

Model Number 638A06		ICP® ACCELEROMETER		Revision: A ECN #: 48955	
Performance		ENGLISH		SI	
Sensitivity(± 10 %)		25 mV/g		2.54 mV/(m/s²) [2]	
Measurement Range		± 200 g		± 1962 m/s² [3]	
Frequency Range(± 5 %)		600 to 24,000 cpm		10 to 400 Hz	
Frequency Range(± 3 dB)		240 to 90,000 cpm		4 to 1500 Hz	
Filter Type		Low Pass		Low Pass	
Electrical Filter Corner Frequency		1.5 kHz		1.5 kHz	
Electrical Filter Roll-off		12 dB/octave		12 dB/octave	
Resonant Frequency		≥ 1200 kcpm		≥ 20 kHz [1]	
Broadband Resolution(1 to 10,000 Hz)		1 mg rms		0.01 m/s² rms [1]	
Non-Linearity		± 1 %		± 1 % [4]	
Transverse Sensitivity		≤ 5 %		≤ 5 %	
Environmental					
Overload Limit(Shock)		1000 g pk		9810 m/s² pk	
Temperature Range		-320 to +250 °F		-196 to +121 °C [1]	
Temperature Response		See Graph		See Graph	
Electrical					
Settling Time(within 1% of bias)		≤ 3 sec		≤ 3 sec	
Discharge Time Constant		0.05 to 0.5 sec		0.05 to 0.5 sec	
Excitation Voltage		18 to 28 VDC		18 to 28 VDC	
Constant Current Excitation		1.6 to 20 mA		1.6 to 20 mA	
Output Impedance		≤ 100 Ohm		≤ 100 Ohm	
Output Bias Voltage		7 to 11 VDC		7 to 11 VDC	
Spectral Noise(1 Hz)		600 µg/√Hz		5890 (µm/sec²)/√Hz	
Spectral Noise(10 Hz)		120 µg/√Hz		1180 (µm/sec²)/√Hz [1]	
Spectral Noise(100 Hz)		36 µg/√Hz		355 (µm/sec²)/√Hz [1]	
Spectral Noise(1 kHz)		25 µg/√Hz		250 (µm/sec²)/√Hz [1]	
Spectral Noise(10 kHz)		6 µg/√Hz		59 (µm/sec²)/√Hz	
Electrical Isolation		≥ 10 ⁸ Ohm		≥ 10 ⁸ Ohm	
Physical					
Size (Length x Width x Height)		2.25 in x 1 in x 1 in		57.4 mm x 25.4 mm x 25.4 mm	
Weight		6.4 oz		181 gm [1]	
Mounting Thread		1/4-28 UNF		1/4-28 UNF [5]	
Mounting Torque		2 to 5 ft-lb		2.7 to 6.8 Nm	
Sensing Element		Quartz		Quartz	
Sensing Geometry		Shear		Shear	
Housing Material		Stainless Steel		Stainless Steel	
Sealing		Hermetic		Hermetic [6]	
Electrical Connector		2-Pin MIL-C-5015		2-Pin MIL-C-5015	
Electrical Connection Position		Side		Side	
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