

## A/124/E Miniature Piezo-Tronic IEPE Accelerometer

1mV/g up to 200mV/g  $\pm 10\%$       2gm      Std temp 125°C



The A/124 range of miniature IEPE accelerometers are available with a range of mounting options including adhesive base, integral ceramic isolating base and integral stud. With top and side entry versions the A/124 is ideal for applications requiring minimal mass loading effects. All versions feature:

- Konic Shear sensing element
- Fully welded construction
- Miniature KP M3.5mm thread, side or top entry coaxial connector
- Titanium case.

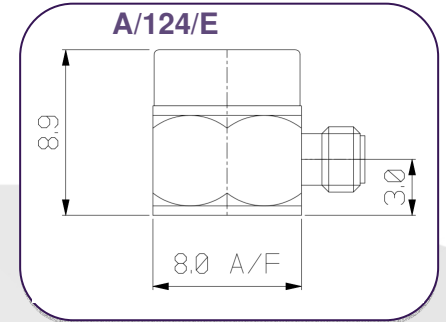
Featuring full compatibility with low-outgassing requirements the A/124 is popular with satellite installations.

### Note:

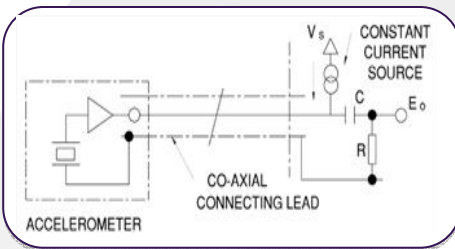
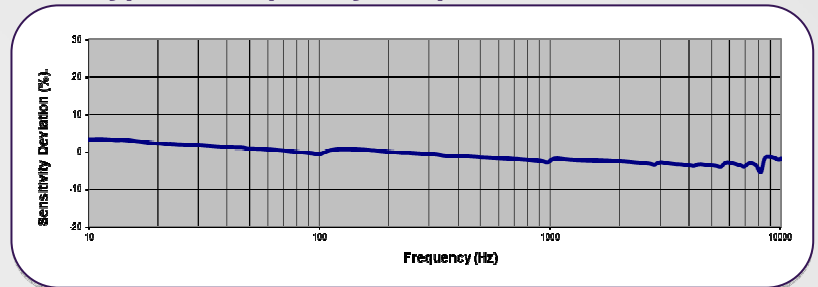
Voltage sensitivities shown are standard. We offer a wide range of sensitivities on request and recommend that applications are evaluated to determine the requisite sensitivity.

### Options:

- A/124/E Side entry
- A/124/E-1 Side entry, integral ceramic isolating base
- A/124/TE Top entry
- A/124/TE-1 Top entry, integral ceramic isolating base
- A/124/TS – Top entry, integral stud



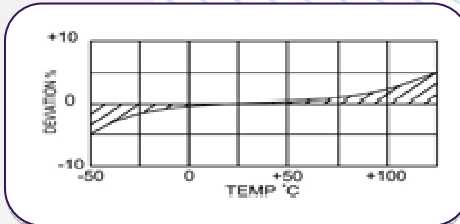
### Typical Frequency Response



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

1Hz	345 $\mu$ g/ $\sqrt$ Hz
10Hz	42.8 $\mu$ g/ $\sqrt$ Hz
100Hz	11.2 $\mu$ g/ $\sqrt$ Hz
1kHz	5.67 $\mu$ g/ $\sqrt$ Hz
10kHz	5.2 $\mu$ g/ $\sqrt$ Hz

### Temperature Response



	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> )	1mV/g	10mV/g	100mV/g
Resonant frequency	$\geq 70$ kHz					
Typical Frequency Response $\pm 5\%$ $\pm 10\%$	1Hz - 11kHz 0.7Hz - 13kHz					
Cross Axis error	$\leq 5\%$					
Temperature Range	-55/+125°C			-67/+257°F		
Voltage sensitivity deviation (20°C/68°F)	-5% @ -50°C +5% @ +125°C			-5% @ -67°F +5% @ +257°F		
Supply voltage	15/35 VDC					
Supply current	2/20 mA					
Output impedance	$\leq 100\Omega$					
Bias voltage	10/14 V DC					
Settling time within 10% bias	$< 5$ sec					
Shock limit	49033m/s <sup>2</sup>			5000g		
Saturation limit g	49033m/s <sup>2</sup>	4903m/s <sup>2</sup>	490.3m/s <sup>2</sup>	5000g	500g	50g
Broadband resolution grms	0.02	0.012	0.002	0.02	0.012	0.002
Base Strain Sensitivity	$\leq 0.001$ g/ $\mu$ strain					
Non-linearity (%FS)	$\leq 1\%$					
Discharge time coef.	1-3 seconds					
Case material	Titanium Grade 2					
Mounting	Flat base, adhesive					
Weight	2gm			0.07oz		
Case seal	Welded					
Size	8(A/F) x 9mm			0.31(A/F) x 0.35in		
Connector	M3.5 KP					

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

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