BXXY36

Universal Testing Type Accelerometer

DETAILS

BXXY36 3-Axis micro-miniature acceleration sensor with piezoelectric ceramic shear structure with wide band frequency response and customised ASIC chip conditioning circuit. The housing is made of less dense titanium alloy and laser welded.

FEATURES

·Wide bandwidth frequency response

·Micro-miniature，Lightweight

TYPICAL APPLICATIONS

·Drop test and package test

·Testing of equipment with restricted installation space

·Testing of small components

·Environmental stress screening test

·Powertrain NVH testing

Fig_1Dimensions of BXXY36

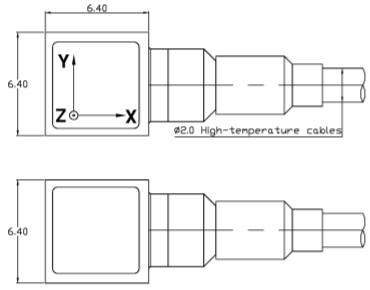

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Fig_2 Typical Temperature Response

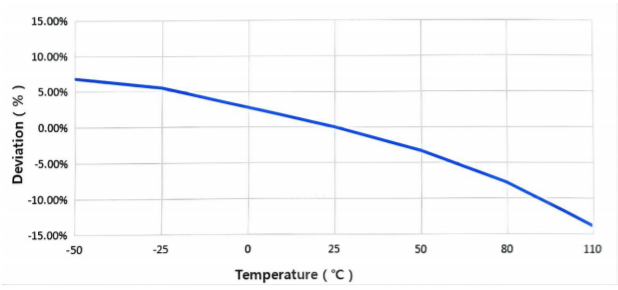
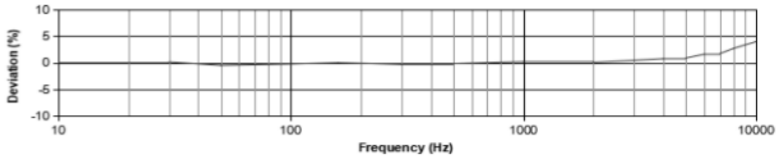


Fig_3 Typical Frequency Response



Specifications-BXXY36

MODEL NUMBER		UNIT	B01Y36	B02Y36
PERFORMANCE				
Sensitivity (±20%) [1]		mV/g	5	10
		mV/(m/s²)	0.5	1
Measurement Range		g	±1000	±500
Broadband Resolution [2]		g rms	0.002	0.001
Non-Linearity [3]		%	1	
Frequency Range	±5%	Hz	5-10k	5-8k
	±10%		2-12k	2-10k
Resonance Frequency [2]		Hz	≥50k	≥50k
Discharge Time Constant [2]		s	≤1	
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	-	
Spectral Noise [2]		μg/√Hz	300	150
			80	40
			40	20
ENVIRONMENTAL				
Sinusoidal Vibration Limit [4]		g rms	2000	1500
Shock Limit [4]		g pk	3000	2000
Temperature Range		°C	-50~100	
		°F	-58~212	
Temperature Response [2]		%/°C	-0.07	-0.13
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Titanium Alloy	
Size		mm	6.40 Cube	
		in	0.252 Cube	
Electrical Connector		-	Connected cable 4-pin	
Mounting Thread		-	Adhesive	
Weight [2]		g	1.5	1.5
		oz	0.053	0.053
TEDS Optional [5]		-	No	

Additional Information

Note:

1. @ 160Hz, 1g
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

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Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS

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