

**Model Number**  
66212APZ2

# ICP® LOW-PROFILE TO-5 ACCELEROMETER

Revision: C  
ECN #: 50920

Performance	ENGLISH	SI	
Sensitivity(± 20 %)	100 mV/g	10.2 mV/(m/s <sup>2</sup> )	[1][2]
Measurement Range	± 50 g	± 490 m/s <sup>2</sup>	
Frequency Range(± 3 dB)	0.5 to 10k Hz	0.5 to 10k Hz	[3][4]
Resonant Frequency	> 25 kHz	> 25 kHz	[4]
Broadband Resolution	350 µg rms	3,434 µm/sec <sup>2</sup> rms	[5]
Non-Linearity	≤ 1 %	≤ 1 %	[6]
Transverse Sensitivity	≤ 7 %	≤ 7 %	
<b>Environmental</b>			
Overload Limit(Shock)	5,000 g pk	49k m/s <sup>2</sup> pk	
Temperature Range(Operating)	-65 to +185 °F	-54 to +85 °C	
Temperature Response	See Graph	See Graph	[5]
<b>Electrical</b>			
Settling Time(within 1% of bias)	≤ 2 sec	≤ 2 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 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)	8 µg/√Hz	78.50 (µm/sec <sup>2</sup> )/√Hz	[5]
Spectral Noise(100 Hz)	5 µg/√Hz	49.1 (µm/sec <sup>2</sup> )/√Hz	[5]
Spectral Noise(1 kHz)	4 µg/√Hz	39.2 (µm/sec <sup>2</sup> )/√Hz	[5]
<b>Physical</b>			
Size (Lip Diameter x Height)	0.36 in x 0.38 in	9.1 mm x 9.7 mm	
Weight	0.1 oz	3 gm	
Mounting	Adhesive/Solder	Adhesive/Solder	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Bottom	Bottom	
Cable Termination	Blunt cut	Blunt cut	
Red Conductor	Signal/Power	Signal/Power	
Black Conductor	Neg (-) Ground	Neg (-) Ground	
Cable Length	1 ft	0.3 m	
Cable Type	PVC	PVC	

**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.

HT - High temperature, extends normal operation temperatures		
Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C
Cable Type	031 PTFE	031 PTFE
Electrical Connections(Red)	Signal / Power	Signal / Power
Electrical Connections(Black)	Neg (-) Ground	Neg (-) Ground

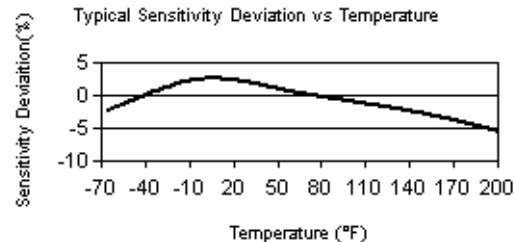
**RH - RoHS Compliant**

**NOTES:**

- [1]Positive output along Z-axis (in upward direction when connector down).
- [2]Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [3]The high frequency tolerance is accurate within ±10% of the specified frequency.
- [4]Performance depends on mounting
- [5]Typical.
- [6]Zero-based, least-squares, straight line method.
- [7]See PCB Declaration of Conformance PS023 or PS060 for details.

**SUPPLIED ACCESSORIES:**

Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (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.  
ICP® is a registered trademark of PCB Piezotronics, Inc.

Entered: LK	Engineer: NJF	Sales: MC	Approved: NJF	Spec Number:
Date: 07/07/2020	Date: 07/07/2020	Date: 07/07/2020	Date: 07/07/2020	47325

**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