B06H46

IEPE Seat Accelerometer

DETAILS

B06H46 Seat Cushion Sensor is used for seat vibration testing. It simulates the vibrations experienced by a vehicle during operation to evaluate the comfort and stability of seats under various road conditions. The sensor is housed within a rubber cushion and has a total weight of approximately 340g.

FEATURES

·IEPE Seat Acceleration Sensor
·Shear structure
·Broadband response

TYPICAL APPLICATIONS

·Comfortability, handling, and reliability research
·Vibration exposure testing for construction vehicles
·Seat development testing
·Seat suspension, installation, mounting brackets, and damping testing

Fig_1 Dimensions of B06H46

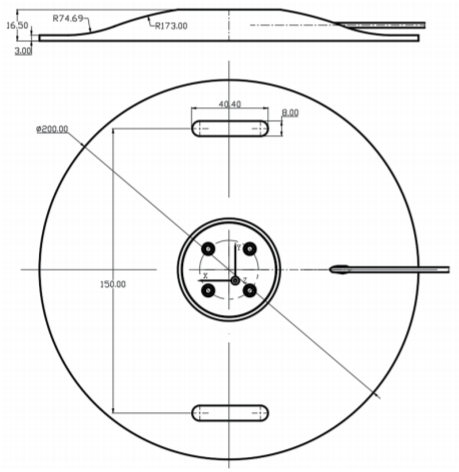


Fig_2 Typical Temperature Response

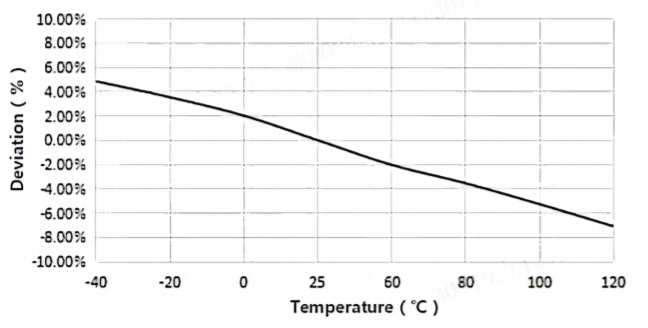
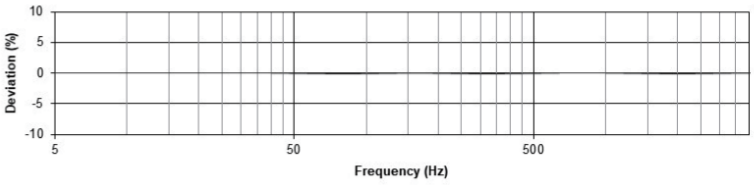


Fig_3 Typical Frequency Response



Specifications-B06H46

MODEL NUMBER		UNIT	B06H46
PERFORMANCE			
Sensitivity [1]		mV/g	100
		mV/(m/s²)	10
Measurement Range		g	±50
Broadband Resolution [2]		g rms	0.0001
Non-Linearity [3]		%	1
Frequency Range	± 5%	Hz	1-4k
	±10%		0.5-6k
Resonance Frequency [2]		Hz	≥20k
Discharge Time Constant [2]		s	≤1
Transverse Sensitivity		%	≤5
ELECTRICAL			
Excitation Voltage		VDC	20-30
Constant Current Excitation		mA	2-20
Output Impedance		Ω	≤100
Output Bias Voltage		V	8-12
Electrical Isolation		Ω	-
Spectral Noise [2]	10Hz	μg/√Hz	15
	100Hz		4
	1000Hz		2
ENVIRONMENTAL			
Sinusoidal Vibration Limit [4]		g rms	400
Shock Limit [4]		g pk	2000
Temperature Range		°C	-40~120
		°F	-40~248
Temperature Response [2]		-	See typical curve
PHYSICAL			
Sealing		-	Laser welding IP68
Sensing Element		-	Piezoelectric ceramics
Housing Material		-	Titanium alloy / PU
Size		mm	Φ200x16.5
		in	Φ7.874×0.650
Electrical Connector		-	1/4-28 4pin
Mounting Thread		-	-
Weight [2]		g	340
		oz	11.99
TEDS Optional [5]		-	No

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

B06H46

Supplied Accessories:

- Product Verification Report

COMPLIANCE WITH STANDARDS

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