

Model 7132A Accelerometer



Triaxial IEPE Accelerometer
Miniature Cube
Hermetically Sealed, Titanium
 $\pm 50g$ to $\pm 2000g$ Dynamic Ranges



The **Model 7132A** is a miniature triaxial IEPE accelerometer available in $\pm 50g$ to $\pm 2000g$ dynamic ranges. The accelerometer features a hermetically sealed titanium construction with a 4-pin Microtech connector interface. The model 7132A incorporates stable piezo-ceramic crystals in annular shear mode which provide a flat frequency response up to $>12kHz$.

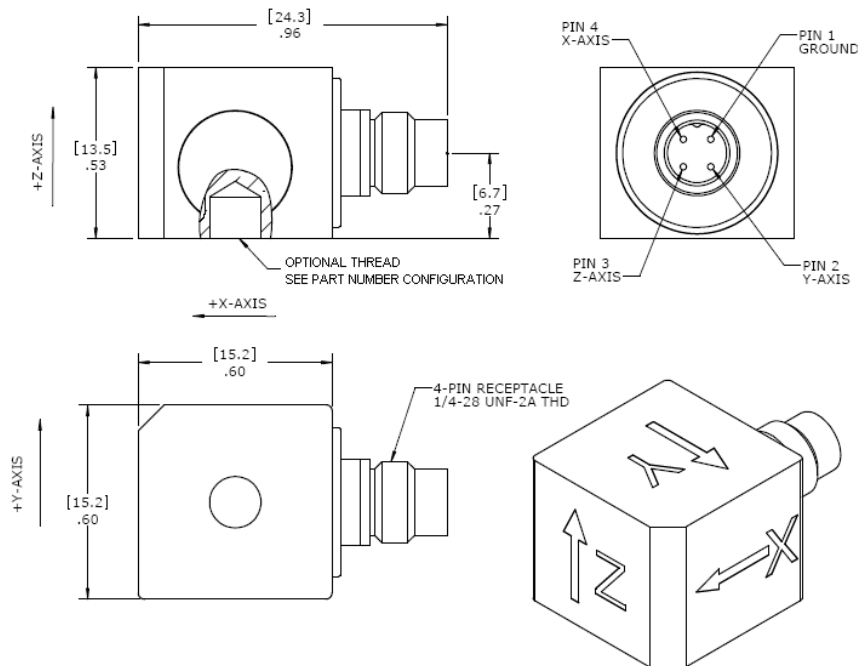
FEATURES

- 4-pin Connector Interface
- Wide bandwidth up to 12kHz
- Adhesive Mounting
- Miniature Triaxial
- Annular Shear Mode Crystals
- Stable Temperature Response

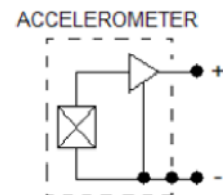
APPLICATIONS

- Vibration & Shock Monitoring
- Laboratory Testing
- Modal Applications
- High Frequency Applications
- General Purpose Usage
- Stress Screening

dimensions



SCHEMATIC (EACH CHANNEL)



Model 7132A Accelerometer

performance specifications

All values are typical at +24°C, 100Hz and 4mA excitation 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.

