

Universal Testing Type Accelerometer

DETAILS

Charge micro-miniature acceleration sensor, the use of piezoelectric ceramic shear structure, with a wide band frequency response, the sensor has excellent long-term stability and repeatability. The casing is laser welded with titanium alloy, characterized by small size and light weight.

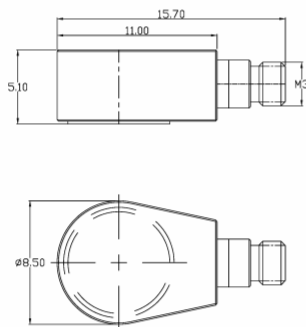
FEATURES

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

TYPICAL APPLICATIONS

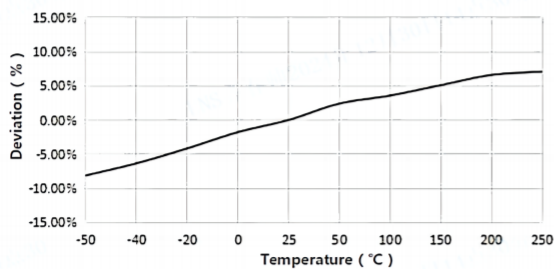
- PC board testing
- ESS
- Vibration measurements in space-constrained areas

Fig_1 Dimensions of C00BM1 C01BM1

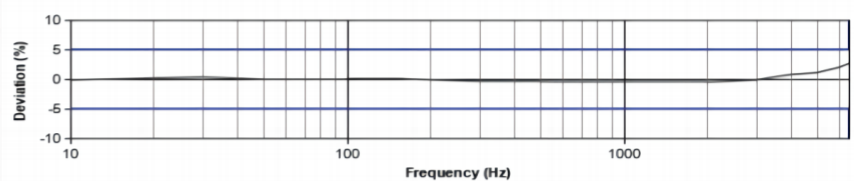


C00BM1 C01BM1

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-CXXBM1

MODEL NUMBER		UNIT	C00BM1	C01BM1
PERFORMANCE				
Sensitivity ¹		pC/g	1	4
		pC/(m/s ²)	0.1	0.4
Measurement Range		g	±5000	±2500
Non-Linearity ³		%	1	
Frequency Range	± 5%	Hz	3-10k	1-6.5k
	±10%		2-12k	0.5-10k
Resonance Frequency ²		Hz	≥50k	≥33k
Discharge Time Constant ²		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	150	90
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g	-	3000
Shock Limit ⁴		g	10000	4000
Temperature Range		°C	-50~250	
		°F	-58~482	
Temperature Response ²		%/°C	0.06	
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		-	Adhesive	
Weight ²		g	1	2
		oz	0.035	0.071

Additional Information

Note:

- @ 160Hz, 1g
- 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

CXXBM1

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS



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