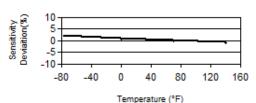
Model Number
356M131

# TRIAXIAL ICP® ACCELEROMETER

Revision: C ECN #: 45989

Performance	<u>ENGLISH</u>	<u>SI</u>			
Sensitivity(± 15 %)(@ 80 Hz)	10 mV/g	1.02 mV/(m/s²)		1.02 mV/(m/s²)	
Measurement Range	± 500 g pk	± 4905 m/s² pk			
Frequency Range(± 5 %)	2 to 3000 Hz	2 to 3000 Hz			
Resonant Frequency	≥ 40 kHz	≥ 40 kHz			
Broadband Resolution(1 to 10,000 Hz)	0.004 g rms	0.04 m/s <sup>2</sup> rms	[1]		
Non-Linearity	≤ 1 %	≤ 1 %	[2]		
Transverse Sensitivity	≤ 5 %	≤ 5 %			
TEDS Compliant	Yes	Yes	[3]		
Environmental					
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s <sup>2</sup> pk			
Temperature Range(Operating)	-76 to +140 °F	-60 to +60 °C			
Temperature Range(Storage)	-310 to +250 °F	-190 to +121 °C			
Temperature Response	See Graph	See Graph	[1]		
Base Strain Sensitivity	≤ 0.001 g/με	≤ 0.01 (m/s²)/με	[1]		
Electrical					
Excitation Voltage	20 to 30 VDC	20 to 30 VDC			
Constant Current Excitation	2 to 20 mA	2 to 20 mA			
Output Impedance	≤ 100 Ohm	≤ 100 Ohm			
Output Bias Voltage	8 to 13 VDC	8 to 13 VDC			
Discharge Time Constant	0.25 to 1.5 sec	0.25 to 1.5 sec			
Settling Time(within 10% of bias)	<10 sec	<10 sec			
Spectral Noise(1 Hz)	1910 μg/√Hz	18,737 (μm/sec <sup>2</sup> )/√Hz			
Spectral Noise(10 Hz)	336 μg/√Hz	3296 (µm/sec <sup>2</sup> )/√Hz			
Spectral Noise(100 Hz)	75 μg/√Hz	736 (µm/sec²)/√Hz			
Spectral Noise(1 kHz)	19 μg/√Hz	186 (µm/sec <sup>2</sup> )/√Hz			
Spectral Noise(10 kHz)	13 µg/√Hz	128 (µm/sec <sup>2</sup> )/√Hz			
Physical	. 5	(			
Sensing Element	Quartz	Quartz			
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 mm x 20.3 mm x 14 mm			
Weight	0.32 oz	9.0 gm	[1]		
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			
	Typical Sensitivit	v Deviation vs Temperature			

#### Typical Sensitivity Deviation vs Temperature



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.

TLA - TEDS LMS International - Free Format

TLB - TEDS LMS International - Automotive Format

TLC - TEDS LMS International - Aeronautical Format

Output Bias Voltage 8 to 13 VDC 8 to 13 VDC

TLD - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4

## NOTES:

- [1] Typical.
- [2] Zero-based, least-squares, straight line method.
- [3] TEDS Capable Digital Memory and Communication, compliant with IEEE P1451.4

### SUPPLIED ACCESSORIES:

Model 080A178 Adhesive Mounting Base with Integral Stud (1)
Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)

Entered: LK	Engineer: RB	Sales: RWM	Approved: BAM	Spec Number:
Date: 4/13/2017	Date: 4/13/2017	Date: 4/13/2017	Date: 4/13/2017	22935



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