

Model Number 66162APZ1		ICP® LOW-PROFILE TO-5 ACCELEROMETER		Revision: A ECN #: 55512																							
Performance		ENGLISH		SI																							
Sensitivity(± 20 %)		1 mV/g		0.10 mV/(m/s ²)																							
Measurement Range		± 5,000 g pk		± 50,000 m/s ² pk																							
Frequency Range(± 3 dB)		0.5 to 10,000 Hz		0.5 to 10,000 Hz																							
Resonant Frequency		> 25 kHz		> 25 kHz																							
Broadband Resolution		4.6 µg		45 µm/sec ²																							
Non-Linearity		≤ 1 %		≤ 1 %																							
Transverse Sensitivity		≤ 7 %		≤ 7 %																							
Environmental																											
Overload Limit(Shock)		5,000 g pk		49,000 m/s ² pk																							
Temperature Range(Operating)		-65 to +185 °F		-54 to +85 °C																							
Temperature Response		See Graph		See Graph																							
Electrical																											
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		< 100 Ohm		< 100 Ohm																							
Output Bias Voltage		8 to 12 VDC		8 to 12 VDC																							
Spectral Noise(10 Hz)		229 µg/√Hz		2,246 (µm/sec ²)/√Hz																							
Spectral Noise(100 Hz)		61 µg/√Hz		598 (µm/sec ²)/√Hz																							
Spectral Noise(1 kHz)		30 µg/√Hz		294 (µm/sec ²)/√Hz																							
Physical																											
Size (Lip Diameter x Height)		0.36 in x 0.26 in		9.1 mm x 6.6 mm																							
Weight		0.08 oz		2.2 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(Chrome-Plated Brass)		Neg (-) Ground		Neg (-) Ground																							
Electrical Connections(Pin 3)		No Connection		No Connection																							
CE UK CA [7] Typical Sensitivity Deviation vs Temperature <table><tr><th>Temperature (°F)</th><th>Sensitivity Deviation (%)</th></tr><tr><td>-70</td><td>-5</td></tr><tr><td>-40</td><td>-2</td></tr><tr><td>-10</td><td>2</td></tr><tr><td>20</td><td>2</td></tr><tr><td>50</td><td>1</td></tr><tr><td>80</td><td>0</td></tr><tr><td>110</td><td>-1</td></tr><tr><td>140</td><td>-2</td></tr><tr><td>170</td><td>-3</td></tr><tr><td>200</td><td>-5</td></tr></table> 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.						Temperature (°F)	Sensitivity Deviation (%)	-70	-5	-40	-2	-10	2	20	2	50	1	80	0	110	-1	140	-2	170	-3	200	-5
Temperature (°F)	Sensitivity Deviation (%)																										
-70	-5																										
-40	-2																										
-10	2																										
20	2																										
50	1																										
80	0																										
110	-1																										
140	-2																										
170	-3																										
200	-5																										
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 connector down).																											
[2]Conversion Factor 1g = 9.81 m/s ² .																											
[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 for details.																											
SUPPLIED ACCESSORIES:																											
Model ICS-2 NIST-traceable single-point amplitude response calibration at 6000 cpm (100 Hz) for each axis (1)																											
Entered: ND		Engineer: NJF		Sales: JL																							
Date: 02/25/2025		Date: 02/25/2025		Date: 02/25/2025																							
				Approved: NJF																							
				Date: 02/25/2025																							
				Spec Number: 47367																							
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