Model	Number		
356A01			

TRIAXIAL ICP® ACCELEROMETER

Revision: G

ECN #: 42197

Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 20 %)	5 mV/g	0.51 mV/(m/s²)	
Measurement Range	± 1000 g pk	± 9810 m/s² pk	
Frequency Range(± 5 %)(y or z axis)	2 to 8000 Hz	2 to 8000 Hz	
Frequency Range(± 5 %)(x axis)	2 to 5000 Hz	2 to 5000 Hz	
Frequency Range(+1 dB)(x axis)	≥ 8 kHz	≥ 8 kHz	
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.003 g rms	0.03 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s ² pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	[2]
Temperature Response	See Graph	See Graph	[1][2]
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	7 to 12 VDC	7 to 12 VDC	
Discharge Time Constant	0.24 to 1.0 sec	0.24 to 1.0 sec	
Settling Time(within 10% of bias)	<3 sec	<3 sec	
Spectral Noise(1 Hz)	1200 μg/√Hz	11,772 (μm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	300 μg/√Hz	2943 (µm/sec²)/√Hz	
Spectral Noise(100 Hz)	100 μg/√Hz	981 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)		294 (µm/sec ²)/√Hz	[1]
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.25 in x 0.25 in x 0.25 in	6.35 mm x 6.35 mm x 6.35 mm	
Weight(without cable)	0.04 oz	1.0 gm	[1]
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Side	Side	
Cable Length	5 ft	1.5 m	
Cable Type	034 4-cond Shielded	034 4-cond Shielded	
	Adhesive	Adhesive	

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.

HT - High temperature, extends normal operation temperatures

Temperature Range(Operating) -65 to +325 °F -54 to +163 °C

W - Water Resistant Cable

Electrical Connector Sealed Integral Cable Sealed Integral Cable

NOTES:

- [1] Typical.
- [2] 250° F to 325° F data valid with HT option only.
- [3] Zero-based, least-squares, straight line method.

[4] See PCB Declaration of Conformance PS023 for details.

(E₁₄

Typical Sensitivity Deviation vs Temperature 20 10 -100 -50 0 50 100 150 200 250 300 350 Temperature (*F)

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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SUPPLIED ACCESSORIES:

Model 034G05 4-cond. shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs (1)

Model 080A109 Petro Wax (1)

Model 080A90 Quick Bonding Gel (1)

Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)

Entered: AP	Engineer: JJB	Sales: WDC	Approved: JJB	Spec Number:
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