Universal Testing Type Accelerometer

DETAILS

CXXBT2 series charge high temperature acceleration sensor, the use of ultra-high temperature piezoelectric ceramics, with ultra-low sensitivity temperature response and high impedance at high temperatures, the maximum operating temperature of 500 °C. The shell is sealed by laser welding of nickel-based alloy with good airtightness, special coaxial 10-32 connector, signal ground and shell isolation, can be equipped with domestic and foreign high-temperature metal cables, the bottom is equipped with M5 mounting holes.

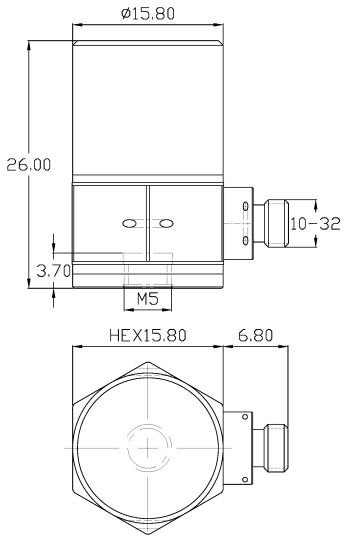
FEATURES

- Designed for high temperature test environments
- Maximum operating temperature up to 500°C, ultra-low sensitivity temperature coefficient
- Special high temperature resistant metal shell, special high temperature resistant piezoelectric material, low temperature bleaching

TYPICAL APPLICATIONS

- Automobile engine test
- High temperature industrial vibration monitoring
- Vibration measurement of high temperature turbines

Fig_1 Dimensions of CXXBT2



CXXBT2

Fig_2 Typical Temperature Response

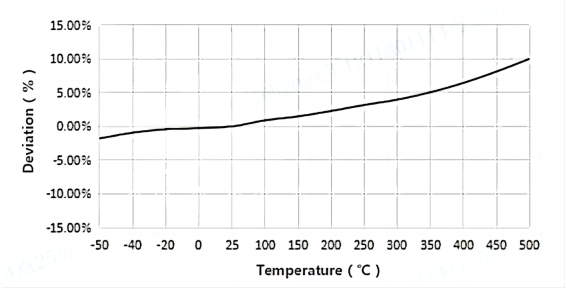
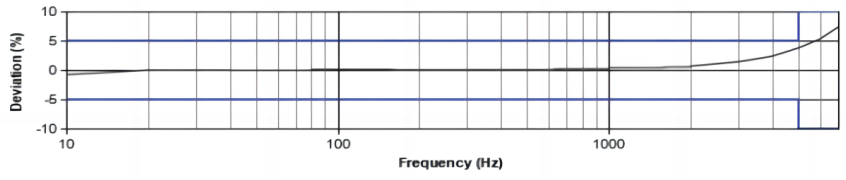


Fig_3 Typical Frequency Response



Specifications-CXXBT2

MODEL NUMBER		UNIT	C01BT2	C02BT2
PERFORMANCE				
Sensitivity [1]		pC/g	5	10
		pC/(m/s²)	0.5	1
Broadband Resolution [2]		g	±1000	±800
Non-Linearity [3]		%	1	
Frequency Range	± 5%	Hz	10-4k	10-5k
	±10%		1-6k	1-7k
Resonance Frequency [2]		Hz	≥30k	≥25k
Discharge Time Constant [2]		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	300	550
Resistance		Ω	$\geq 1\times10^{9}$	$\geq 1\times10^{9}$
Electrical Isolation		Ω	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$
ENVIRONMENTAL				
Sinusoidal Vibration Limit [4]		g	1500	1000
Shock Limit [4]		g	2000	1500
Temperature Range		℃	-50~500	
		℉	-122~932	
Temperature Response [2]		%/℃	0.02	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Nickel-based alloy	
Size		mm	HEX 15.8×26	
		in	HEX 0.622×1.024	
Electrical Connector		-	10-32 Side	
Mounting Thread		-	M5	
Weight [2]		g	28	
		oz	0.988	

Additional Information

Note:

1. @ 160Hz, 24VDC, 4mA conditions
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
5. Some products may have changes in size after adding TEDS

CXXBT2

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONALVERSIONS

-E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS

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