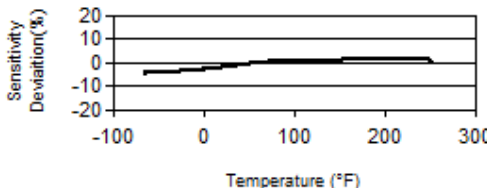





Model Number 639A91		TRIAxIAL ICP® ACCELEROMETER		Revision: NR ECN #: 46924		
Performance	ENGLISH	SI		OPTIONAL VERSIONS		
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s ²)	[2]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used. EX - Hazardous Area Approval- contact factory for specific approvals		
Measurement Range	± 50 g pk	± 491 m/s ² pk				
Frequency Range(± 5 %)	8.0 to 5500 Hz	8.0 to 5500 Hz				
Frequency Range(± 3 dB)	0.5 to 10 kHz	0.5 to 10 kHz				
Resonant Frequency	≥ 25 kHz	≥ 25 kHz				
Broadband Resolution(1 to 10,000 Hz)	.0003 g rms	.003 m/s ² rms	[1]			
Non-Linearity	≤ 1 %	≤ 1 %	[3]			
Transverse Sensitivity	≤ 5 %	≤ 5 %				
Environmental						
Overload Limit(Shock)	± 5000 g pk	± 5000 g pk				
Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C				
Temperature Response	See Graph	See Graph	[1]			
Electrical				NOTES: [1] Typical. [2] Conversion Factor 1g = 9.81 m/s ² . [3] Zero-based, least-squares, straight line method. [4] See PCB Declaration of Conformance PS023 for details.		
Excitation Voltage	18 to 30 VDC	18 to 30 VDC				
Constant Current Excitation	2 to 20 mA	2 to 20 mA				
Output Impedance	≤ 150 Ohm	≤ 150 Ohm				
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC				
Discharge Time Constant	≥ .32 sec	≥ .32 sec				
Settling Time(within 10% of bias)	<2 sec	<2 sec				
Spectral Noise(1 Hz)	90 µg/√Hz	883 (µm/sec ²)/√Hz	[1][2]			
Spectral Noise(10 Hz)	20 µg/√Hz	196 (µm/sec ²)/√Hz	[1][2]			
Spectral Noise(100 Hz)	10 µg/√Hz	98.1 (µm/sec ²)/√Hz	[1][2]			
Spectral Noise(1 kHz)	3.0 µg/√Hz	29.4 (µm/sec ²)/√Hz	[1][2]			
Electrical Isolation(Case)	≥ 10 ⁸ Ohm	≥ 10 ⁸ Ohm				
Physical						
Sensing Element	Ceramic	Ceramic				
Sensing Geometry	Shear	Shear				
Housing Material	Stainless Steel	Stainless Steel				
Sealing	Hermetic	Hermetic				
Size (Height x Length x Width)	.72 in x .95 in x .95 in	18.3 mm x 24.1 mm x 24.1 mm				
Weight(Maximum)	3.0 oz	85 gm				
Electrical Connector	4-Pin, M12	4-Pin, M12				
Electrical Connection Position	Side	Side				
Mounting	Through Hole	Through Hole				
	Typical Sensitivity Deviation vs Temperature 			SUPPLIED ACCESSORIES: Model 081A56 Captive mounting bolt 1/4-28 x .75" (1) Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)		
						
						
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. ICP® is a registered trademark of PCB Group, Inc.						
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Entered: LK	Engineer: JJD	Sales: JJB	Approved: MC			Spec Number:
Date: 6/20/2017	Date: 6/20/2017	Date: 6/20/2017	Date: 6/20/2017			64198



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