CXXBTX

Universal Testing Type Accelerometer

DETAILS

CXXBTX series charge high temperature acceleration sensor, using ultra-high temperature piezoelectric ceramics, has ultra-low sensitivity temperature response and high impedance at high temperatures. The shell adopts nickel-based alloy laser welding seal with good air tightness, industry standard 7/16-27 two-core nozzle output, signal ground and shell isolation differential output, can be equipped with domestic and foreign high temperature metal cables, the bottom with standard 3×φ4 through holes

FEATURES

- Designed for high temperature test environments
- Maximum operating temperature up to 500°C, ultra-low sensitivity temperature coefficientresponse

TYPICAL APPLICATIONS

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

Fig_1 Dimensions of CXXBTX

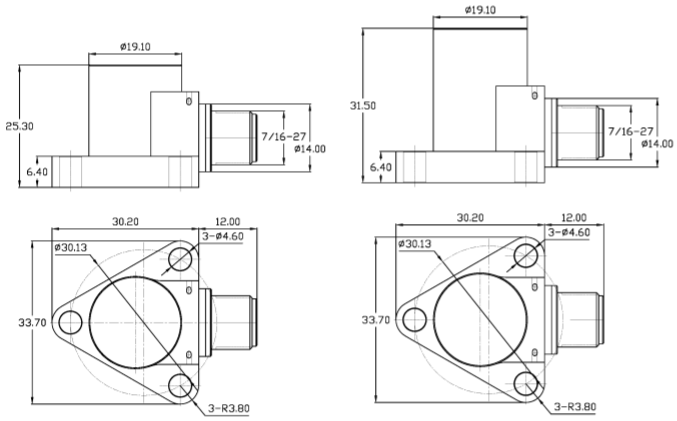

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Fig_2 Typical Temperature Response

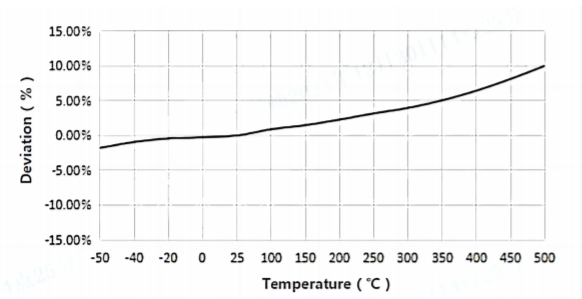
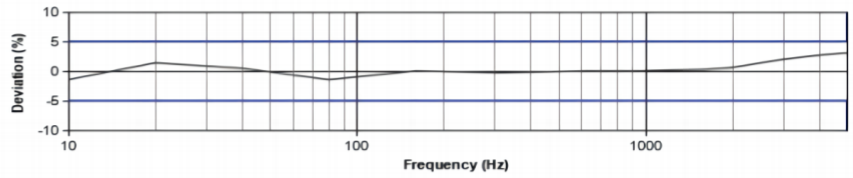


Fig_3 Typical Frequency Response



Specifications-CXXBTX

MODEL NUMBER		UNIT	C02BT3	C05BT3
PERFORMANCE				
Sensitivity [1]		pC/g	10	50
		pC/(m/s²)	1	5
Measurement Range		g	±600	±300
Non-Linearity [3]		%	1	
Frequency Range	± 5%	Hz	10-5k	10-2.5k
	±10%		1-9k	1-4.5k
Resonance Frequency [2]		Hz	≥30k	≥16k
Discharge Time Constant [2]		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	500	650
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	1000	500
Shock Limit [4]		g	1500	1000
Temperature Range		℃	-50~500	
		℉	-58~932	
Temperature Response [2]		%/℃	0.023	
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	nickel-based alloy	
Size		mm	33.7×30.2×25.3	33.7×30.2×31.5
		in	1.327×1.189×0.996	1.327×1.189×1.240
Electrical Connector		-	7/16-27 2-pin	
Mounting Thread		-	M4×3 THRU	M4×3 THRU
Weight [2]		g	80	110
		oz	2.822	3.880

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

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Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS

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