

Microminiature Accelerometer

DETAILS

BXXAMX series micro-small acceleration sensor built-in micro-small impedance converter, can be vibration process charge signal into a voltage signal, this type of sensor has excellent long-term stability and repeatability. The casing is laser welded with titanium alloy, characterized by small size and light weight.

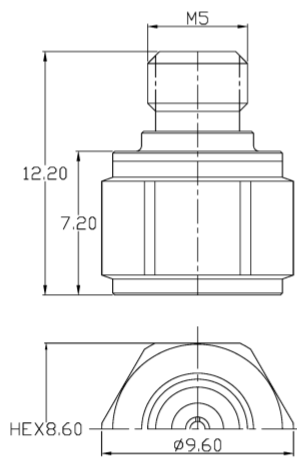
FEATURES

- Built-in micro integrated circuits
- Small size and light weight
- High frequency response characteristics

TYPICAL APPLICATIONS

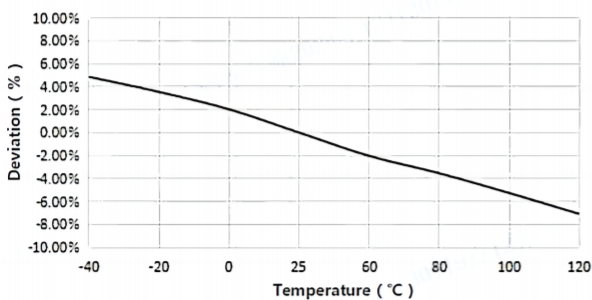
- PC board test
- ESS
- Space-constrained vibration measurements

Fig_1 Dimensions of BXXAMX

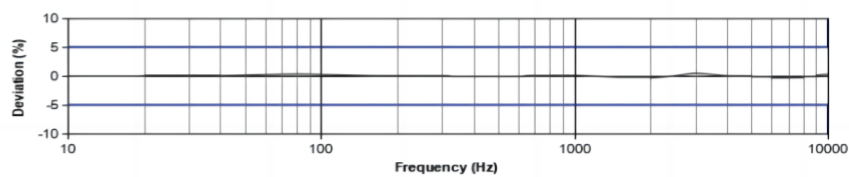


BXXAMX

Fig_2 Typical Temperature Response



Fig_3 Typical Frequency Response



Specifications-BXXAM6

| MODEL NUMBER | UNIT | B05AM6 | B06AM6 |
|---|------------------------|------------------------|---------|
| PERFORMANCE | | | |
| Sensitivity ¹ | mV/g | 50 | 100 |
| | mV/(m/s ²) | 5 | 10 |
| Measurement Range | g | ±100 | ±50 |
| Broadband Resolution ² | g rms | 0.0002 | 0.0001 |
| Non-Linearity ³ | % | 1 | |
| Frequency Range | ± 5%(Hz) | 1-12k | 1-10k |
| | ±10%(Hz) | 0.5-14k | 0.5-12k |
| Resonance Frequency ² | Hz | ≥40k | ≥38k |
| 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 | μg/√Hz | 30 | 15 |
| | | 8 | 4 |
| | | 4 | 2 |
| ENVIRONMENTAL | | | |
| Sinusoidal Vibration Limit ⁴ | g | 800 | 400 |
| Shock Limit ⁴ | g | 2000 | 1000 |
| Temperature Range | °C | -50~120 | |
| | °F | -58~248 | |
| Temperature Response ² | %/°C | -0.07 | |
| PHYSICAL | | | |
| Sealing | - | Laser welding IP68 | |
| Sensing Element | - | Piezoelectric ceramics | |
| Housing Material | - | Titanium Alloy | |
| Size | mm | HEX 8.60×12.20 | |
| | in | HEX 0.339×0.480 | |
| Electrical Connector | - | M5 Top (Opt. 10-32) | |
| Mounting Thread | - | Adhesive | |
| Weight ² | g | 2.1 | 2.5 |
| | oz | 0.074 | 0.088 |
| TEDS Optional ⁵ | - | Nb | |

Additional Information

Note:

- @ 160Hz, 24VDC, 4mA conditions
- Typical values
- JBT 6822-2018 7.12.1 Vibration Testing Method
- References the mechanical structure of the sensor not being damaged in a non powered state, rather than in a working state
- Some products may have changes in size after adding TEDS

BXXAM6

Supplied Accessories:

- Product Verification Report
- Install Screws

OPTIONAL VERSIONS

-A: 10-32 Output Connector

COMPLIANCE WITH STANDARDS



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