

Model Number
354A14

TRIAXIAL ICP® ACCELEROMETER

Revision: A
ECN #: 55405

	ENGLISH	SI	
Performance			
Sensitivity(± 10 %)	10.0 mV/g	1.02 mV/(m/s ²)	
Measurement Range	± 500 g pk	± 4,905 m/s ² pk	
Frequency Range(± 5 %)	2.5 to 5,000 Hz	2.5 to 5,000 Hz	
Frequency Range(± 10 %)	5,000 to 10,000 Hz	5,000 to 10,000 Hz	
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	
Broadband Resolution(1 to 10,000 Hz)	.004 g rms	.04 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s ² pk	
Temperature Range(Operating)	-320 to +250 °F	-195 to +120 °C	
Temperature Range(Storage)	-320 to +250 °F	-195 to +120 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	.05 g/µε	.5 (m/s ²)/µε	[1]
Electrical			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.5 to 2 sec	0.5 to 2 sec	
Settling Time(within 10% of bias)	< 5 sec	< 5 sec	
Spectral Noise(1 Hz)	1,900 µg/√Hz	18,639 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	260 µg/√Hz	2,551 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	60 µg/√Hz	589 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	35 µg/√Hz	343 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 kHz)	35 µg/√Hz	343 (µm/sec ²)/√Hz	[1]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	
Physical			
Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Hermetic	Hermetic	
Size (Height x Width x Length)	.42 in x .87 in x .87 in	10.7 mm x 22.0 mm x 22.0 mm	
Weight	0.95 oz	27 gm	[1]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Mounting	Through Hole	Through Hole	

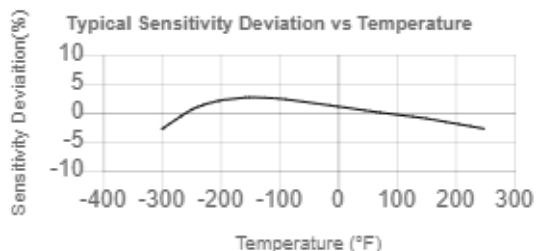
OPTIONAL VERSIONS
Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

- [1]Typical.
- [2]Zero-based, least-squares, straight line method.
- [3]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 039A22 Allen wrench, 7/64" hex (1)
- Model 081A133 Mounting Screw (6-32 x 5/8" SHCS 18-8 w/wire lock hole) (1)
- Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
- Model ACS-44T Triaxial extended amplitude response, upper 5% point to 10% point (requires ACS-1T or equivalent). (1)
- Model M039A22 Allen wrench for use with M3 thread (1)
- Model M081A133 Mounting Screw (M3.5x0.6 x 16mm SHCS 18-8 w/wire lock hole) (1)



All specifications are at room temperature unless otherwise specified.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
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