CXXBT4

Universal Testing Type Accelerometer

DETAILS

CXXBT4 series charge high temperature acceleration sensor, using ultra-high temperature piezoelectric ceramics, ultra-low sensitivity temperature response and high impedance at high temperatures, the maximum operating temperature of 260°C. 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

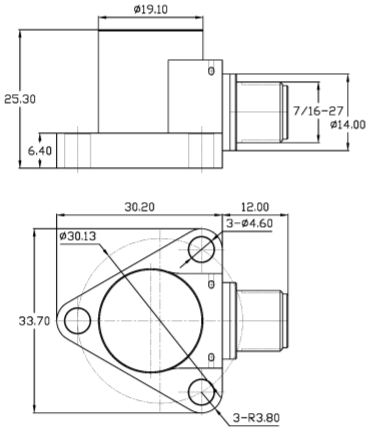
FEATURES

- Maximum operating temperature of 260°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 CXXBT4



CXXBT4

Fig_2 Typical Temperature Response

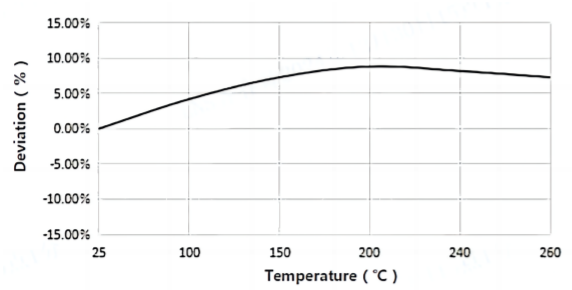
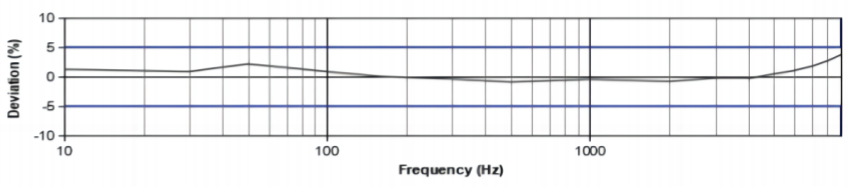


Fig_3 Typical Frequency Response



Specifications-CXXBT4

MODEL NUMBER		UNIT	C02BT4	C03BT4	C05BT4
PERFORMANCE					
Sensitivity [1]		pC/g	10	20	50
		pC/(m/s²)	1	2	5
Measurement Range		g	±1500	±1000	±500
Non-Linearity [3]		%	1		
Frequency Range	± 5%	Hz	1-10k	1-9k	1-6k
	±10%		1-11k	1-11k	1-9k
Resonance Frequency [2]		Hz	≥50k	≥40k	≥28k
Discharge Time Constant [2]		s	-		
Transverse Sensitivity		%	≤5		
ELECTRICAL					
Capacitance		PF	1250	1300	3000
Resistance		Ω	$\geq 1\times10^{10}$	$\geq 1\times10^{10}$	$\geq 1\times10^{10}$
Electrical Isolation		Ω	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$	$\geq 1\times10^{8}$
ENVIRONMENTAL					
Sinusoidal Vibration Limit [4]		g	3000	2500	1000
Shock Limit [4]		g	4000	3000	2000
Temperature Range		°C	-50~260		
		°F	-58~500		
Temperature Response [2]		%/°C	0.02		
PHYSICAL					
Sealing		-	Laser welding IP68		
Sensing Element		-	Piezoelectric ceramics		
Housing Material		-	Nickel-based alloy		
Size		mm	33.7×30.2×25.3	33.7×30.2×25.3	33.7×30.2×25.3
		in	1.327×1.189×0.996	1.327×1.189×0.996	1.327×1.189×0.996
Electrical Connector		-	7/16-27 2-pin		
Mounting Thread		-	M4 x 3 THRU		
Weight [2]		g	61.1	62	91
		oz	2.155	2.187	3.210

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

CXXBT4

Supplied Accessories:

- Product Verification Report
- Install Screws

COMPLIANCE WITH STANDARDS

LNS Intelligent Technology Co., Ltd
NO.3 Building
Qilu High-Tech District, Qihe,Dezhou
Shandong Province, China 251100
+86-0534-2150417

International:
9620 NE Tanasbourne Dr Ste 300
Hillsboro, OR, USA 97124
+1-503-208-5512
info@lnsdynamics.com