

# A/38, A/38-1 Micro-miniature Piezoelectric Triaxial Accelerometer 0.4pC/g nom. 0.4gm 200°C Max temp



Micro-miniature triaxial vibration transducers comprising three shear plate sensing elements. A/28/E inserts are bonded orthogonally into hard anodised aluminium housing.

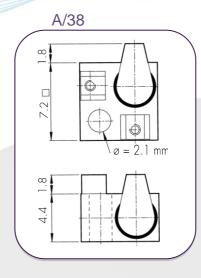
The inserts are electrically insulated, individually and from the housing, thus eliminating ground loop interference.

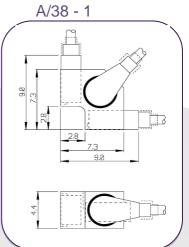
The additional mechanical isolation implicit in the construction provides near elimination of strain induced error.

The spatial response of a structure to dynamic forcing may lead to erroneous single axis vibration or shock measurement, due to the inherent directional property of the transducer.

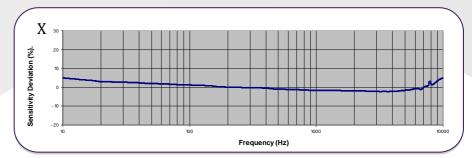
In cases where this is deemed to be a problem, an orthogonal three axis measurement, allowing computation of absolute value and direction offers a solution.

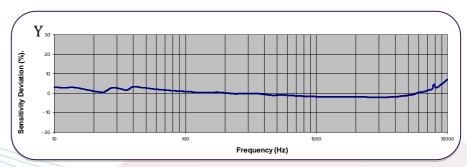
The 3 output connectors of the A/38-1 are in the same horizontal plane.



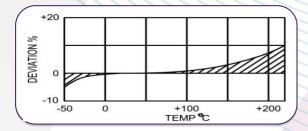


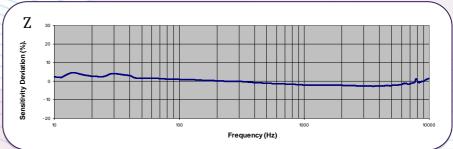
# Typical Frequency Response





### Temperature Response







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# **Options**

Wideband temperature calibration

	Metric			Imperial		
Charge Sensitivity nom.	0.4pC/(m/s²)			0.4pC/g		
Capacitance pF	280			280		
Resonant Frequency kHz	X (32)	Y (32)	Z (36)	X (32)	Y (32)	Z (36)
Cross Axis error % max	5			5		
Temperature Range	-50/+200°C			-58/+ 392°F		
Charge sensitivity deviation re 20°C/68°F	-5% @ -50°C +10% @ +200°C			-5% @-58°F +10% @+392°F		
Frequency Response Hz	1 – 10k			1 – 10k		
Maximum Continuous level	19,613m/s²			2000g		
Case Material	Inserts s/steel 303 S31 Hard anodized al. block			Inserts s/steel 303 S31 Hard anodized al. block		
Connector	3x L8			3x L8		
Weight	0.9g			0.032oz		
Size	7.3 x 7.3 x 4.4mm A/38 7.2 X 7.2 X 4.4mm A/38-1			0.29 X 0.29 X 0.17in A/38 0.28 X 0.28 X 0.17in A/38-1		
Base Strain Sensitivity	<0.002g/μ strain			<0.002g/µ strain		
Max Shock g level, rise time µs	98,100m/s <sup>2</sup> ,20			10000g, 20		
Case Seal	Welded			Welded		
Mounting	x1 Ø 2.1mm through hole, Adhesive			x1 Ø 2.1mm through hole, Adhesiv		