

Model Number  
**356A66**

# TRIAxIAL ICP® ACCELEROMETER

Revision: D  
ECN #: 29834

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s <sup>2</sup> )	
Measurement Range	± 500 g pk	± 4900 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	2 to 4000 Hz	2 to 4000 Hz	[5][6]
Resonant Frequency	≥ 35 kHz	≥ 35 kHz	
Filter Type	single pole	single pole	
Electrical Filter Roll-off	6 dB/octave	6 dB/octave	[3]
Electrical Filter Cutoff Frequency	16 kHz	16 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	0.002 g rms	0.02 m/s <sup>2</sup> rms	[3]
Non-Linearity	≤ ±1 %	≤ ±1 %	[7]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
<b>Environmental</b>			
Overload Limit(Shock)	± 7000 g pk	± 68,600 m/s <sup>2</sup> pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	[4]
Temperature Response	See Graph	See Graph	[3]
Base Strain Sensitivity	0.001 g/με	0.01 (m/s <sup>2</sup> )/με	[3]
<b>Electrical</b>			
Excitation Voltage	22 to 30 VDC	22 to 30 VDC	[1]
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 ohm	≤ 200 ohm	
Output Bias Voltage	7 to 15 VDC	7 to 15 VDC	[2]
Discharge Time Constant	0.1 to 1.0 sec	0.1 to 1.0 sec	
Settling Time(within 10% of bias)	<3 sec	<3 sec	
Spectral Noise(1 Hz)	450 μg/√Hz	4415 (μm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(10 Hz)	100 μg/√Hz	981 (μm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(100 Hz)	25 μg/√Hz	245 (μm/sec <sup>2</sup> )/√Hz	[3]
Spectral Noise(1 kHz)	20 μg/√Hz	196 (μm/sec <sup>2</sup> )/√Hz	[3]
<b>Physical</b>			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.55 in x 0.80 in x 0.55 in	14.0 mm x 20.3 mm x 14.0 mm	
Weight	0.32 oz	9.0 gm	[3]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Mounting Thread	10-32 Female	10-32 Female	
Mounting Torque	10 to 20 in-lb	113 to 225 N-cm	

**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

**T** - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4

**TLA** - TEDS LMS International - Free Format

**TLB** - TEDS LMS International - Automotive Format

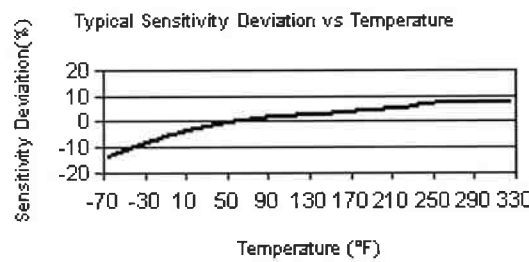
**TLC** - TEDS LMS International - Aeronautical Format

**NOTES:**

- [1] Full range requires adequate excitation voltage.
- [2] TEDS option adds 1.0 VDC to bias voltage.
- [3] Typical.
- [4] 250° F to 325° F data valid with HT option only.
- [5] Upper frequency response is ± 500 Hz from the specified value.
- [6] X-axis frequency response is limited due to mounting method.
- [7] Zero-based, least-squares, straight line method.
- [8] See PCB Declaration of Conformance PS023 for details.

**SUPPLIED ACCESSORIES:**

- Model 080A109 Petro Wax (1)
- Model 080A12 Adhesive Mounting Base (1)
- Model 081B05 Mounting Stud (10-32 to 10-32) (1)
- Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
- Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)



Entered: <i>JH</i>	Engineer: <i>BM</i>	Sales: <i>RJF</i>	Approved: <i>EB</i>	Spec Number:
Date: <i>12-15-08</i>	Date: <i>12-12-08</i>	Date: <i>12-12-08</i>	Date: <i>12-15-08</i>	<b>20571</b>

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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