SINOCERA

Global Sensor Technology

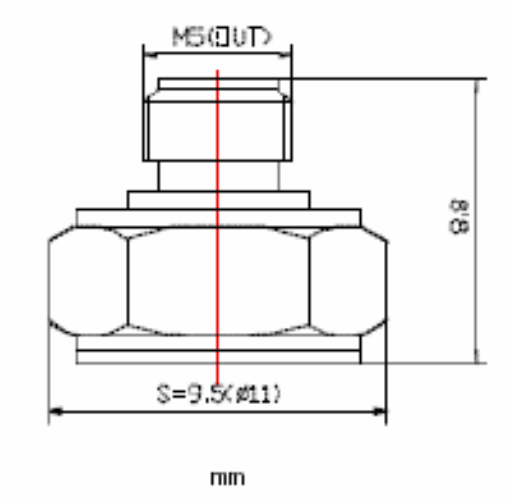
Lightweight Piezoelectric Accelerometer

Model: CA-YD-160

Description

The Sensors Model 160 is a small piezoelectric accelerometer for vibration measurement on small structures and objects. Its light weight of 2.8 grams (without the low-noise cable) effectively minimizes mass loading. The accelerometer is a self-generating device that requires no external power source for operation.

The Model 160 exhibits a broad frequency response range and a high resonance frequency. Low-noise, flexible coaxial cables are used for error-free operation.



mm

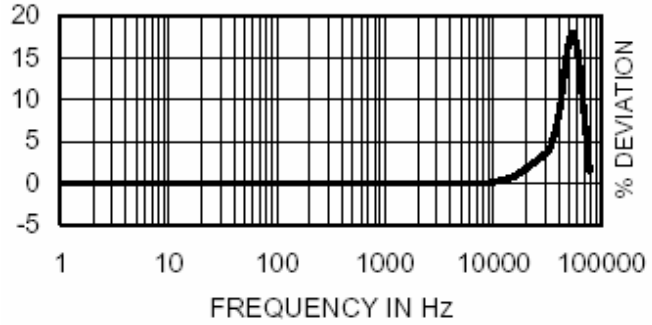
	UNITS	
DYNAMIC CHARACTERISTICS		
Axial Sensitivity	pC/g	2
Transverse Sensitivity	%	≤ 5
Frequency Response		See Typical Amplitude Response
Resonance Frequency	Hz	21,000
Amplitude Response [1]		
± 5 %	Hz	1 to 5000
± 1 dB	Hz	0.5 to 7000
Temperature Response		See Typical Temperature Response
Amplitude Linearity	%	< 1
ELECTRICAL CHARACTERISTICS		
Output Polarity		Acceleration directed from the base into the transducer is defined as positive
Resistance	GΩ	>1
Capacitance	pF	300
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	2000
Base Strain	equiv. g pk/μ strain	0.002
Magnetic Field Sensitivity	equiv. g rms/gauss (/T)	1E-5 (1)
Thermal Transient Sensitivity	equiv. g pk/°F (/°C)	0.018 (0.01)
PHYSICAL CHARACTERISTICS		
Weight	oz (grams)	0.1 (2.8)
Case Material		Stainless Steel
Mounting		Adhesive [2]
Piezoelectric Material		PZT-5
Structure		Annular Shear
Output Connector		M5 receptacle, top mounting

ACCESSORIES

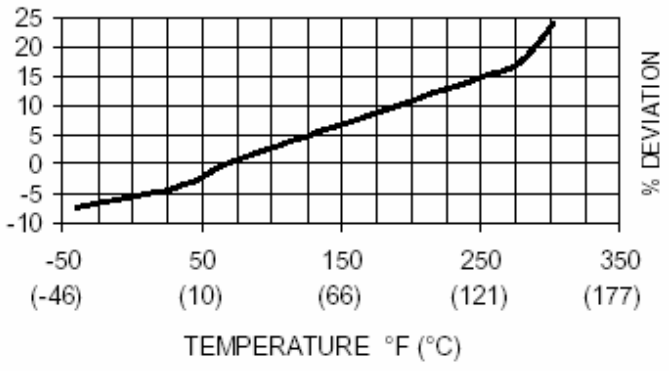
Included:
9002-120 Low Noise, Coaxial M5/10-32, 10ft (3.3 m)
Calibration Certificate

Optional:
9001-120 Low Noise, Coaxial M5/M5, 10 ft (3.3 m)

Typical Amplitude Response



Typical Temperature Response



Global Sensor Technology (UK) Ltd.
Registered Office, 26 Fairholme Road, Manchester, M20 4NT, UK.
Tel: +44 161 446 4848 | www.globalsensortech.com | sales@globalsensortech.com
VAT Reg. 871973482 | Company No. 07287142