

## A/127/V Miniature Piezo-Tronic IEPE Accelerometer

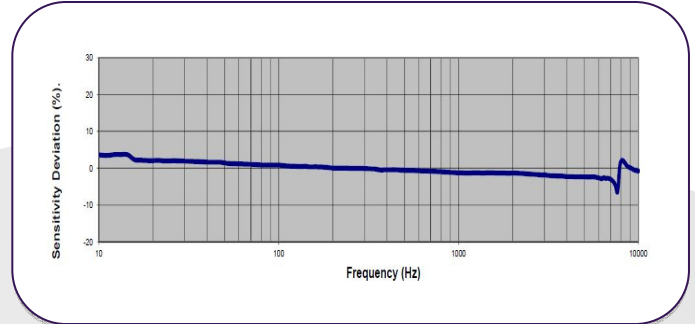
1mV/g up to 100mV/g  $\pm 10\%$     1.4gm    Std temp 125°C



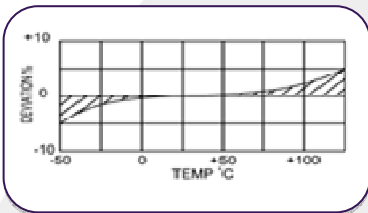
Sub-miniature teardrop IEPE / voltage output accelerometer. Manufactured in Titanium and features an all welded construction for a robust build. Using the DJB unique Konic shear sensing element the low mass of the A/127/V renders it transparent in the vast majority of light weight structure vibration measurement applications.

The A/127/V is adhesive mounted. A detachment tool is provided to shear adhesive joints. Shock removal is to be avoided as being deleterious to the integrity of the transducer. Abrasive cleaning of the attachment face will reduce base thickness over time; sparing use of adhesive will aid longevity. All welded construction. KP miniature microdot connector.

### Typical Frequency Response



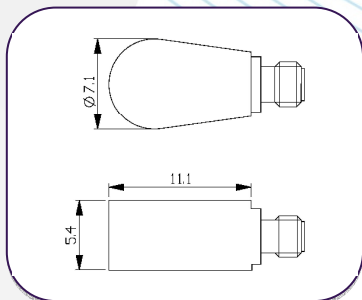
### Temperature Response



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

1Hz    393 $\mu$ g/ $\sqrt$ Hz  
 10Hz    174 $\mu$ g/ $\sqrt$ Hz  
 100Hz    32 $\mu$ g/ $\sqrt$ Hz  
 1kHz    12 $\mu$ g/ $\sqrt$ Hz  
 10kHz    5 $\mu$ g/ $\sqrt$ Hz

### A/127/V



	Metric			Imperial		
	0.1 mV/(m/s <sup>2</sup> )	1.02 mV/(m/s <sup>2</sup> )	10.2 mV/(m/s <sup>2</sup> )	1mV/g	10mV/g	100mV/g
Voltage Sensitivity $\pm 10\%$	0.1 mV/(m/s <sup>2</sup> )	1.02 mV/(m/s <sup>2</sup> )	10.2 mV/(m/s <sup>2</sup> )	1mV/g	10mV/g	100mV/g
Resonant Frequency	$\geq 50$ kHz					
Typical Frequency Response $\pm 5\%$	1Hz-11kHz	1Hz-11kHz	2Hz-11kHz	1Hz-11kHz	1Hz-11kHz	2Hz-11kHz
$\pm 10\%$	0.7Hz-13kHz	0.7Hz-13kHz	1Hz-13kHz	0.7Hz-13kHz	0.7Hz-13kHz	1Hz-13kHz
Cross Axis error	$< 5\%$					
Temperature Range	-50/ +125°C			-58/ +257°F		
Voltage sensitivity deviation (20°C/68°F)	-5% @ -50°C +5% @ +125°C			-5% @ -58°F +5% @ +257°F		
Supply Voltage	15 to 35 V DC					
Supply Current	2 to 20 mA					
Bias Voltage	9 to 14 V DC					
Settling time to 90% final val.	$< 5$ sec					
Maximum Continuous g level sine	49033m/s <sup>2</sup>			5000g		
Max Shock g level, rise time $\mu$ s	98100m/s <sup>2</sup> , 20			10000g, 20		
Saturation Limit, equiv.g	49033 m/s <sup>2</sup>	4903 m/s <sup>2</sup>	490.3m/s <sup>2</sup>	5000g	500g	50g
Base Strain Sensitivity	$\leq 5\%$					
Case Material	Titanium					
Mounting	Adhesive					
Weight	1.4gm			0.05oz		
Size	11.1 x 7.1 x 5.4mm			0.44 x 0.28 x 0.21in		
Connector	M3.5 KP Miniature Microdot					

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

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

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