

Universal Testing Type Accelerometer

DETAILS

C02B02 C04B05 type charge acceleration sensor, using piezoelectric ceramic shear structure, with wide band frequency response, low sensitivity temperature response characteristics, high quality piezoelectric ceramics with long-term stability, can ensure many years of accurate measurements, the use of temperature $-70^{\circ}\text{C} \sim 160^{\circ}\text{C}$. The housing is laser welded stainless steel for high sealing grade and strength, with M5 mounting threads on the bottom.

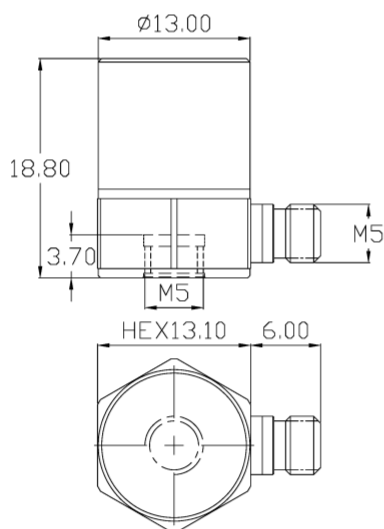
FEATURES

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

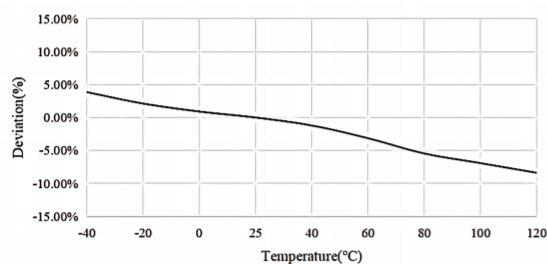
TYPICAL APPLICATIONS

- Environmental Stress Screening (ESS)
- Vibration Control
- Generalized High Temperature Vibration Monitori

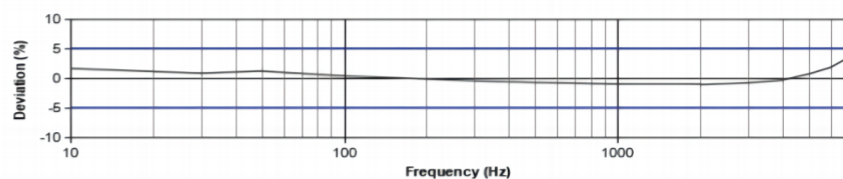
Fig_1 Dimensions of C02B02 C04B05



Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-C02B02&C04B05

MODEL NUMBER		UNIT	C02B02	C04B05
PERFORMANCE				
Sensitivity ¹		pC/g	10	30
		pC/(m/s²)	1	3
Measurement Range		g	±500	±150
Non-Linearity ³		%	1	
Frequency Range	± 5%	Hz	0.5-10k	0.5-7k
	±10%		0.3-11k	0.3-9k
Resonance Frequency ²		Hz	≥50k	≥38k
Discharge Time Constant ²		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	1250	1700
Resistance		Ω	≥1×10 ¹¹	≥1×10 ¹¹
Electrical Isolation		Ω	-	-
ENVIRONMENTAL				
Sinusoidal Vibration Limit ⁴		g	650	300
Shock Limit ⁴		g	650	300
Temperature Range		°C	-70~160	
		°F	-94~320	
Temperature Response ²		%/°C	0.045	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Stainless steel	
Size	mm	HEX 13.1×18.8		
	in	HEX 0.516×0.740		
Electrical Connector		-	M5 Side (Opt. 10-32)	
Mounting Thread		-	M5 (Opt. 10-32)	
Weight ²	g		16	17
	oz		0.564	0.600

Additional Information

Note:

1. @ 160Hz, 1g
2. Typical values
3. JBT 6822-2018 7.12.1 Vibration Testing Method
4. References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state

C02B02&C04B05

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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