

PE Miniature Accelerometer

DETAILS

This charge-type miniature accelerometer uses a piezo-electric ceramic shear structure with wide-bandwidth frequency response. Excellent long-term stability and repeatability. Titanium alloy housing, laser-welded, small and light.

FEATURES

- Small size and light weight
- Suitable for small-scale modal structure testing
- Multiple output options available
- Full series uses shape-memory alloy fasteners, shear structure, stable and reliable

TYPICAL APPLICATIONS

- PPCB testing
- ESS
- Vibration measurement in confined spaces

Fig_1 Picture

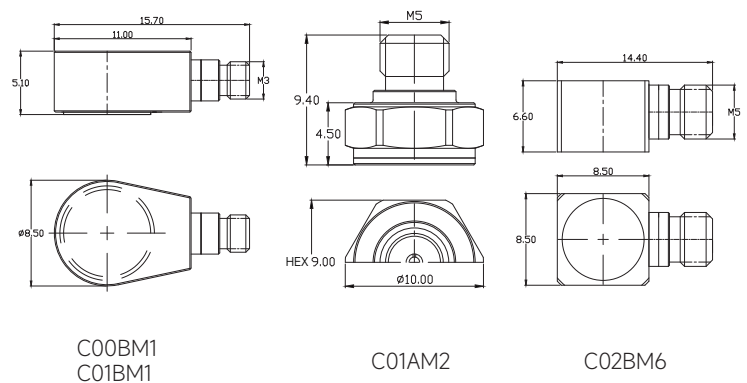


C00BM1
C01BM1

C01AM2

C02BM6

Fig_2 Dimensions

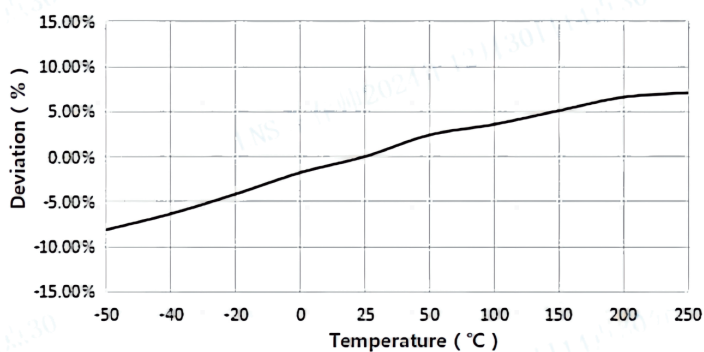


C00BM1
C01BM1

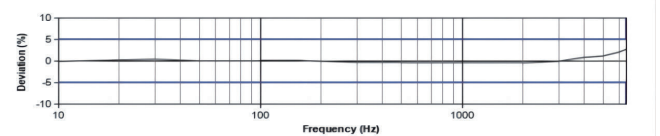
C01AM2

C02BM6

Fig_4 Typical Temperature Response



Fig_5 Typical Frequency Response



Specifications-C00BM1 C01AM2 C01BM1 C02BM6

MODEL NUMBER		UNIT	C00BM1	C01BM1	C01AM2	C02BM6
PERFORMANCE						
Sensitivity ¹		pC/g	1	4	4	10
		pC/(m/s ²)	0.1	0.4	0.4	1
Measurement Range ²		g	±5000	±2500	±2000	±1000
Non-Linearity ³		%	1			
Frequency Range	± 5%	Hz	3-10k	1-6.5k	0.5-5k	1-6k
	±10%	Hz	2-12k	0.5-10k	0.3-7k	0.5-10k
Resonance Frequency ²		Hz	≥50k	≥33k	≥27k	≥33k
Transverse Sensitivity		%	≤5			
ELECTRICAL						
Capacitance		pF	150	90	90	650
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-	-	-
ENVIRONMENTAL						
Sinusoidal Vibration Limit ⁴		g rms	-	3000	2500	3000
Shock Limit ⁴		g pk	10000	4000	3000	4000
Temperature Range		°C	-50~250		-50~160	
		°F	-58~482		-58~320	
Temperature Response ²		-	See typical curve			
PHYSICAL						
Sealing		-	Laser welding IP68			
Sensing Element		-	Piezoelectric ceramics			
Housing Material		-	Titanium alloy			
Size	mm		15.7×8.5×5.1		HEX 9×9.4	14.4×8.5×6.6
	in		0.618×0.335×0.201		HEX 0.354×0.370	0.567×0.335×0.260
Electrical Connector		-	M3 Side		M5 Top	M5 Side
Mounting Thread		-	Adhesive			
Weight ²		g	1	2	2	2.6
		oz	0.035	0.071	0.071	0.092
Mounting Torque		-	-			
Recommended Accessories	Cable	-	K55AK02		K01AB01/K14AB14	
	Mounting Base	-	-			

Additional Information

Note:

1. @ 160Hz, under the condition of 23 °C± 5 °C
2. JBT 6822-2018 7.12.1 Vibration Testing Method
3. Low frequency is determined by the low-frequency characteristics of the charge amplifier
4. Typical values
5. It refers to the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

C0XXMX

Supplied Accessories:

- Product Verification Report

OPTIONALVERSIONS

-A: 10-32 Output Connector

COMPLIANCE WITH STANDARDS

