

Microminiature 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.

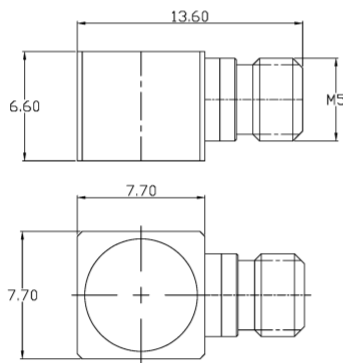
FEATURES

- Built-in micro integrated circuits
- Small size and light weight
- High frequency response characteristics

TYPICAL APPLICATIONS

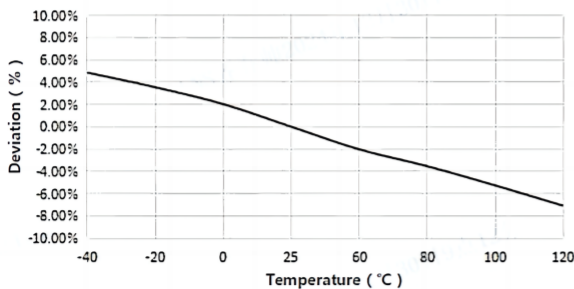
- PC board test
- ESS
- Space-constrained vibration measurements

Fig_1 Dimensions of BXXBM6

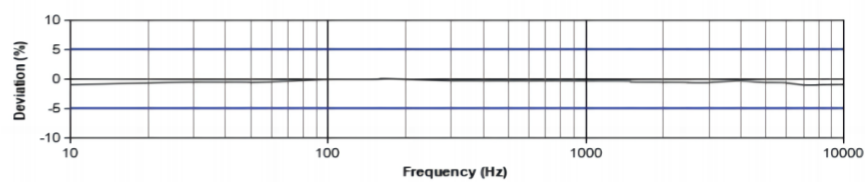


BXXBM6

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-BXXBM6

MODEL NUMBER	UNIT	B05BM6	B06BM6
PERFORMANCE			
Sensitivity ¹	mV/g	50	100
	mV/(m/s ²)	5	10
Measurement Range	g	±100	±50
Broadband Resolution ²	g rms	0.0002	0.0001
Non-Linearity ³	%	1	
Frequency Range	± 5%(Hz)	1-12k	1-10k
	±10%(Hz)	0.5-14k	0.5-12k
Resonance Frequency ²	Hz	≥40k	≥38k
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	30	15
		8	4
		4	2
ENVIRONMENTAL			
Sinusoidal Vibration Limit ⁴	g	800	400
Shock Limit ⁴	g	2000	1000
Temperature Range	°C	-50-120	
	°F	-58-248	
Temperature Response ²	%/°C	-0.07	
PHYSICAL			
Sealing	-	Laser welding IP68	
Sensing Element	-	Piezoelectric ceramics	
Housing Material	-	Titanium Alloy	
Size	mm	7.70×7.70×6.60	8.50×8.50×6.60
	in	0.303×0.303×0.260	0.335×0.335×0.260
Electrical Connector	-	M5 Side (Opt. 10-32)	
Mounting Thread	-	Adhesive	
Weight ²	g	2.1	2.7
	oz	0.074	0.095
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

BXXBM6

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONAL VERSIONS

-A: 10-32 Output Connector

COMPLIANCE WITH STANDARDS



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