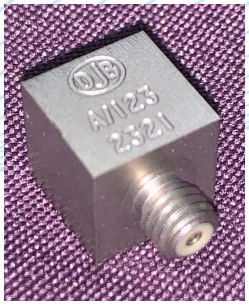
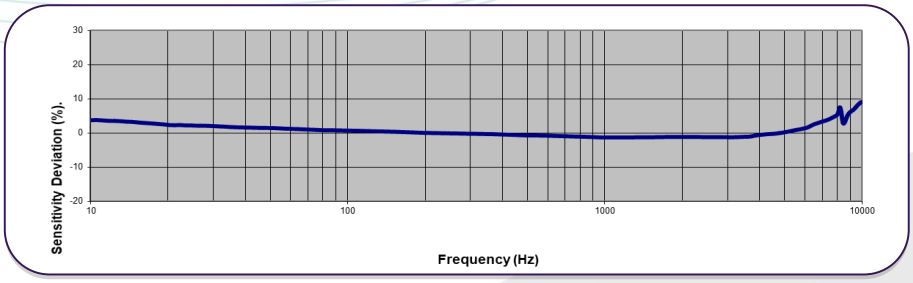
DJB Instruments
SENSING ENGINEERING INNOVATION

A/123/B Piezo-Tronic IEPE Accelerometer

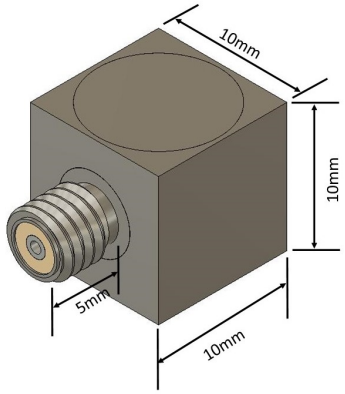
1mV/g up to 250mV/g ±10% 4.8gm Std temp 125˚C



Typical Frequency Response



A/123/B



The A/123/B is part of the wide range of A/123 monoaxial accelerometers which use the unique Konic Shear® piezoelectric sensing element for superior cross axis control and enhanced performance. The A/123/B is designed as a 10mm cube with a side entry 10/32UNF connector, this allows the user to adhesive mount the accelerometer on any 5 of its faces for maximum flexibility in applications such as modal analysis.
Lightweight titanium fully welded construction for a rugged and reliable accelerometer.

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.

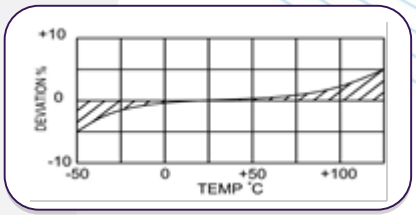
Frequency responses given are based On the A/123/B mounted on its base With Connector exiting to the side.

	Metric			Imperial		
Voltage Sensitivity ±10%	0.5mV/(m/s²)	1.02mV/(m/s²)	10.2mV/(m/s²)	5mV/g	10mV/g	100mV/g
Resonant frequency	≥50 kHz					
Typ. Frequency Response ± 5% ±10%	1Hz – 8kHz 0.7Hz – 10kHz					
Cross Axis error	≤5%					
Temperature Range	-55/+125°C			-67/+257°F		
Voltage sensitivity deviation (20ºC / 68ºF)	-5% @-55°C +5% @ +125°C			-5% @-67°F +5% @ +257°F		
Supply voltage	18/ 35 standard V DC					
Supply current	2/20 mA					
Output Impedance	≤100Ω					
Bias voltage	10/14 VDC					
Shock Limit	49,033m/s²			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/s²	4903m/s²	490.3m/s²	1000g	500g	50g
Broadband resolution grms	0.01	0.002	0.0009	0.01	0.002	0.0009
Case material	Titanium					
Mounting	Adhesive					
Weight	4.8gm			0.17oz		
Case seal	Welded					
Size (without connector)	10mm x 10mm x 10mm			0.39 x 0.39in x 0.39in		
Connector	10-32 UNF Microdot					

Typical Spectral Noise (100mV/g)

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

Temperature Response



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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