

Universal Testing Type Accelerometer

DETAILS

BXXBMX series micro-small acceleration sensor built-in micro-small impedance converter, can be vibration process charge signal into a voltage signal, this type of sensor has excellent long-term stability and repeatability. The casing is laser welded with titanium alloy, characterized by small size and light weight.

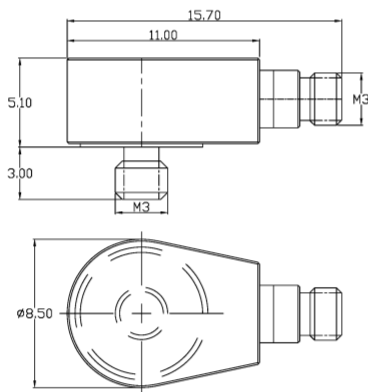
FEATURES

- IEPE Universal Acceleration Sensor
- Standard series with multiple range options
- Shear structure
- Broadband response

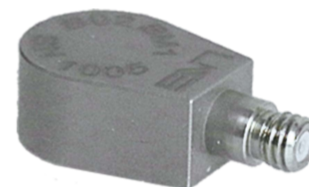
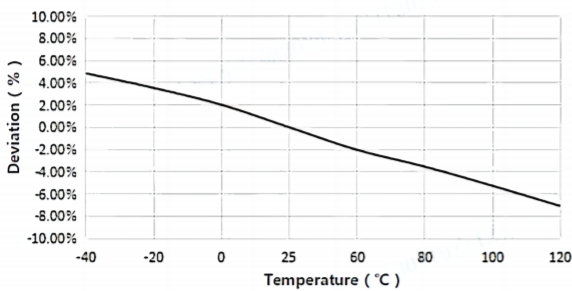
TYPICAL APPLICATIONS

- PC board testing
- ESS
- Space-constrained vibration measurements

Fig_1 Dimensions of BXXBMX

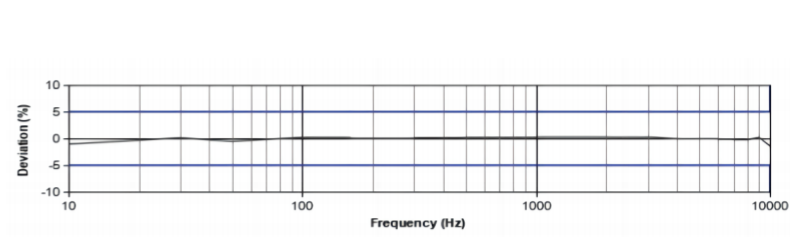


Fig_2 Typical Temperature Response



BXXBMX

Fig_3 Typical Frequency Response



Specifications-BXXBMX

MODEL NUMBER	UNIT	B00BM1	B00BM2	B05BM3	B06BM3
PERFORMANCE					
Sensitivity ¹	mV/g	1	2	50	100
	mV/(m/s ²)	0.1	0.2	5	10
Measurement Range	g	±5000	±2500	±100	±50
Broadband Resolution ²	g rms	0.01	0.005	0.0002	0.0001
Non-Linearity ³	%	1			
Frequency Range	± 5%(Hz)	-	-	1-10k	1-10k
	±10%(Hz)	5-10k	5-10k	0.5-11k	0.5-11k
Resonance Frequency ²	Hz	≥60k	≥60k	≥38k	≥37k
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	1500	750	30	15
		400	200	8	4
		200	100	4	2
ENVIRONMENTAL					
Sinusoidal Vibration Limit ⁴	g	6000	4000	800	400
Shock Limit ⁴	g	10000	8000	2000	1000
Temperature Range	°C	-50-120			
	°F	-58-248			
Temperature Response ²	%/°C	-0.07			-0.1
PHYSICAL					
Sealing	-	Laser welding IP68			
Sensing Element	-	Piezoelectric ceramics			
Housing Material	-	Titanium Alloy			
Size	mm	15.7×8.5×5.1			
	in	0.618×0.335×0.201			
Electrical Connector	-	M3 Side			
Mounting Thread	-	M3 Jointed thread			
Weight ²	g	1.5	1.5	1.7	2.2
	oz	0.053	0.053	0.060	0.078
TEDS Optional ⁵	-	Nb			

Additional Information

Note:

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

BXXBMX

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS



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