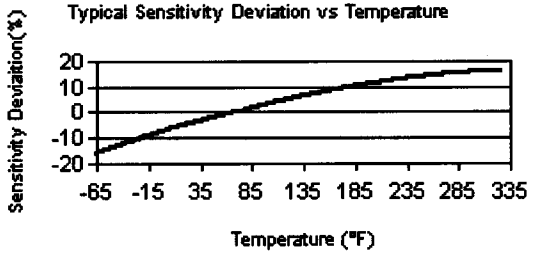
Model Number	HIGH TEMPERATURE INDUSTRIAL ICP® ACCELEROMETER	Revision: A
HT623C01		ECN #: 24311

Performance	ENGLISH	SI	
Sensitivity (± 5 %)	100 mV/g	10.2 mV/(m/s²)	[4]
Measurement Range	± 50 g	± 490 m/s²	
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/s²	[3]
Non-Linearity	± 1 %	± 1 %	[7]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit (Shock)	5000 g pk	49,050 m/s² 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 Bias Voltage (at 4 mA)	8 to 15 VDC	8 to 15 VDC	[2]
Spectral Noise (10 Hz)	20 µg/√Hz	196 (µm/s²)/√Hz	[3]
Spectral Noise (100 Hz)	7 µg/√Hz	69 (µm/s²)/√Hz	[3]
Spectral Noise (1 kHz)	3 µg/√Hz	29 (µm/s²)/√Hz	[3]
Electrical Isolation (Case)	$>10^8$ ohm	$>10^8$ ohm	
Electrical Protection	RFI/ESD	RFI/ESD	
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 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	MIL-C-5015	MIL-C-5015	
Electrical Connection Position	Top	Top	

CE [9]



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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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)

Entered:	Engineer:	Sales:	Approved:	Spec Number:
Date: 5/23/06	Date: 5/24/06	Date: 5/24/06	Date: 5/30/06	12308

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