

Model Number  
**354M56**

# TRIAxIAL ICP<sup>®</sup> ACCELEROMETER

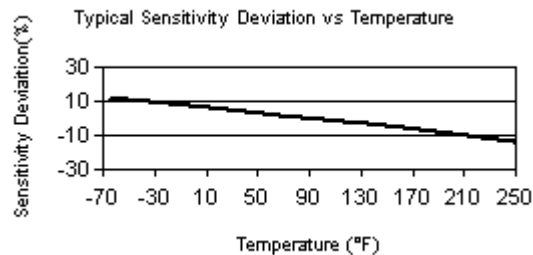
Revision: A  
ECN #: 42197

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity( $\pm 15\%$ )	10 mV/g	1.02 mV/(m/s <sup>2</sup> )	
Measurement Range	$\pm 500$ g pk	$\pm 4905$ m/s <sup>2</sup> pk	
Frequency Range( $\pm 5$ )	2 to 8000 Hz	2 to 8000 Hz	
Resonant Frequency	$\geq 40$ kHz	$\geq 40$ kHz	
Broadband Resolution(1 to 10,000 Hz)	0.003 g rms	0.03 m/s <sup>2</sup> rms	[1]
Non-Linearity	$\leq 1\%$	$\leq 1\%$	[2]
Transverse Sensitivity	$\leq 5\%$	$\leq 5\%$	
<b>Environmental</b>			
Overload Limit(Shock)	$\pm 10,000$ g pk	$\pm 98,100$ m/s <sup>2</sup> pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	
<b>Electrical</b>			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	$\leq 200$ Ohm	$\leq 200$ 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 $\mu\text{g}/\sqrt{\text{Hz}}$	9810 $(\mu\text{m}/\text{sec}^2)/\sqrt{\text{Hz}}$	[1]
Spectral Noise(10 Hz)	300 $\mu\text{g}/\sqrt{\text{Hz}}$	2943 $(\mu\text{m}/\text{sec}^2)/\sqrt{\text{Hz}}$	[1]
Spectral Noise(100 Hz)	80 $\mu\text{g}/\sqrt{\text{Hz}}$	785 $(\mu\text{m}/\text{sec}^2)/\sqrt{\text{Hz}}$	[1]
Spectral Noise(1 kHz)	25 $\mu\text{g}/\sqrt{\text{Hz}}$	308 $(\mu\text{m}/\text{sec}^2)/\sqrt{\text{Hz}}$	[1]
Electrical Isolation	$>10^8$ Ohm	$>10^8$ Ohm	
<b>Physical</b>			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.30 in x 0.55 in x 0.55 in	7.6 mm x 14.0 mm x 14.0 mm	[1]
Weight(without cable)	0.18 oz	5.0 gm	
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Cable Length	5 ft	1.5 m	
Cable Type	034 4-cond Shielded	034 4-cond Shielded	
Mounting	Through Hole	Through Hole	
Mounting Torque	4 to 5 in-lb	45 to 55 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.

**NOTES:**  
[1] Typical.  
[2] Zero-based, least-squares, straight line method.  
[3] See PCB Declaration of Conformance PS023 for details.

**SUPPLIED ACCESSORIES:**  
Model 034M22 Cable, Low Outgas, 4-pin Plug to 3 BNC. (1)  
Model 081M216 Low Outgas Mounting Screw, 5-40 thd x 1/2" long (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	<b>35208</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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