

# A/123/E Piezo-Tronic IEPE Accelerometer

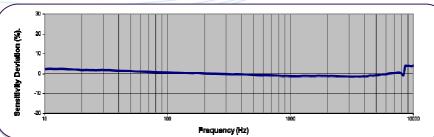
1mV/g up to 250mV/g ±10%

3.4gm

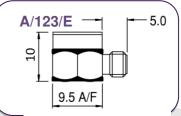
Std temp 125°C



## **Typical Frequency Response**



The A/123 range of Piezo-tronic IEPE accelerometers features the Konic shear design sensing element, packaged to offer a choice of side/ top entry connector, tapped base, adhesive base and isolated ceramic adhesive mount 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



## **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

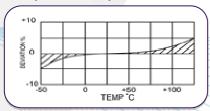
A/123/EB Side entry, tapped base A/123/TB Top entry, tapped base

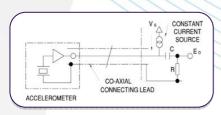
NOTE: Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request, and recommend that applications are evaluated to determine the requisite sensitivity.

### Typical Spectral Noise (100mV/g)

1Hz 10Hz 100Hz 1kHz 10kHz	522μg/√Hz 31.2μg/√Hz 8.9μg/√Hz 5.8μg/√Hz 4.2μg/√Hz
10kHz	4.2μg/√Hz

#### **Temperature Response**





	Metric			Imperial				
Voltage Sensitivity ±10%	0.5mV/(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							
Typ. Frequency Response ± 5% ±10%	1Hz – 10kHz 0.7Hz – 11kHz							
Cross Axis error	≤5%							
Temperature Range		-55/+125°C	-67/+257°F					
Voltage sensitivity deviation (20°C / 68°F)	-5% @-55°C -5% @-67°F +5% @ +125°C +5% @ +257°F							
Supply voltage	15/ 35 standard V DC							
Supply current	2/20 mA							
Output Impedance	≤100Ω							
Bias voltage	10/14 VDC							
Shock Limit	49,033m/s <sup>2</sup> 5000g							
Settling time within 10% bias	<5 sec							
Non-linearity (%FS)	≤1%							
Discharge Time Coef.	1 to 3 seconds							
Base Strain Sensitivity	≤0.001g/µ strain							
Saturation limit g	9807m/s <sup>2</sup>	4903m/s <sup>2</sup>	490.3m/s <sup>2</sup>	1000g	500g	50g		
Broadband resolution grms	0.01	0.002	0.0009	0.01	0.002	0.0009		
Case material	Titanium							
Mounting	Adhesive							
Weight	3.4gm			0.12oz				
Case seal	Welded							
Size	9.5(A/F) x 10mm			0.37in (A/F) x 0.39in				
Connector	10-32 UNF Microdot							

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

**DJB Instruments (UK) Ltd** 

Finchley Avenue,

Mildenhall, Suffolk IP28 7BG

Email

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

www.djbinstruments.com

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