SINOCERA®

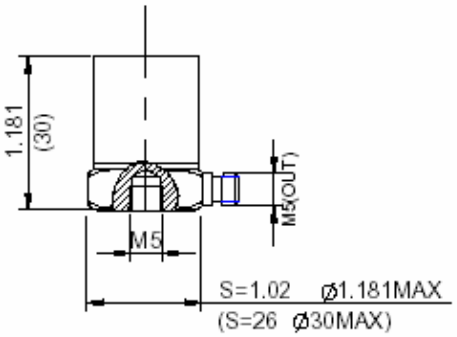
PIEZOELECTRIC ACCELEROMETER MODEL: CA-YD-132

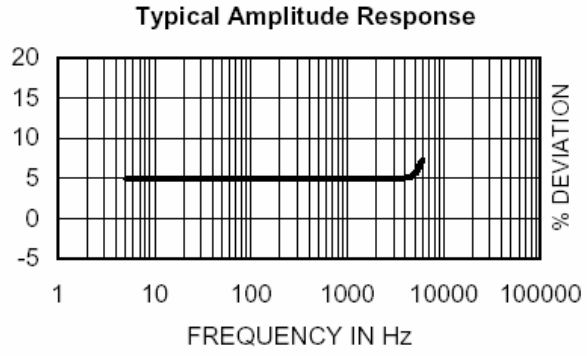
- **Very High Sensitivity at 1000 pC/g**
- **Low-g Measurement Applications**
- **Frequency Response Down to 0.3 Hz**
- **Side Connector**
- **Stud Mounted**

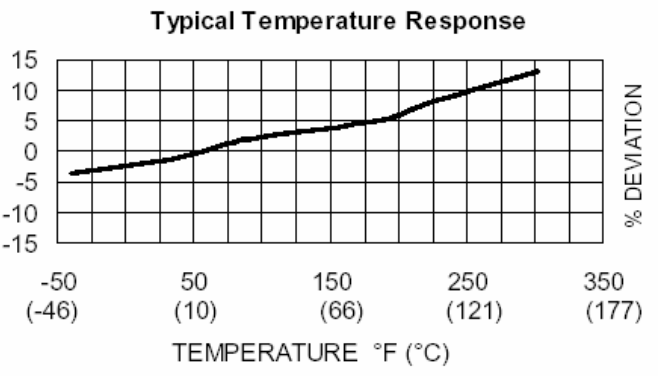
Description

The Sensors Model 132 is a stud mounted piezoelectric accelerometer designed for general vibration measurement on structures and objects. The high sensitivity (1000 picocoulombs per g) makes it very useful low-g measurement applications. The accelerometer is a self-generating device that requires no external power source for operation.

The Model 132 design is sealed against external contamination. Signal ground is connected to the outer case of the unit. When used with an isolated mounting stud, the accelerometer is electrically isolated from ground. The accelerometer features a M5 top connector that is used with low-noise coaxial cable for error-free operation.







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SPECIFICATIONS

The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C) and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

	UNITS	
DYNAMIC CHARACTERISTICS		
Axial Sensitivity	pC/g	1000 (850 minimum)
Transverse Sensitivity	%	≤ 5
Frequency Response		See Typical Amplitude Response
Resonance Frequency	Hz	7,000
Amplitude Response [1]		
± 5 %	Hz	1 – 2,000
± 1 dB	Hz	0.3 – 2,500
Temperature Response		See Typical Temperature Response
Amplitude Linearity	%	< 1
ELECTRICAL CHARACTERISTICS		
Output Polarity		Acceleration directed from the base into the transducer is defined as positive
Resistance	GΩ	>1
Capacitance	pF	500
Grounding		Signal ground connected to case
ENVIRONMENTAL CHARACTERISTICS		
Temperature Range		-40°F to 302°F (-40°C to +150°C)
Humidity		Epoxy sealed
Shock Limit	g pk	200
Base Strain	equiv. g pk/μ strain	0.0002
Magnetic Field Sensitivity	equiv. g rms/gauss (/T)	1.2E-5 (1.2)
Thermal Transient Sensitivity	equiv. g pk/°F (/°C)	0.01 (0.018)
PHYSICAL CHARACTERISTICS		
Weight	oz (grams)	3.5 (100)
Case Material		Stainless Steel
Mounting		M5, torque 2 N-m (18 lbf-in)
Piezoelectric Material		PZT-5
Structure		Annular Shear
Output Connector		M5 receptacle, side mounting

ACCESSORIES

Included:
9002-120 Cable, Low Noise, Coaxial M5/10-32, 10ft (3.3 m)
9504-1 M5/10-32 Mounting Stud
Calibration Certificate

Optional:
9001-120 Cable, Low Noise, Coaxial M5/M5, 10 ft (3.3 m)
9504-4 M5/M5 Mounting Stud
9505-1 M5/10-32 Isolated Mounting Stud

NOTES

1. Low end response of the transducer is a function of its electronics.