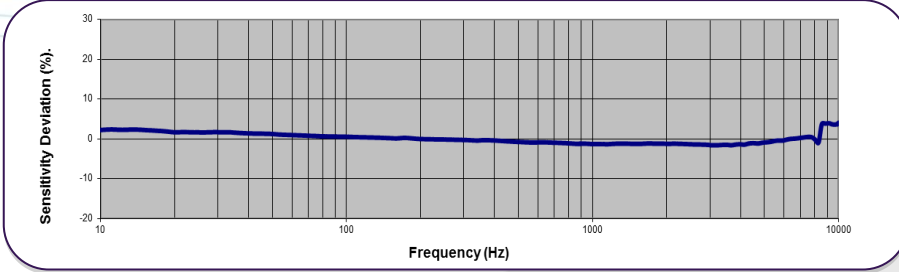


## A/123/E, A/123/S, A/123/TS, A/123/TE Piezo-Tronic IEPE Accelerometer

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



### Typical Frequency Response



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.

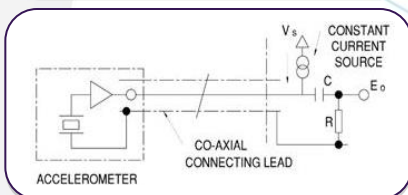
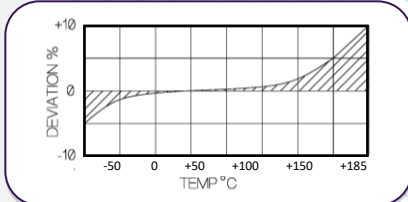
### Options

- Extended low frequency response
- Wideband temperature calibration -50/+125°C.

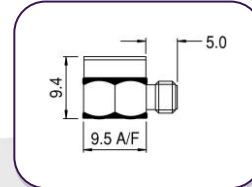
### Spectral Noise

1Hz	761 $\mu$ g/ $\sqrt$ Hz
10Hz	193 $\mu$ g/ $\sqrt$ Hz
100Hz	37.8 $\mu$ g/ $\sqrt$ Hz
1kHz	11.2 $\mu$ g/ $\sqrt$ Hz
10kHz	4.2 $\mu$ g/ $\sqrt$ Hz

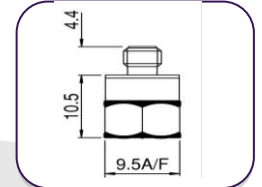
### Temperature Response



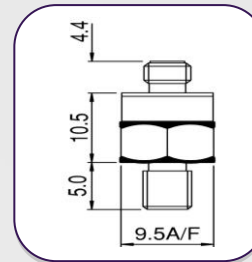
A/123/E



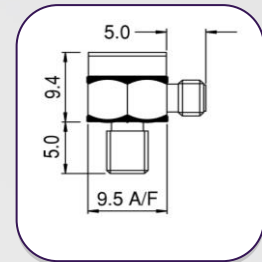
A/123/TE



A/123/TS



A/123/S



	Metric			Imperial		
Voltage Sensitivity $\pm 10\%$	0.1mV/(m/s <sup>2</sup> ) 1.02mV/(m/s <sup>2</sup> ) 10.2mV/(m/s <sup>2</sup> )			5mV/g	10mV/g	100mV/g
Resonant frequency	≈ 50 kHz					
Cross Axis error	5% max					
Temperature Range	-50/+185°C (HT)			-58/+365°F (HT)		
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		
Typical Frequency Response	1Hz-10KHz $\pm 5\%$ 0.7Hz-12KHz $\pm 10\%$			1Hz-10KHz $\pm 5\%$ 0.7Hz-12KHz $\pm 10\%$		
Max continuous accn. g sine	49,033m/s <sup>2</sup>			1000g		
Supply voltage V DC	15/ 35 standard					
Supply voltage mA	2/20					
Bias voltage V DC	9/10					
Settling time to 90% final val. secs	<1					
L.F corner frequency, Hz (-3dB)	0.15	0.2	1.5	0.15	0.2	1.5
Saturation limit g	9,807m/s <sup>2</sup>	4,903m/s <sup>2</sup>	490.3m/s <sup>2</sup>	1000g	500g	50g
Noise level, equiv. mg	3					
Case material	Titanium					
Mounting	Adhesive (A/123/E,TE) M5 x 5mm Int Stud (A/123/S, TS)			Adhesive (A/123/E,TE) M5 x 0.2in Int Stud (A/123/S, TS)		
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)		
Size	9.5(A/F) x 10mm (A/123/E) 9.5(A/F) x 9.4mm (A/123/S, TS, TE)			0.37in (A/F) x 0.39in (A/123/E) 0.37in (A/F) x 0.370in (A/123/S, TS, TE)		
Connector	10-32 UNF Microdot					
Case seal	Welded					

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DJB Iss.3

