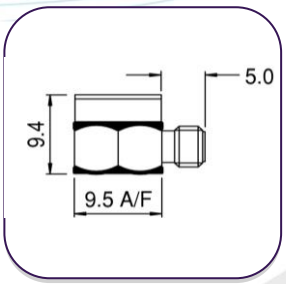
DJB Instruments
SENSING ENGINEERING INNOVATION

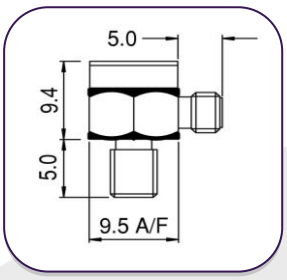
A/123/E, A/123/S, A/123/TS, A/123/TE
Piezo-Tronic IEPE Accelerometer

1mV/g up to 250mV/g ±10% 3.6 – 5.2gm Std temp 125°C (HT 185°C)

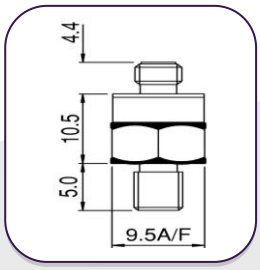
A/123/E



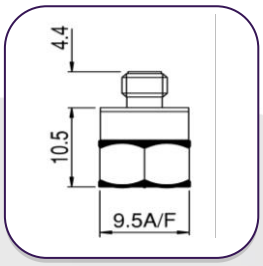
A/123/S



A/123/TS



A/123/TE



The A/123 range of Piezo-tronic IEPE accelerometers features the Konic shear design sensing element, including a hybrid QVC, packaged to offer a choice of side/top entry connector, integral stud or flat base (for adhesive mounting).

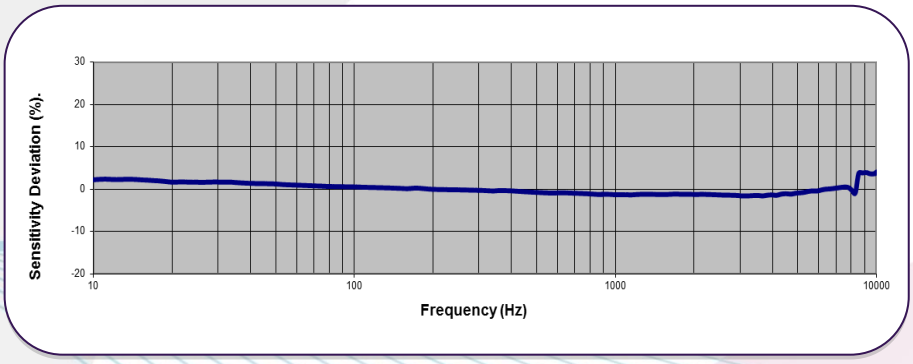
Ideal for applications requiring a low mass compact design for minimal mass loading effect the A/123 offers wide frequency band with a linear response.

Available as a high temperature IEPE accelerometer with a max operating temperature of 185°C the A/123 is a highly versatile and robust accelerometer.

Applications include, modal testing, general vibration testing, NVH, package testing, shock testing etc.

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.

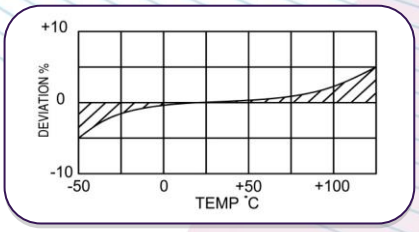
Typical Frequency Response

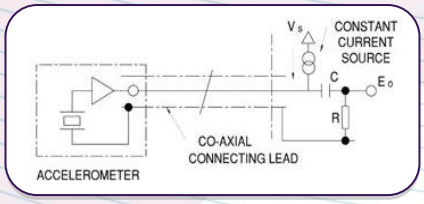


Spectral Noise

1Hz	761µg/√Hz
10Hz	193µg/√Hz
100Hz	37.8µg/√Hz
1kHz	11.2µg/√Hz
10kHz	4.2µg/√Hz

Temperature Response





DJB Instruments (UK) Ltd
Finchley Avenue,
Mildenhall, Suffolk IP28 7BG

Tel +44 (0)1638 712 288
Email sales@djbinstruments.com
Web www.djbinstruments.com

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

bsi. ISO 9001 Quality Management

DJB Instruments
SENSING ENGINEERING INNOVATION

A/123/E, A/123/S, A/123/TS, A/123/TE
Piezo-Tronic IEPE Accelerometer

1mV/g up to 250mV/g ±10% 3.6 – 5.2gm Std temp 125ºC (HT 185ºC)

	Metric	Imperial
Voltage Sensitivity ±10%	0.1 mV/(m/s²) 1.02 mV/(m/s²) 10.2 mV/(m/s²)	5mV/g 10mV/g 100mV/g
Resonant frequency kHz	≈ 50	≈ 50
Cross Axis error % max	5	5
Temperature Range	-50/+185ºC (HT)	-58/+365ºF (HT)
Voltage sensitivity deviation re 20ºC / 68ºF	-5% @ 50ºC +5% @ +125ºC +/- 10% @ +185ºC	-5% @ 58ºF +5% @ +257ºF +/- 10% @ +365ºF
Supply voltage V DC	15/ 35 standard	15/ 35 standard
Supply voltage mA	2/20	2/20
Bias voltage V DC	9/10	9/10
Settling time to 90% final val. secs	<1	<1
Max continuous accn. g sine	49,033m/s²	1000g
Saturation limit g	9,807m/s² 4,903m/s² 490.3m/s²	1000g 500g 50g
Noise level, equiv. mg	3	3
Frequency Response	1Hz-10KHz ± 5% 0.7Hz-12KHz ±10%	1Hz-10KHz ± 5% 0.7Hz-12KHz ±10%
L.F corner frequency, Hz (-3dB)	0.15 0.2 1.5	0.15 0.2 1.5
Case material	Titanium	Titanium
Mounting	A/123/E,TE Adhesive A/123/S, TS M5 x 5mm Int Stud	A/123/E,TE Adhesive A/123/S, TS M5 x 0.2in Int Stud
Weight	3.6gm A/123/E 3.7gm A/123/S 5.2gm A/123/TS 4.7gm A/123/TE	0.142oz A/123/E 0.145oz A/123/S 0.20oz A/123/TS 0.18oz A/123/TE
Case seal	Welded	Welded
Size	9.5(A/F) x 10mm A/123/E 9.5(A/F) x 9.4mm A/123/S 9.5(A/F) x 9.4mm A/123/TS 9.5(A/F) x 9.4mm A/123/TE	0.374in (A/F) x 0.39in A/123/E 0.374in (A/F) x 0.370in A/123/S 0.374in (A/F) x 0.370in A/123/TS 0.374in (A/F) x 0.370in A/123/TE
Connector	10-32 UNF Microdot	10-32 UNF Microdot

DJB Instruments (UK) Ltd
Finchley Avenue,
Mildenhall, Suffolk IP28 7BG

Tel +44 (0)1638 712 288
Email sales@djbinstruments.com
Web www.djbinstruments.com

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

bsi. ISO 9001 Quality Management