Model	Number				
250424					

## TRIAXIAL ICP® ACCELEROMETER

Revision: F

ECN #: 42197

Performance	ENGLISH	<u>SI</u>	
Sensitivity(± 15 %)	10 mV/g	10 mV/g 1.02 mV/(m/s²)	
Measurement Range	± 500 g pk	± 4905 m/s² pk	
Frequency Range(± 5 %)	1 to 9000 Hz	1 to 9000 Hz	
Frequency Range(± 10 %)	0.5 to 12,000 Hz	0.5 to 12,000 Hz	
Resonant Frequency	≥ 45 kHz	≥ 45 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 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s <sup>2</sup> 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	1.0 to 3.5 sec	1.0 to 3.5 sec	
Settling Time(within 10% of bias)	<10 sec	<10 sec	
Spectral Noise(1 Hz)	900 μg/√Hz	8820 (µm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 Hz)	250 μg/√Hz	2450 (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)	. σ 50 μg/√Hz	490 (µm/sec <sup>2</sup> )/√Hz	[1]
Physical		100 (p.11/000 )/ 11 iz	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.28 in x 0.47 in x 0.47 in	7.0 mm x 12.0 mm x 12.0 mm	
Weight(without cable)	0.11 oz	3.1 gm	[1]
Electrical Connector	8-36 4-Pin	8-36 4-Pin	
Electrical Connection Position	Side	Side	
Mounting	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) -54 to +163 °C

J - Ground Isolated

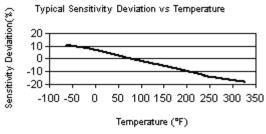
Electrical Isolation(Base) 10<sup>8</sup> Ohm 10<sup>8</sup> Ohm

Size - Height x Length x Width 0.33 in x 0.47 in x 0.47 in 8.3 mm x 12.0 mm x 12.0 mm

0.13 oz 3.7 gm

## 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.



SUPPLIED ACCESSORIES:

Model 034K10 Cable 10FT Mini 4 Pin To (3) BNC (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:
Date: 11/8/2013	Date: 11/8/2013	Date: 11/8/2013	Date: 11/8/2013	10463



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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.

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