

Performance	ENGLISH	SI	
Sensitivity (±20 %)	100 mV/g	10.2 mV/(m/s ²)	[2]
Measurement Range	±50 g	±490 m/s ²	
Frequency Range (±3 dB)	16 to 600000 cpm	0.27 to 10000 Hz	[3]
Resonant Frequency	960 kcpm	16 kHz	[1]
Broadband Resolution (1 to 10000 Hz)	50 µg	491 µm/sec ²	[1]
Non-Linearity	±1 %	±1 %	[4]
Transverse Sensitivity	≤7 %	≤7 %	
Environmental			
Overload Limit (Shock)	5000 g pk	49050 m/s ² pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Enclosure Rating	IP68	IP68	
Electrical			
Settling Time (within 1% of bias)	≤4.0 sec	≤4.0 sec	
Discharge Time Constant	≥0.6 sec	≥0.6 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 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	
Spectral Noise (10 Hz)	3.2 µg/√Hz	31.0 (µm/sec ² /√Hz)	[1]
Spectral Noise (100 Hz)	1.0 µg/√Hz	9.81 (µm/sec ² /√Hz)	[1]
Spectral Noise (1 kHz)	0.7 µg/√Hz	6.94 (µm/sec ² /√Hz)	[1]
Electrical Isolation (Case)	>10 ⁸ ohm	>10 ⁸ ohm	
Physical			
Size (Hex x Height)	7/8 in x 1.94 in	22 mm x 49.3 mm	
Weight	2.8 oz	80 gm	
Mounting Thread	1/4-28 Female	Not Applicable	[5]
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	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 standard model except where noted below. More than one option maybe used.)

M - Metric Mount
Supplied Accessory: Model M081A61 Mounting stud, 1/4-28 to M6 x 1 replaces Model 081A40

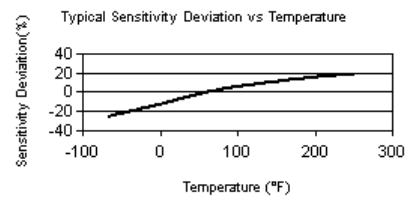
TO - Temperature Output

Temperature Output Range	+36 to +250 °F	+2 to +121 °C
Temperature Scale Factor	5.56 mV/°F + 32	(+10 mV/°C)
Electrical Connector	3-Pin	3-Pin
Electrical Connections (Pin A)	Acceleration Output	Acceleration Output
Electrical Connections (Pin B)	Ground	Ground
Electrical Connections (Pin C)	Temperature Output	Temperature Output

Notes

[1] Typical.
 [2] Conversion Factor 1g = 9.81 m/s².
 [3] The high frequency tolerance is accurate within ±10% of the specified frequency.
 [4] Zero-based, least-squares, straight line method.
 [5] 1/4-28 has no equivalent in S.I. units.
 [6] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories
081A40 Mounting Stud (1)



Entered: NJF	Engineer: NJF	Sales: EGY	Approved: JMF	Spec Number:
Date: 06/21/2002	Date: 06/21/2002	Date: 06/21/2002	Date: 06/26/2002	5436

IMI SENSORS
A PCB PIEZOTRONICS DIV.

3425 Walden Avenue
Depew, NY 14043
UNITED STATES
Phone: 716-684-0003
Fax: 716-684-3823
E-mail: imi@pcb.com
Web site: www.imi-sensors.com

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.

