

Model 7132A & 7132B Accelerometer



Triaxial IEPE Accelerometer
Miniature Cube
Hermetically Sealed, Titanium
±10g to ±2000g Dynamic Ranges



7132A Pictured

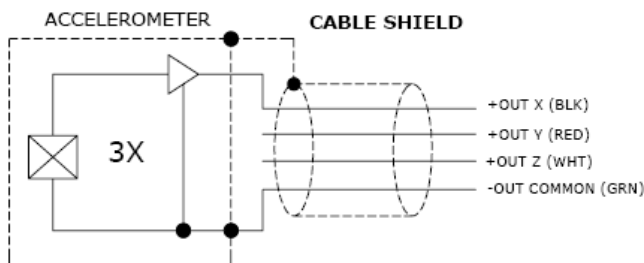
The **Model 7132A** is a miniature triaxial IEPE accelerometer available in ±10g to ±2000g dynamic ranges. The accelerometer features a hermetically sealed titanium construction with a 4-pin Microtech connector interface. The model 7132A incorporates stable piezo-ceramic crystals in annular shear mode which provide a flat frequency response up to >12kHz. The model 7132B offers identical performance with an integral cable option.

FEATURES

- -55°C to +125°C Operating Range
- Wide bandwidth up to 12kHz
- Adhesive Mounting
- Miniature Triaxial
- Annular Shear Mode Crystals
- Stable Temperature Response

