C02XTXT

Universal Testing Type Accelerometer

DETAILS

C02XTXT 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, special coaxial 10-32 connector, signal ground isolation from the shell, can be equipped with domestic and foreign high-temperature metal cables, the bottom is equipped with M5 mounting holes

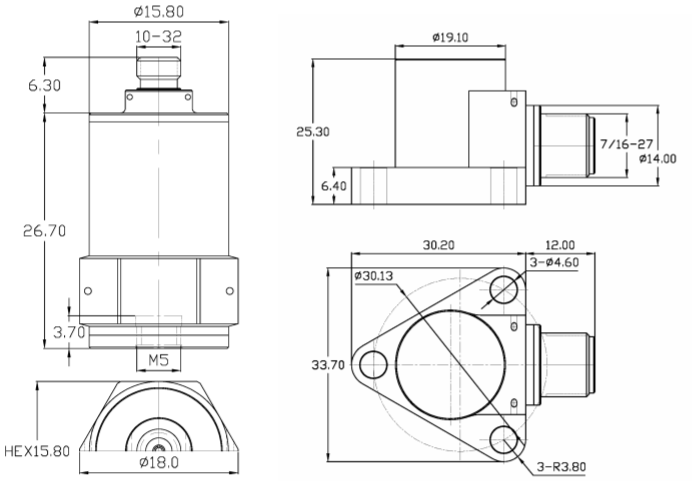
FEATURES

- Maximum operating temperature up to 500°C, ultra-low sensitivity temperature coefficient
- Special double coaxial 10-32 output connector form
- Designed for high temperature test environments, radiation resistant

TYPICAL APPLICATIONS

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

Fig_1 Dimensions of C02XTXT



C02XTXT

Fig_2 Typical Temperature Response

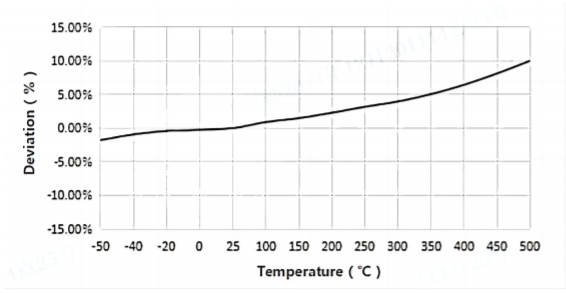
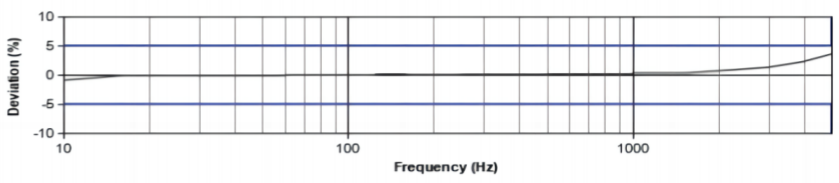


Fig_3 Typical Frequency Response



Specifications-C02XTXT

MODEL NUMBER		UNIT	C02AT2T	C02BT3T
PERFORMANCE				
Sensitivity [1]		pC/g	10	10
		pC/(m/s²)	1	1
Measurement Range		g	±800	±600
Non-Linearity [3]		%	1	
Frequency Range	± 5%	Hz	10-5k	10-5k
	±10%		1-7k	1-10k
Resonance Frequency [2]		Hz	≥25k	≥30k
Discharge Time Constant [2]		s	-	
Transverse Sensitivity		%	≤5	
ELECTRICAL				
Capacitance		PF	550	500
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	1000
Shock Limit [4]		g	1500	1500
Temperature Range		℃	-50~500	
		℉	-58~932	
Temperature Response [2]		%/℃	0.02	0.023
PHYSICAL				
Sealing		-	Laser welding IP68	
Sensing Element		-	Piezoelectric ceramics	
Housing Material		-	Nickel-based alloy	
Size		mm	HEX 15.8×26.7	33.7×30.2×25.3
		in	HEX 0.622×1.051	1.327×1.189×0.996
Electrical Connector		-	10-32 TOP	7/16-27 2-pin
Mounting Thread		-	M5 (Opt. 10-32)	M4×3
Weight [2]		g	30	80
		oz	1.058	2.822

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

OPTIONAL VERSIONS

-E: 10-32 Mounting Threads

COMPLIANCE WITH STANDARDS

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