

**Model Number**  
66333PNZ1

# 3-WIRE TO-8 ACCELEROMETER

Revision: A  
ECN #: 52695

**Performance**

	ENGLISH	SI	
Sensitivity(± 20 %)	1,000 mV/g	102 mV/(m/s <sup>2</sup> )	[1][2]
Measurement Range	± 2 g	± 20 m/s <sup>2</sup>	[3]
Frequency Range(± 3 dB)	0.5 to 5,000 Hz	0.5 to 5,000 Hz	[4][5]
Resonant Frequency	> 16,000 Hz	> 16,000 Hz	[5]
Broadband Resolution	0.00104 g rms	0.010202 m/s <sup>2</sup> rms	[6]
Non-Linearity	≤ 1 %	≤ 1 %	[7]
Transverse Sensitivity	≤ 7 %	≤ 7 %	

**Environmental**

Overload Limit(Shock)	5,000 g pk	49,000 m/s <sup>2</sup> pk	
Temperature Range(Operating)	-65 to 185 °F	-54 to 85 °C	
Temperature Response	See Graph	See Graph	[6]

**Electrical**

Settling Time(within 1% of bias)	< 3 sec	< 3 sec	[6]
Discharge Time Constant	≥ 0.4 sec	≥ 0.4 sec	
Excitation Voltage	3 to 12 VDC	3 to 12 VDC	
Output Impedance	< 100 Ohm	< 100 Ohm	
Current Draw	0.75 mA	0.75 mA	
Output Bias Voltage	0.5 x Excitation Voltage	0.5 x Excitation Voltage	
Spectral Noise(10 Hz)	39 µg/√Hz	383 (µm/sec <sup>2</sup> )/√Hz	[6]
Spectral Noise(100 Hz)	15 µg/√Hz	147 (µm/sec <sup>2</sup> )/√Hz	[6]
Spectral Noise(1 kHz)	9 µg/√Hz	88 (µm/sec <sup>2</sup> )/√Hz	[6]

**Physical**

Size (Diameter x Height)	0.64 in x 0.57 in	16.3 mm x 14.5 mm	
Weight	0.88 oz	25 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)	Output	Output	
Electrical Connections(Pin 2)	Neg (-) Ground	Neg (-) Ground	
Electrical Connections(Pin 3)	Pos (+) VDC	Pos (+) VDC	

**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 -65 to 250 °F -54 to 121 °C

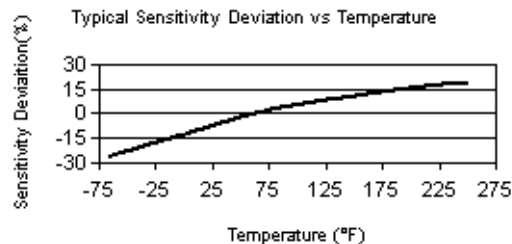
**RH** - RoHS Compliant

**NOTES:**

- [1] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [2] Negative output for acceleration along Z-axis (in upward direction when pin mounted).
- [3] Measurement range achieved is dependent upon excitation voltage.
- [4] The high frequency tolerance is accurate within ±10% of the specified frequency.
- [5] Performance depends on mounting
- [6] Typical.
- [7] Zero-based, least-squares, straight line method.
- [8] See PCB Declaration of Conformance PS198

**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: ND	Engineer: GD	Sales: JL	Approved: BAM	Spec Number:
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