

## AT/13 Triaxial Piezo-Tronic IEPE Accelerometer

1mV/g up to 100mV/g  $\pm 10\%$     25.9gm    Std Temp 125°C (185°C HT)



The AT/13 has been developed primarily for the Modal Analysis and Structural test marketplace with particular focus on the Automotive and Aerospace markets. The slotted sides and a slotted base allow it to be mounted on 5 of its faces by sliding into the accompanying clip. Users can then mount the clips using normal glue methods and slide the accelerometers in and out of the clip as required. This ensures perfect repeatability for tests without the need for leaving the accelerometer in situ. In addition, for large channel count testing, all accelerometers can be mounted in the same orientation making software set up easier.

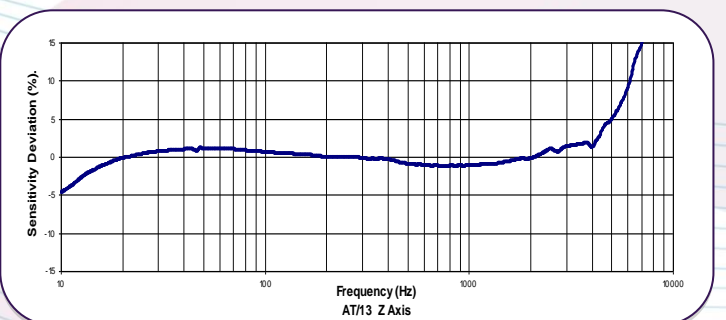
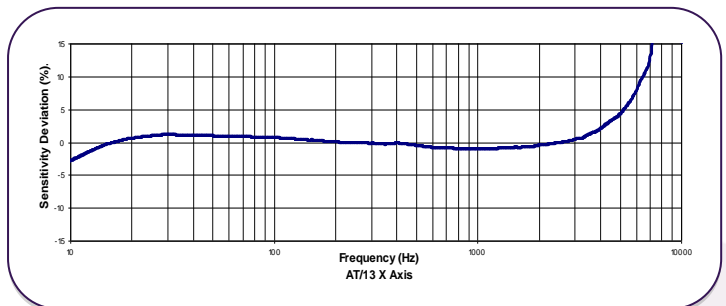
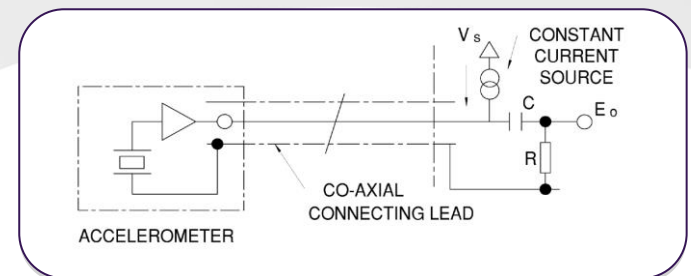
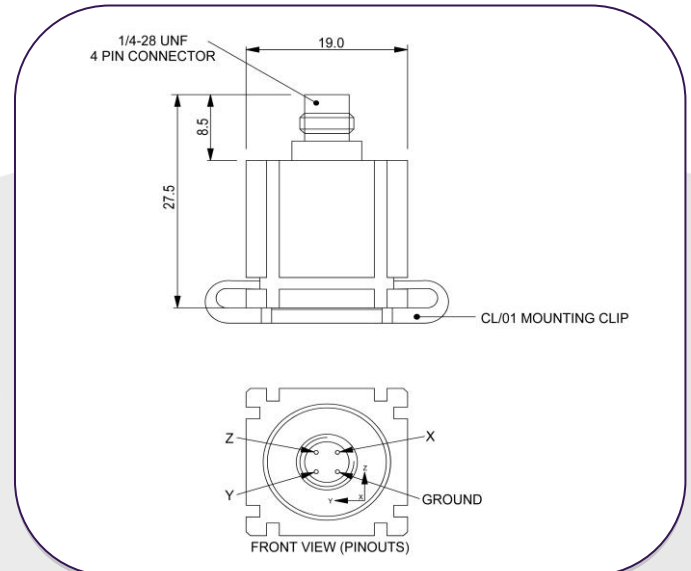
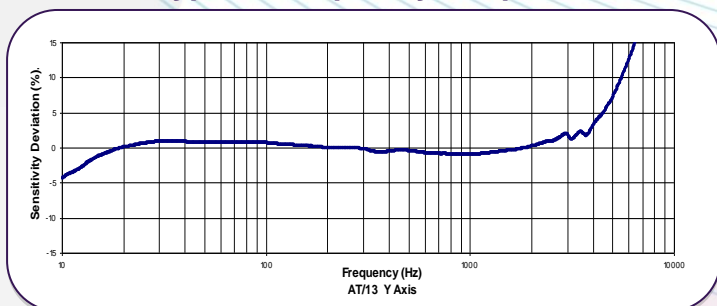
Manufactured in Titanium for low mass and long life, the AT/13 has three individual Konic Shear sensing elements internally mounted in the three orthogonal axes; this provides excellent performance in each axis with minimal cross axis effects.