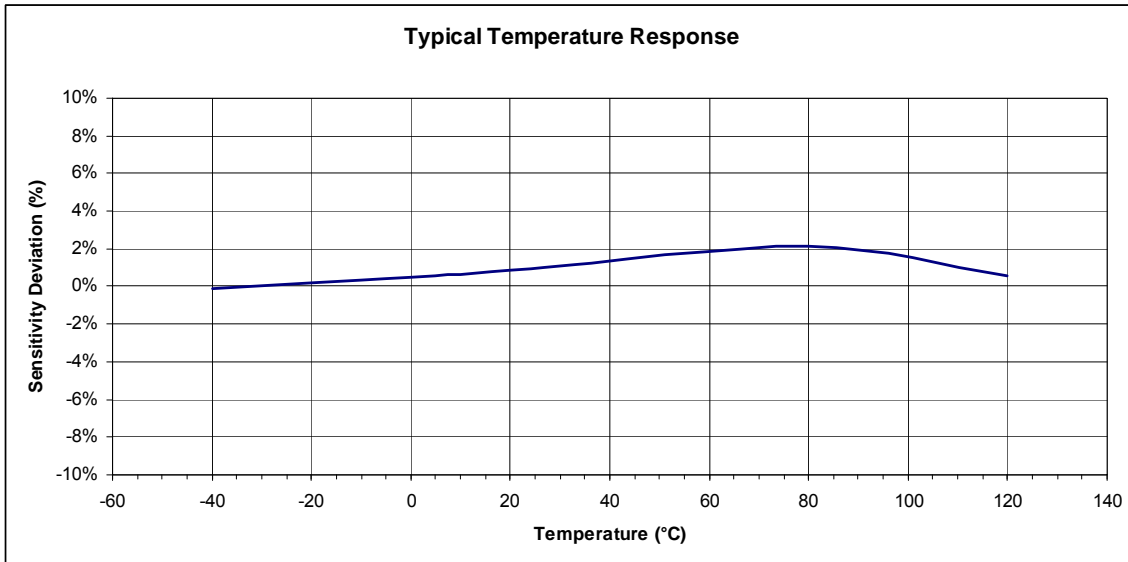
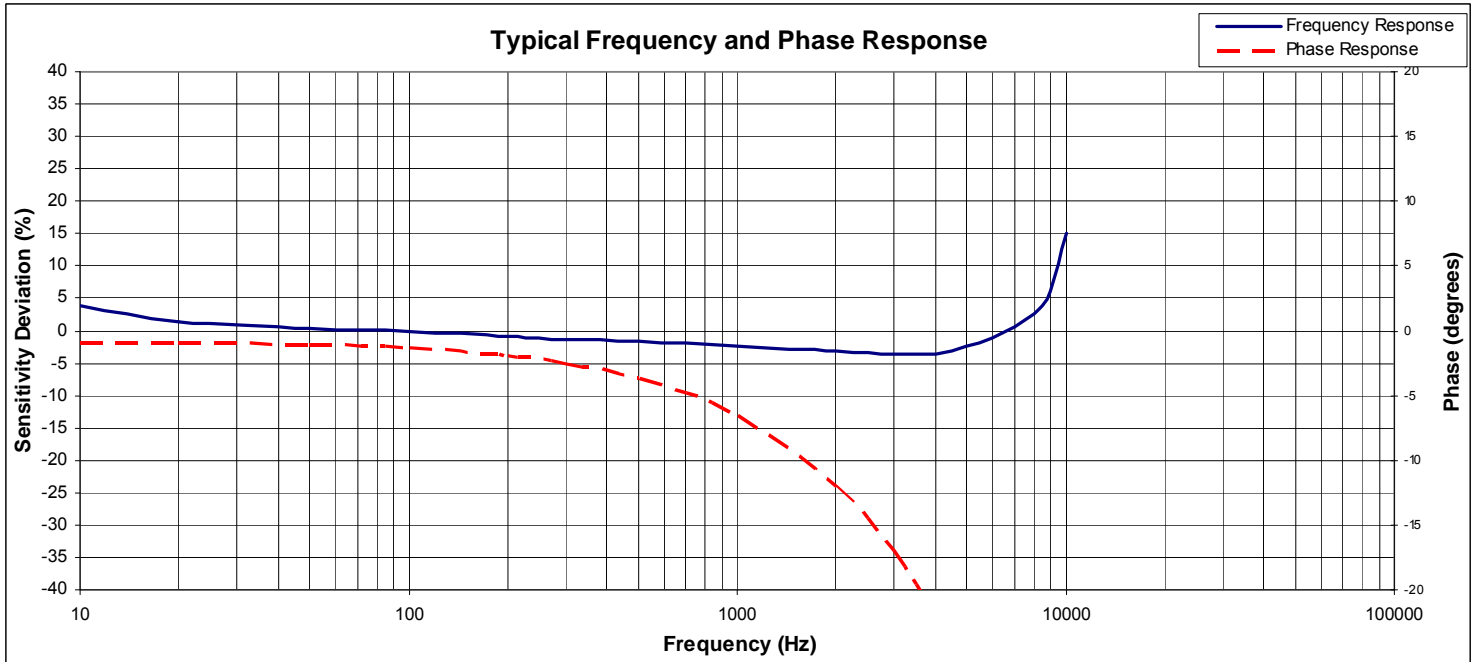
Parameters

	±50	±100	±500	±2000	Notes
DYNAMIC					
Range (g)	±50	±100	±500	±2000	
Sensitivity (mV/g)	100	50	10	2.5	±10%
Frequency Response (Hz)	1-7000	1-7000	1-8000	1-10000	±10%
Frequency Response (Hz)	0.4-9000	0.4-9000	0.4-10000	0.4-12000	±2dB ²
Natural Frequency (Hz)	37000	37000	37000	42000	
Non-Linearity (%FSO)	±1	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	<5	
Shock Limit (g)	10000	10000	10000	10000	
ELECTRICAL					
Compliance Voltage (Vdc)	18 to 30	18 to 30	18 to 30	18 to 30	
Excitation Current (mA)	2 to 10	2 to 10	2 to 10	2 to 10	
Bias Voltage (Vdc)	8 to 12	8 to 12	8 to 12	8 to 12	Room Temperature
Bias Voltage (Vdc)	6 to 13	6 to 13	6 to 13	6 to 13	-55 to +125°C
Output Impedance (Ω)	<100	<100	<100	<100	
Full Scale Output Voltage (V)	±5	±5	±5	±5	
Residual Noise (g RMS)	0.0005	0.0006	0.001	0.0025	Broadband 1Hz to 10kHz
Discharge Time Constant (sec)	0.8 to 1.2				
Ground Isolation	Case Grounded				
ENVIRONMENTAL					
Temperature Response (%)	See Typical Temperature Response Curve				
Operating Temperature (°C)	-55 to +125				
Storage Temperature (°C)	-55 to +125				
Humidity	Hermetically Sealed				
PHYSICAL					
Sensing Element	Ceramic (shear mode)				
Case Material	Titanium				
Electrical Connector	4-Pin Receptacle				
Weight (grams)	14				
Mounting	Adhesive				
Calibration supplied:	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit ²			
Optional accessories:	315-XXX 161	Cable Assembly, 4-pin ¼-28 to 3x BNC (XXX designates length in inches, 10ft standard) Three Channel PE & IEPE Signal Conditioner			

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performance specifications



ordering info

PART NUMBERING Model Number+Range

7132AT-GGGG-XX

| | | | Optional Thread Dash Number
| | | | Range (0050 is 50g)
| | | | TEDS compliant to IEEE 1451.4 when 'T' option is included

Dash Number Thread Options
-01 #5-40 UNC-2B
-02 #10-32 UNF-2B
-03 M3 x 0.5 6g

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