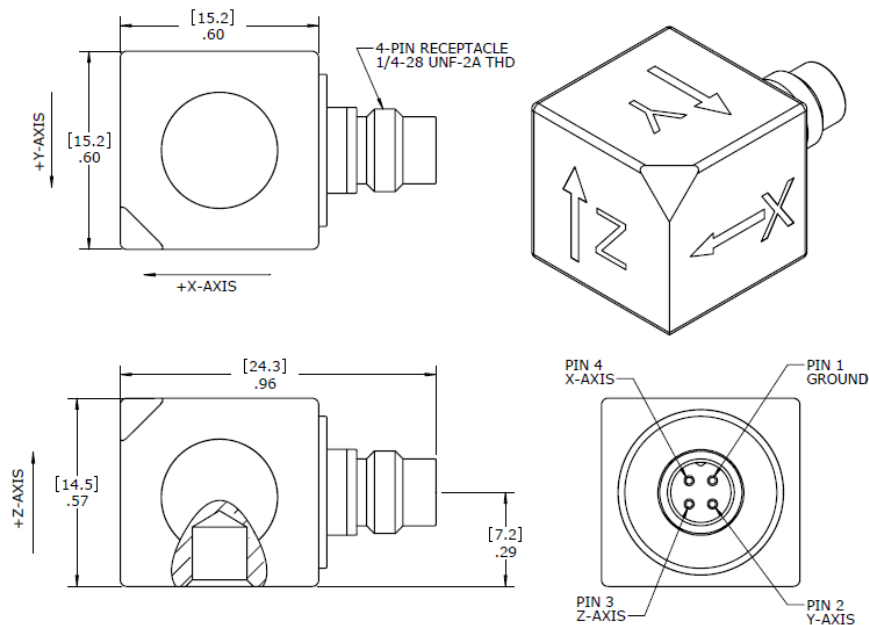
APPLICATIONS

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

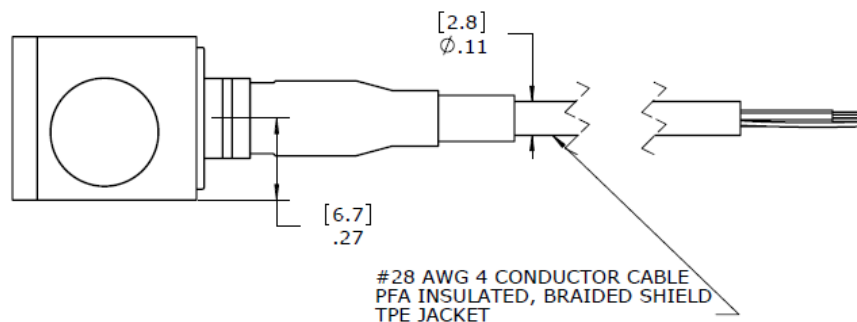


dimensions

7132A Dimensions



7132B Dimensions



Model 7132A & 7132B Accelerometer

performance specifications

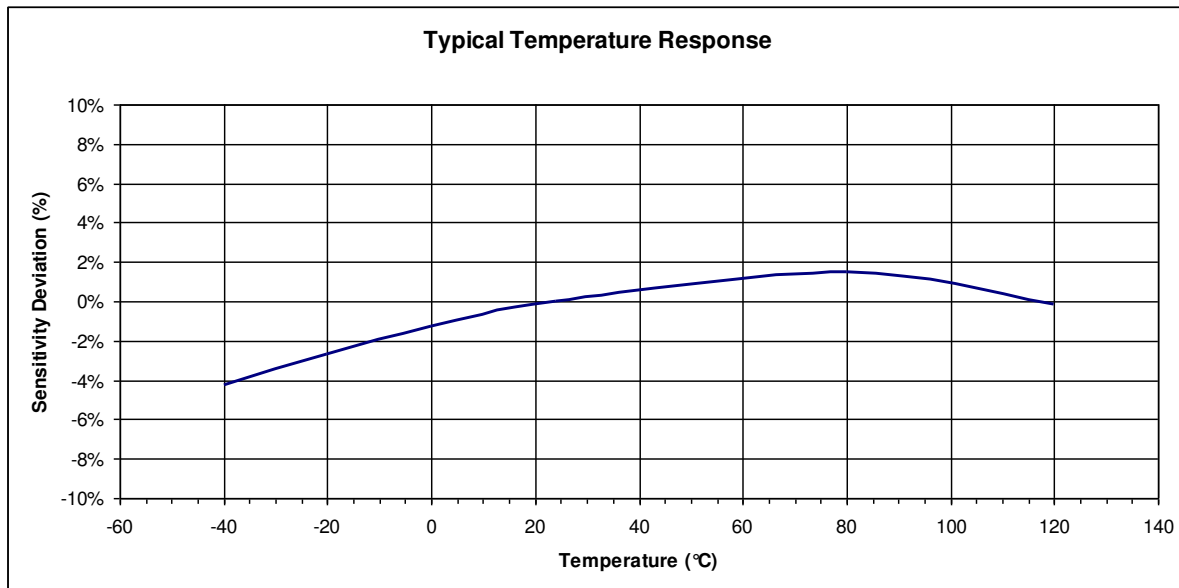
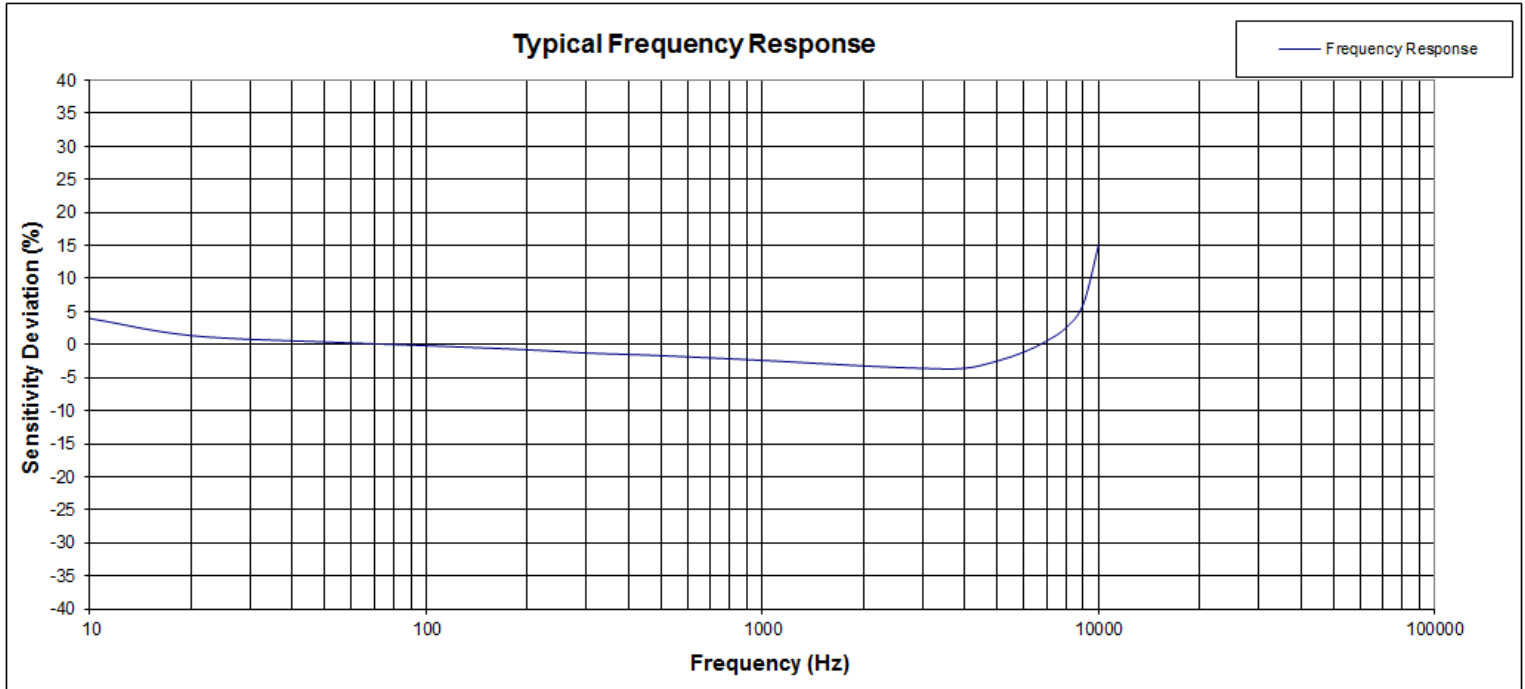
All values are typical at +24 °C, 100Hz and 4mA excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice. Standard product parameters are described in PSC-1003 for Plug & Play AC Accelerometers.

