

**Model Number**  
356M239

# TRIAxIAL ICP® ACCELEROMETER

Revision: NR  
ECN #: 51276

**Performance**

	ENGLISH	SI	
Sensitivity(± 20 %)	10 mV/g	1.02 mV/(m/s <sup>2</sup> )	
Measurement Range	± 500 g pk	± 4,905 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)(y or z axis)	2 to 8,000 Hz	2 to 8,000 Hz	
Frequency Range(± 5 %)(x axis)	2 to 5,000 Hz	2 to 5,000 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 <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

**Environmental**

Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s <sup>2</sup> pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]

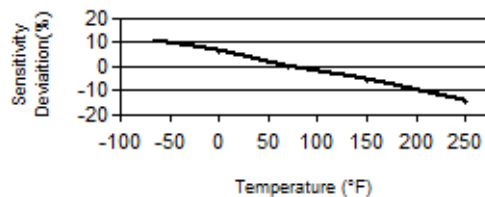
**Electrical**

Excitation Voltage	22 to 30 VDC	22 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	9 to 16 VDC	9 to 16 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)	1,200 µg/√Hz	11,772 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 Hz)	300 µg/√Hz	2,943 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	100 µg/√Hz	981 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	30 µg/√Hz	294 (µm/sec <sup>2</sup> )/√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 Termination	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	
Mounting	Adhesive	Adhesive	

Typical Sensitivity Deviation vs Temperature



**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 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: LK	Engineer: KW	Sales: KK	Approved: BAM	Spec Number:
Date: 11/30/2020	Date: 11/30/2020	Date: 11/30/2020	Date: 11/30/2020	74010

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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.