

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.

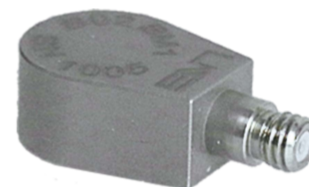
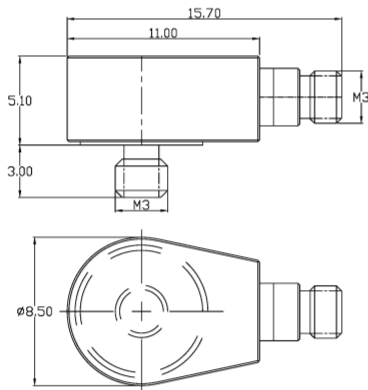
FEATURES

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

TYPICAL APPLICATIONS

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

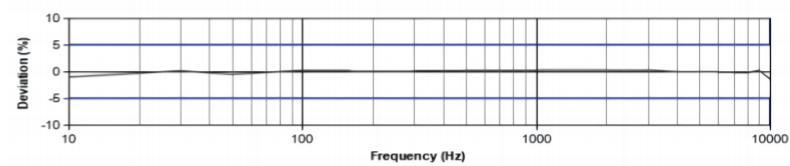
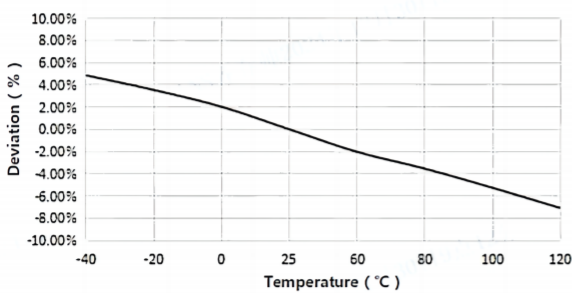
Fig_1 Dimensions of BXXBMX



BXXBMX

Fig_2 Typical Temperature Response

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	10Hz	μg/√Hz	1500	750	30	15
	100Hz	μg/√Hz	400	200	8	4
	1000Hz	μg/√Hz	200	100	4	2
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴	g rms	6000	4000	800	400	
Shock Limit ⁴	g pk	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

OPTIONAL VERSIONS

- A: 10-32 Output Connector
- E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS



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