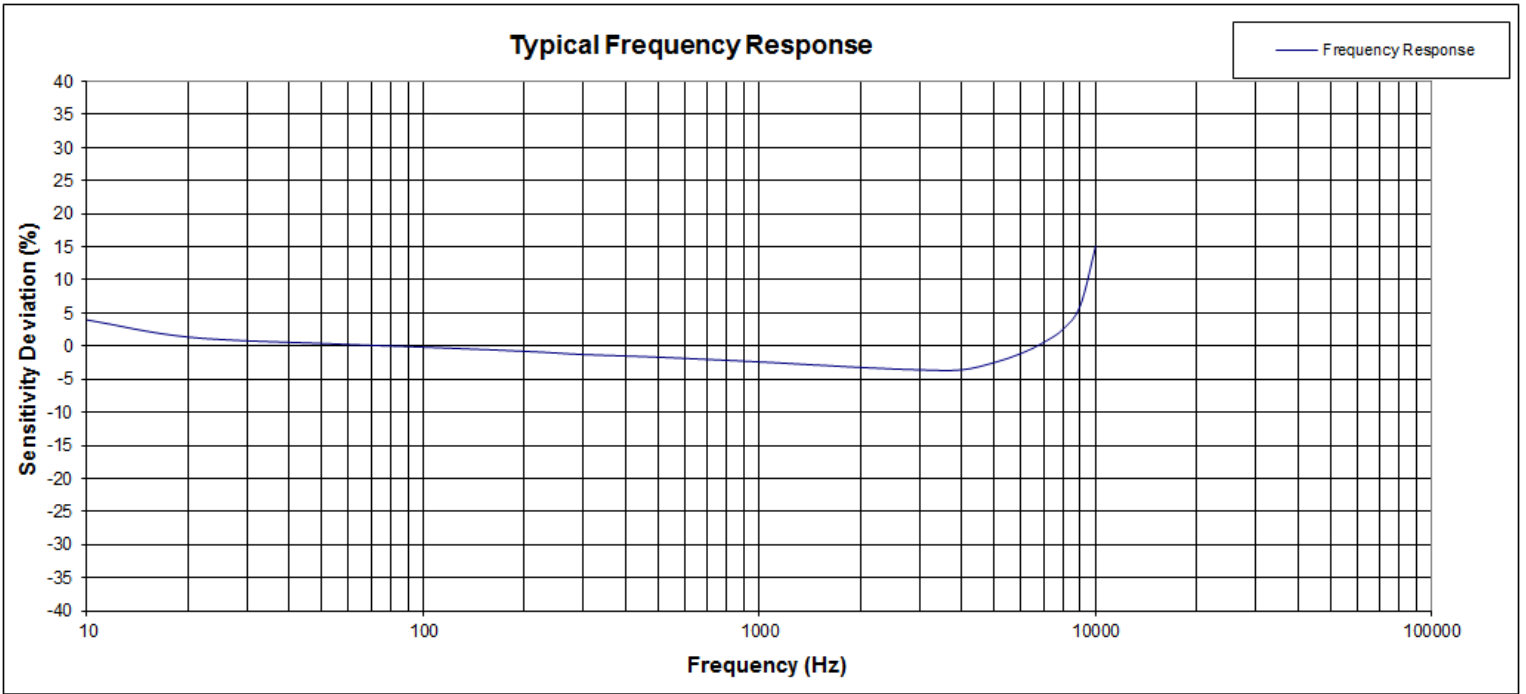
Sensing Element	Ceramic (shear mode)
Case Material	Titanium
Electrical Connector	4-Pin Receptacle
Weight (grams)	15 (17 for -03 Case Isolation option)
Mounting	Adhesive or Stud Mount Option

<sup>1</sup> For Isolated Case Order the -03 Option.

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

**Optional accessories:** 315HT-XXX Cable Assembly, 4-pin ¼-28 to 3x BNC (XXX designates length in inches, 10ft standard)  
 161A 4-Channel PE & IEPE Signal Conditioner  
 AC-A03530 Magnetic Mounting Adaptor (for -02 thread option)

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ORDERING INFORMATION

PART NUMBERING Model Number+Range

7132AHT-GGGG-XX  
| | Optional Thread Dash Number  
| Range (0050 is 50g)

Dash Number	Thread Options
-01	M5 x 0.8 6g
-02	#10-32 UNF-2B
-03	Case Isolated

Example: 7132AHT-0050  
Model 7132AHT, 50g, No Option

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