Parameters						Notes
DYNAMIC						
Range (g)	±10	±50	±100	±500	±2000	
Sensitivity (mV/g)	500	100	50	10	2.5	±10%
Frequency Response (Hz)	2-6000	1-7000	1-7000	1-8000	1-10000	±10%
Frequency Response (Hz)	1.5-8000	0.4-9000	0.4-9000	0.4-10000	0.4-12000	±2dB
Natural Frequency (Hz)	37000	37000	37000	37000	42000	
Non-Linearity (%FSO)	±1	±1	±1	±1	±1	
Transverse Sensitivity (%)	<5	<5	<5	<5	<5	
Shock Limit (g)	5000	5000	5000	5000	5000	
Residual Noise (g RMS)	0.0003	0.0005	0.0006	0.001	0.0025	Broadband 1Hz to 10kHz
ELECTRICAL						
Compliance Voltage (Vdc)	18 to 30					
Excitation Current (mA)	2 to 10					
Bias Voltage (Vdc)	8 to 12					Room Temperature
Bias Voltage (Vdc)	6 to 13					-55 to +125 °C
Output Impedance (Ω)	<100					
Full Scale Output Voltage (V)	±5					
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, IP67					
PHYSICAL						
Sensing Element	Ceramic (shear mode)					
Case Material	Titanium					
Electrical Connector	7132A; 4-Pin Receptacle 7132B; 4x #28 AWG Conductors, Braided Shield, TPE Jacket					
Weight	15grams (50g-2000g ranges), 20grams (10g range)					
Mounting	Adhesive (stud mount option)					
Calibration supplied:	CS-FREQ-0100	NIST Traceable Amplitude Calibration from 20Hz to ±2dB Frequency Response Limit				
Optional accessories:	315-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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Model 7132A & 7132B Accelerometer

performance specifications



ordering info

PART NUMBERING Model Number+Range

7132A-GGGG-XX

| | | Optional Thread Dash Number
| | Range (0050 is 50g)
| Connection Option (A for 4-pin Microtech, B for integral cable)

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

Example: 7132A-0050
Model 7132A, 4-Pin Microtech Connector, 50g Range