

Model Number  
612A01

# HIGH TEMPERATURE INDUSTRIAL CHARGE ACCELEROMETER

Revision: C  
ECN #: 53216

### Performance

	ENGLISH	SI	
Sensitivity(± 15 %)	26 pC/g	2.6 pC/(m/s <sup>2</sup> )	[1]
Frequency Range(+ 10 %)	300 kcpm	5,000 Hz	[2]
Frequency Range(+ 3 dB)	600 kcpm	10 kHz	
Resonant Frequency	1,800 kcpm	30 kHz	[3]
Non-Linearity	± 1 %	± 1 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	

### Environmental

Overload Limit(Shock)	5,000 g pk	49,050 m/s <sup>2</sup> pk
Temperature Range(Operating)	-65 to +500 °F	-54 to +260 °C
Temperature Response	See Graph	See Graph
Enclosure Rating	IP68	IP68

### Electrical

Capacitance	1,500 pF	1,500 pF	[3]
Insulation Resistance(at 500°F)	> 10 <sup>9</sup> Ohm	> 10 <sup>9</sup> Ohm	[3]
Insulation Resistance(at room temp)	≥ 0.5 x 10 <sup>12</sup> Ohm	≥ 0.5 x 10 <sup>12</sup> Ohm	[3]
Electrical Isolation(Base)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	[3]
Output Polarity	Negative	Negative	

### Physical

Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Hex x Height)	7/8 in x 2.12 in	22.2 mm x 53.8 mm	
Weight	2.95 oz	83.6 gm	[3]
Electrical Connection Position	Top	Top	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Mounting Thread	1/4-28 UNF	No Metric Equivalent	
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 Nm	

### 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 replaces Model 081A40

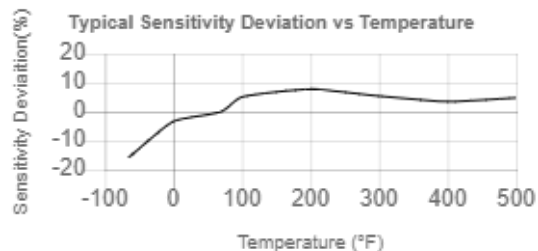
### NOTES:

[1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.

[2] 1Hz = 60 cpm (cycles per minute).

[3] Typical value.

[4] Zero-based, least-squares, straight line method.



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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### SUPPLIED ACCESSORIES:

Model 081A40 Mounting Stud  
Model ICS-1 NIST-traceable single-axis amplitude response calibration from 600 cpm (10 Hz) to upper 5% frequency

Entered: ND	Engineer: NJF	Sales: EGY	Approved: JS	Spec Number:
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**IMI SENSORS**  
A PCB PIEZOTRONICS DIV.  
3425 Walden Avenue, Depew, NY 14043

Phone: 800-959-4464  
Fax: 716-684-3823  
E-Mail: imi@pcb.com