

AMB/50.40C Biaxial MEMS DC Response Accelerometer

±50g range, 40mV/g sensitivity



The AMB range of accelerometers are Biaxial MEMS (micro electro mechanical system) DC response voltage output devices for testing at low frequency vibration measurement from DC (0Hz) and above. They are Biaxial (measuring in 2 directions simultaneously) variable capacitance design. The AMB/50.40C has a 4 pin 1/4-28UNF side entry connector.

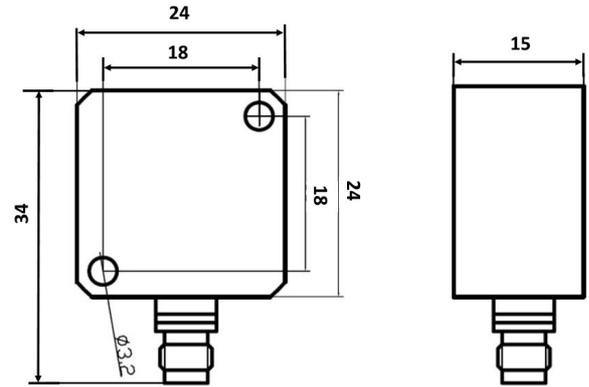
Ideally suited to low frequency vibration applications including low level vibration where high sensitivity is required.

Due to their ability to measure DC response they can also be used to measure constant gravity application.

The AMB/50.40C has a range of ±50g and a sensitivity of 40mV/g, we recommend using with DJB's MEMS signal conditioner the DCM-03

AMB/50.40C

Dimensions in mm



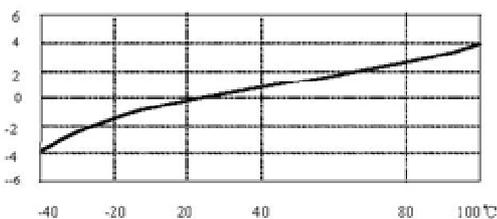
Features:

- Operational frequency range DC to 550Hz
- 1/4-28UNF 4 pin connector
- DJB signal conditioner model DCM-03 available as an option
- Differential Capacitance operation
- Compact form and low mass
- Constant gravity measurement

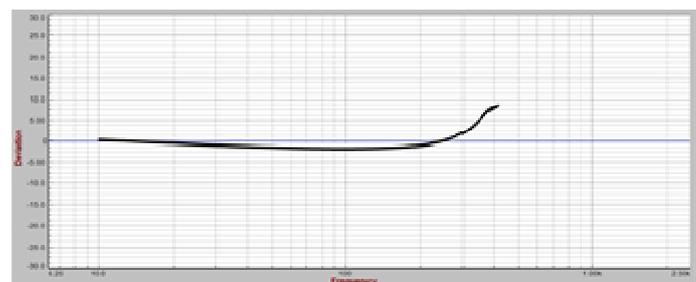
Applications:

- Auto/Aero structural body surveys
- Constant gravity measurements
- General vibration measurement
- Seismic vibration measurement
- Crash testing

Typical Temperature Response



Typical Frequency Response



Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes.

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A UK company with UK-based manufacturing, assembly and calibration in-house.



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±50g range, 40mV/g sensitivity



	Metric	Imperial
Sensitivity (20°C)	4.1mV/(m/s ²)±10%	40mV/g±10%
Measurement Range	±490m/s ² pk	±50g pk
Transverse sensitivity	≤5%	
Frequency Range (±5%)	DC to 500 Hz	
Frequency Range (±10%)	DC to 550Hz	
Mounted Resonance Frequency	5,000 Hz	
Temperature Range	-40 to +120°C	-40 to +248°F
Temperature Sensitivity	0.1 mV/°C	
Shock limit (No Supply)	29,420m/s ²	±3,000g
Power Supply	+6 to +30 VDC	
Operating Current	≤5mA	
Offset Voltage	2.5±0.1VDC	
Noise(100Hz)	< 0.14mVrms	
Resolution	45mq (rms)	
Weight	18grams	0.63oz
Case material	Titanium	
Case sealing	Hermetic	
Mounting	2 x Ø3.2mm hole	2 x Ø0.12inch holes
Connector Exit	Side	
Size	24 x 24 x 15mm	0.94x 0.94 x 0.59 inches
IP rating	IP65	

Options:

- DCM-03 – 3 channel MEMS signal conditioning unit.
- Pigtail cable terminations

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