

**Model Number**  
66212APZ1

# ICP® TO-5 ACCELEROMETER

Revision: B  
ECN #: 50920

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity(± 20 %)	100 mV/g	1.02 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 -84 °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	0.01 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	Header Pins	Header Pins	
Electrical Connection Position	Bottom	Bottom	
Electrical Connections(Pin 1)	Signal / Power	Signal / Power	
Electrical Connections(Pin 2)	Neg (-) Ground	Neg (-) Ground	
Electrical Connections(Pin 3)	No Connection	No Connection	

**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

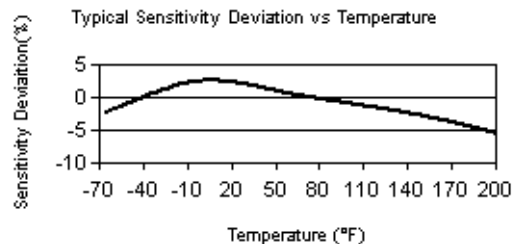
**RH** - RoHS Compliant

**NOTES:**

- [1]Positive output along Z-axis (in upward direction when pin mounted).
- [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.  
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Entered: LK	Engineer: NJF	Sales: MC	Approved: NJF	Spec Number:
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