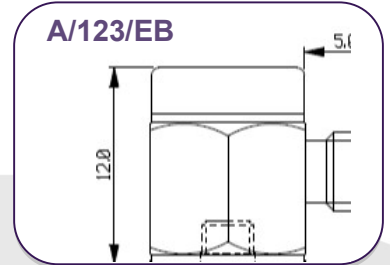
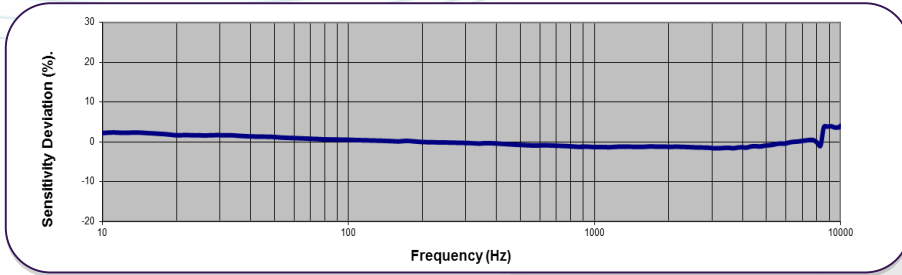


A/123/EB Piezo-Tronic IEPE Accelerometer

1mV/g up to 250mV/g $\pm 10\%$ 4.4gm Std temp 125°C



Typical Frequency Response



The A/123/EB range of PiezoTronic IEPE accelerometers features the Konic shear® design sensing element and internal electronics, packaged to offer a side entry connector and tapped base. Ideal for applications requiring a low mass compact design for minimal mass loading effect the A/123 offers wide frequency band with a linear response. The A/123 is a highly versatile and robust accelerometer. Applications include, modal testing, general vibration testing, NVH, package testing, shock testing etc.

Options

- Extended low frequency response
 - Wideband temperature calibration -50/+125°C.
- A/123/E Side entry
A/123/E-1 Side entry, isolated ceramic base
A/123/TE Top entry
A/123/TE-1 Top entry, isolated ceramic base
A/123/EB Side entry, tapped base
A/123/TB Top entry, tapped base

NOTE: Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request, and recommend that applications are evaluated to determine the requisite sensitivity.

Typical Spectral Noise (100mV/g)

| | |
|-------|--------------------------|
| 1Hz | 522 μ g/ \sqrt Hz |
| 10Hz | 31.2 μ g/ \sqrt Hz |
| 100Hz | 8.9 μ g/ \sqrt Hz |
| 1kHz | 5.8 μ g/ \sqrt Hz |
| 10kHz | 5.12 μ g/ \sqrt Hz |

| | Metric | | | Imperial | | |
|--|--|----------------------------|----------------------------|-----------------------------|--------|---------|
| Voltage Sensitivity $\pm 10\%$ | 0.5mV/(m/s ²) | 1.02mV/(m/s ²) | 10.2mV/(m/s ²) | 5mV/g | 10mV/g | 100mV/g |
| Resonant frequency | ≥ 50 kHz | | | | | |
| Typ. Frequency Response $\pm 5\%$ $\pm 10\%$ | 1Hz – 10kHz 0.7Hz – 11kHz | | | | | |
| Cross Axis error | $\leq 5\%$ max | | | | | |
| Temperature Range | -55/+125°C | | | -67/+257°F | | |
| Voltage sensitivity deviation (20°C / 68°F) | -5% @ -55°C +5% @ +125°C | | | -5% @ -67°F +5% @ +257°F | | |
| Supply voltage | 15/35 standard V DC | | | | | |
| Supply current | 2/20 mA | | | | | |
| Bias voltage | 10/14 V DC | | | | | |
| Shock limit | 49,033m/s ² | | | 5000g | | |
| Settling time within 10% bias | <5 sec | | | | | |
| Base Strain Sensitivity | ≤ 0.001 g/ μ strain | | | | | |
| Discharge Time Coef. | 1-3 seconds | | | | | |
| Saturation limit g | 9806m/s ² | 4903m/s ² | 490.3m/s ² | 1000g | 500g | 50g |
| Broadband Resolution grms | 0.01 | 0.002 | 0.0009 | 0.01 | 0.002 | 0.0009 |
| Case material | Titanium | | | | | |
| Output Impedance | ≤ 100 Ohms | | | | | |
| Non-Linearity (%FS) | $\leq 1\%$ | | | | | |
| Mounting | Tapped Base, 5-40 UNC Supplied with adaptor stud to 10/32UNF thread | | | | | |
| Weight | 4.4gm | | | 0.155oz | | |
| Case seal | Welded | | | | | |
| Size | 9.5(A/F) x 12mm | | | 0.37in (A/F) x 0.47in | | |
| Connector | 10-32 UNF Microdot | | | | | |

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

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

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