The AT/13 is available as charge output or as IEPE voltage output.

Clip part number CL/01 can be ordered separately. Also available is the CL/02 which has a thicker base and can be modified to suit specific user applications.

Also available with DJB's unique high temperature IEPE solution capable of testing up to 185°C as an option.

### Typical Frequency Response



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

**DJB Instruments (UK) Ltd**  
Finchley Avenue,  
Mildenhall, Suffolk IP28 7BG

Tel +44 (0)1638 712 288  
Email sales@djbstruments.com  
Web www.djbstruments.com

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

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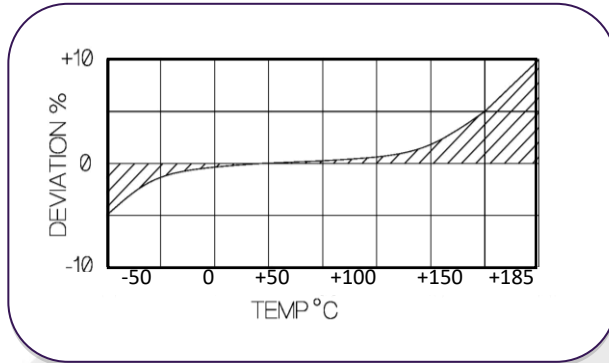
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### Temperature



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

1Hz	345 $\mu$ g/ $\sqrt$ Hz
10Hz	156 $\mu$ g/ $\sqrt$ Hz
100Hz	44 $\mu$ g/ $\sqrt$ Hz
1kHz	12.1 $\mu$ g/ $\sqrt$ Hz
10kHz	8.2 $\mu$ g/ $\sqrt$ Hz

	Metric			Imperial		
	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
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	X / Y Axis 20kHz			Z Axis 33 kHz		
Typical Frequency Response $\pm 5\%$ $\pm 10\%$	1Hz – 5kHz 0.7Hz – 6kHz	1Hz – 5kHz 0.7Hz – 6kHz	20Hz – 5kHz 15Hz – 6kHz	1Hz – 5kHz 0.7Hz – 6kHz	1Hz – 5kHz 0.7Hz – 6kHz	20Hz – 5kHz 15Hz – 6kHz
Cross Axis error	$\leq 5\%$ max					
Temperature Range	-50/+125°C (HT Version 185°C)			-58/+257°F (HT Version 365°F)		
Voltage sensitivity deviation (20°C / 68°F)	-5% @ -50°C +5% @ +125°C (max 185°C)			-5% @ -58°F +5% @ +257°F (max 365°F)		
Supply voltage	15/ 35 V DC					
Supply current	2/15 mA					
Bias voltage (20°C/68°F)	9/10 V DC					
Settling time to 90% final val.	<1 sec					
Max continuous accn.g sine	49033m/s <sup>2</sup>			5000g		
Saturation Limit	49033m/s <sup>2</sup>	4903m/s <sup>2</sup>	490.3m/s <sup>2</sup>	5000g	500g	50g
Base Strain Sensitivity	$\leq 5\%$					
Case material	Titanium Grade 2					
Mounting	Adhesive or CL/01 or CL/02 Mounting Clip					
Weight	25.9g			0.91oz		
Case seal	Welded hermetic connector					
Size	19 x 19 x 19mm			0.75 x 0.75 x 0.75in		
Connector	4 pin ¼-28 UNF					

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