Model Number					
356M57					

TRIAXIAL ICP® ACCELEROMETER

Revision: H

ECN #: 42197

00001					
Performance	<u>ENGLISH</u>	<u>SI</u>			
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s²)			
Measurement Range	± 500 g pk	± 4905 m/s² pk		0 g pk $\pm 4905 \text{ m/s}^2 \text{ pk}$	
Frequency Range(± 5 %)(y or z axis)	2 to 10,000 Hz	2 to 10,000 Hz			
Frequency Range(± 5 %)(x axis)	2 to 7000 Hz	2 to 7000 Hz			
Resonant Frequency	≥ 55 kHz	≥ 55 kHz			
Broadband Resolution(1 to 10,000 Hz)	0.003 g rms	0.03 m/s ² rms	[1]		
Non-Linearity	≤ 1 %	≤ 1 %	[2]		
Transverse Sensitivity	≤ 5 %	≤ 5 %			
Environmental					
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s² pk			
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C			
Temperature Response	See Graph	See Graph	[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	7 to 12 VDC	7 to 12 VDC			
Discharge Time Constant	0.3 to 1.0 sec	0.3 to 1.0 sec			
Settling Time(within 10% of bias)	<3 sec	<3 sec			
Spectral Noise(1 Hz)	1000 μg/√Hz	9810 (μm/sec ²)/√Hz	[1]		
Spectral Noise(10 Hz)	300 μg/√Hz	2943 (µm/sec ²)/√Hz		2943 (µm/sec ²)/√Hz [1	
Spectral Noise(100 Hz)	80 μg/√Hz	785 (μm/sec ²)/√Hz		785 (µm/sec ²)/√Hz [´	
Spectral Noise(1 kHz)	25 μg/√Hz	308 (µm/sec ²)/√Hz [1		308 (µm/sec²)/√Hz	
Physical		. ,			
Sensing Element	Ceramic	Ceramic			
Sensing Geometry	Shear	Shear			
Housing Material	Titanium	Titanium			
Sealing	Welded Hermetic	Welded Hermetic			
Size (Height x Length x Width)	0.4 in x 0.4 in x 0.4 in	10.2 mm x 10.2 mm x 10.2 mm			
Weight(without cable)	0.14 oz	4 gm [4 gm	
Electrical Connector	Integral Cable	Integral Cable [Integral Cable	
Electrical Connection Position	Side	Side		Side	
Cable Termination	1/4-28 4-Pin Jack	1/4-28 4-Pin Jack		1/4-28 4-Pin Jack	
Cable Length	5 ft	1.5 m			
Cable Type	034 4-cond Shielded	034 4-cond Shielded	[4]		
Mounting Thread	5-40 Female	5-40 Female			
Mounting Torque	4 to 5 in-lb	45 to 56 N-cm			
	Typical Sensi	itivity Deviation vs Temperature			

Sensitivity Deviaition(10 -10 -70 -30 10 50 90 130 170 210 250

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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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] Materials selected for a TML of 1% or less and a CVCM of 0.1% or less.
- [4] Outgassing is limited to PTFE in the cable. All other outgassing materials are omitted from this model.
- [5] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

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

Model 080A Adhesive Mounting Base (1)

Model 080A109 Petro Wax (1)

Model 081A27 Mounting Stud (5-40 to 5-40) (1)

Model 081A90 Mounting stud, 10-32 to 5-40 (1)

Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1) Model M081A27 Metric mounting stud, 5-40 to M3 x 0.50 long (1)

Entered: AP	Engineer: JJB	Sales: WDC	Approved: JJB	Spec Number:
Date: 11/8/2013	Date: 11/8/2013	Date: 11/8/2013	Date: 11/8/2013	10267



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