

Model Number
HT623C01

HIGH TEMPERATURE INDUSTRIAL ICP® ACCELEROMETER

Revision: B
ECN #: 45446

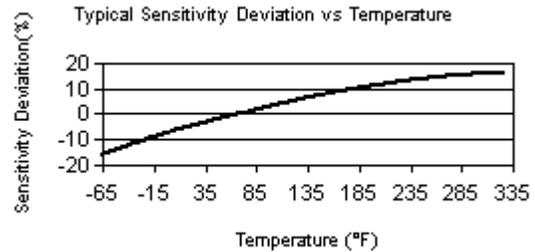
	<u>ENGLISH</u>	<u>SI</u>	
Performance			
Sensitivity(± 5 %)	100 mV/g	10.2 mV/(m/s ²)	[4]
Measurement Range	± 50 g	± 490 m/s ²	
Frequency Range(± 5 %)	144 to 420,000 cpm	2.4 to 7 kHz	[5][6]
Frequency Range(± 10 %)	102 to 480,000 cpm	1.7 to 8 kHz	
Frequency Range(± 3 dB)	48 to 720,000 cpm	0.8 to 12 kHz	
Resonant Frequency	2100 kcpm	35 kHz	[3]
Broadband Resolution(1 to 10,000 Hz)	300 µg	2943 µm/sec ²	[3]
Non-Linearity	± 1 %	± 1 %	[7]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	5000 g pk	49,050 m/s ² pk	
Temperature Range	-65 to +325 °F	-54 to +163 °C	
Temperature Response	See Graph	See Graph	[3]
Electrical			
Settling Time(within 1% of bias)	≤ 2 sec	≤ 2 sec	
Discharge Time Constant	≥ 0.2 sec	≥ 0.2 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 10 mA	2 to 10 mA	[1]
Output Impedance	≤ 100 Ohm	≤ 100 Ohm	
Output Bias Voltage(at 4 mA)	8 to 15 VDC	8 to 15 VDC	[2]
Spectral Noise(10 Hz)	20 µg/√Hz	196 (µm/sec ²)/√Hz	[3]
Spectral Noise(100 Hz)	7 µg/√Hz	69 (µm/sec ²)/√Hz	[3]
Spectral Noise(1 kHz)	3 µg/√Hz	29 (µm/sec ²)/√Hz	[3]
Electrical Protection	RFI/ESD	RFI/ESD	
Electrical Isolation(Case)	>10 ⁸ Ohm	>10 ⁸ Ohm	
Physical			
Size (Hex x Height)	11/16 in x 1.97 in	17.5 mm x 50 mm	
Weight	1.80 oz	51 gm	
Mounting Thread	1/4-28 UNF	No Metric Equivalent	[8]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	

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.

M - Metric Mount
Supplied Accessory : Model M081A61 Mounting Stud 1/4-28 to M6 X 1 (1) replaces Model 081A40

NOTES:
[1]Maximum of 4 mA is recommended at temperatures above 250 °F (121 °C).
[2]Bias voltage increases with higher constant current.
[3]Typical.
[4]Conversion Factor 1g = 9.81 m/s².
[5]1Hz = 60 cpm (cycles per minute).
[6]The high frequency tolerance is accurate within ±10% of the specified frequency.
[7]Zero-based, least-squares, straight line method.
[8]1/4-28 has no equivalent in S.I. units.
[9]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:
Model 081A40 Mounting Stud (1)
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (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.
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