B00CGX

Shock Accelerometer

DETAILS

Model B00CGX Single Axis Shock Acceleration Sensor utilizes a unique shear structure for smaller base strains and lateral sensitivity, and high quality piezoelectric ceramics with long term stability to ensure years of accurate measurements. Unique double shielded construction with insulation to ground and one-piece screws for strength and reliability.

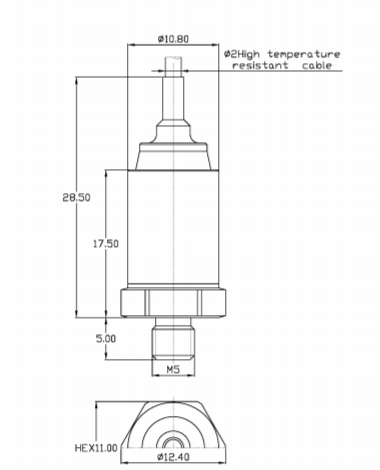
FEATURES

- Special shear structure, designed for high vibration and shock testing
- Memory alloy fasteners
- Stable and reliable, high frequency response characteristics

TYPICAL APPLICATIONS

- Drop test
- Burst impact test

Fig_1 Dimensions of B00CGX



B00CGX

Fig_2 Typical Temperature Response

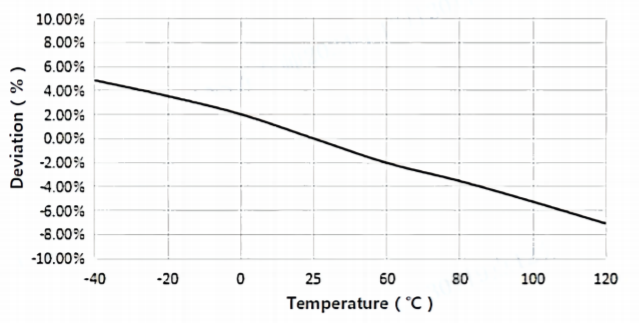
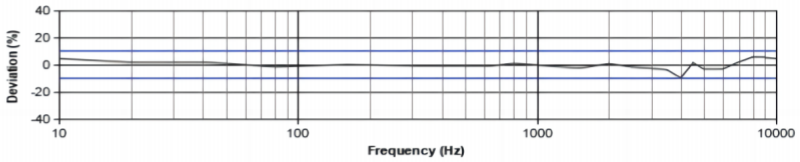


Fig_3 Typical Frequency Response



Specifications-B00CGX

MODEL NUMBER		UNIT	B00CG6	B00CG1	B00CG2	B00CG3
PERFORMANCE						
Sensitivity [1]		mV/g	0.1	0.25	0.5	1
		mV/(m/s²)	0.01	0.025	0.05	0.1
Measurement Range		g	±50000	±20000	±10000	±5000
Broadband Resolution [2]		g rms	0.1	0.04	0.02	0.01
Non-Linearity [3]		%	per10000g 3%			3%
Frequency Range	± 5%(Hz)	Hz	-	-	-	-
	±10%(Hz)		10-15k	10-11k	10-11k	5-11k
Resonance Frequency [2]		Hz	≥100k	≥70k	≥70k	≥60k
Discharge Time Constant [2]		s	≤0.5			
Transverse Sensitivity		%	≤5			
ELECTRICAL						
Excitation Voltage		VDC	20-30			
Constant Current Excitation		mA	2-20			
Output Impedance		Ω	≤100			
Output Bias Voltage		V	8-12			
Electrical Isolation		Ω	≥1×10⁸			
Spectral Noise [2]		μg/√Hz	30000	6000	3000	1500
			8000	1600	800	400
			4000	800	400	200
ENVIRONMENTAL						
Sinusoidal Vibration Limit [4]		g	-	-	-	6000
Shock Limit [4]		g	80000	24000	12000	10000
Temperature Range		℃	-50~120			
		℉	-58~248			
Temperature Response [2]		%/℃	-0.1	-0.07		
PHYSICAL						
Sealing		-	Laser welding IP68			
Sensing Element		-	Piezoelectric ceramics			
Housing Material		-	Titanium Alloy			
Size		mm	HEX 11.00×33.50			
		in	HEX 0.433×1.319			
Electrical Connector		-	Top connected cable			
Mounting Thread		-	M5/M6 Jointed thread			
Weight [2]		g	10	10	10	10
		oz	0.353	0.353	0.353	0.353
TEDS Optional [5]		-	No			

Additional Information

Note:

1. @ 160Hz, 24VDC, 4mA conditions
2. Typical values
3. JBT 6822-2018 7.12.1 Vibration Testing Method
4. References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
5. Some products may have changes in size after adding TEDS

B00CGX

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS

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