



A/122/V Piezo-Tronic IEPE Accelerometer

10mV/g up to 1V/g $\pm 10\%$ 12gm Std temp 125°C (HT 185°C)

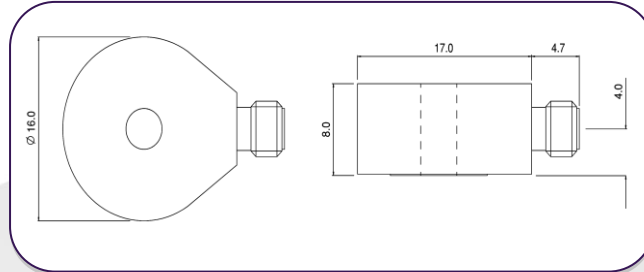
General purpose Piezo-tronic IEPE accelerometer, identical in sensitivity range to A/120/V, but with annular through hole fixing allowing full 360 degree connector orientation, reduced weight and height.

Konic shear mechanically preloaded ceramic sensing element in addition to the welded case seal, maximizes measurement integrity and reliability.

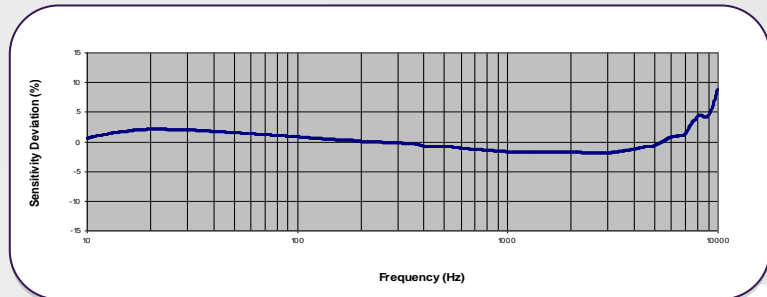
A/122/V will interface directly to spectrum analyzers having minimum 15V, 2mA transducer outlet, bearing in mind that the minimal supply may constrain high frequency capability, due to drive limitations, and dynamic range at elevated temperature.

Note that low level measurements are subject to signal/ noise constraints but may be realizable if band width is restricted.

A/122/V



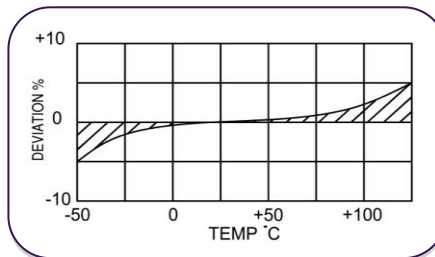
Typical Frequency



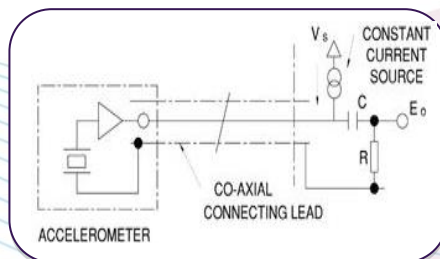
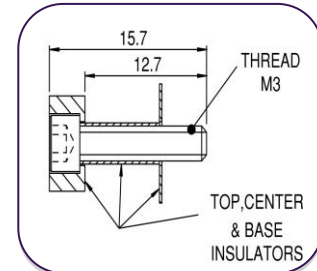
Note:

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.

Temperature



Mounting Stud SI-22



Options

Non-standard sensitivities within range 10/100mV/g



A/122/V Piezo-Tronic IEPE Accelerometer

10mV/g up to 1V/g $\pm 10\%$

12gm

Std temp 125°C (HT 185°C)

| | Metric | | Imperial | |
|--|--|----------------------------|--|---------|
| | | | | |
| Voltage Sensitivity $\pm 10\%$ | 1.02mV/(m/s ²) | 10.2mV/(m/s ²) | 10mV/g | 100mV/g |
| Resonant frequency kHz | ≈ 9 | | ≈ 9 | |
| Cross Axis error % max | 5 | | 5 | |
| Temperature Range | -50/+185°C | | -58/+365°F | |
| Voltage sensitivity deviation re 20°C/68°F | -5% @ 50°C +5% @ +125°C +/- 10% @ +185°C | | -5% @ 58°F +5% @ +257°F +/- 10% @ +365°F | |
| Supply voltage V DC | 15/35 | | 15/35 | |
| Supply voltage mA | 2/15 | | 2/15 | |
| Bias voltage V DC | 8/10 | | 8/10 | |
| Settling time to 90% final val. secs | <1 | | <1 | |
| Max continuous accn. g sine | 49,033m/s ² | | 1000g | |
| Frequency Response | 1Hz-7KHz $\pm 5\%$ 1Hz-9KHz $\pm 10\%$ | | 1Hz-7KHz $\pm 5\%$ 1Hz-9KHz $\pm 10\%$ | |
| L.F corner frequency, Hz (-3db) | 0.1 | 0.6 | 0.1 | 0.6 |
| Case material | st/steel, 303 S31 | | st/steel, 303 S31 | |
| Mounting | Through hole, 3.5mm dia.SI/22 | | Through hole, 1.4in dia.SI/22 | |
| Weight | 12gm | | 0.42oz | |
| Case seal | Welded | | Welded | |
| Size | 17.2 x \varnothing 16 x 9.5mm | | 0.68 x \varnothing 0.63 x 0.37in | |
| Connector | 10-32 UNF Microdot | | 10-32 UNF Microdot | |

Spectral Noise

| | |
|-------|--------------------------|
| 1Hz | 98.7 μ g/ \sqrt Hz |
| 10Hz | 61 μ g/ \sqrt Hz |
| 100Hz | 13.1 μ g/ \sqrt Hz |
| 1kHz | 4.2 μ g/ \sqrt Hz |
| 10kHz | 0.5 μ g/ \sqrt Hz |

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DJB Iss.1

