

Model Number  
66333PPZ2

### 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 5k Hz  | 0.5 to 5k Hz                  | [4][5] |
| Resonant Frequency      | > 16 kHz      | > 16 kHz                      | [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    | 49k 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          | Adhesive          |  |
| 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         |  |
| Electrical Connections(White)  | Output            | Output            |  |
| Electrical Connections(Black)  | Neg (-) Ground    | Neg (-) Ground    |  |
| Electrical Connections(Red)    | Pos (+) VDC       | Pos (+) VDC       |  |
| 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 -65 to 250 °F -54 to 121 °C  
 Cable Type 010 010

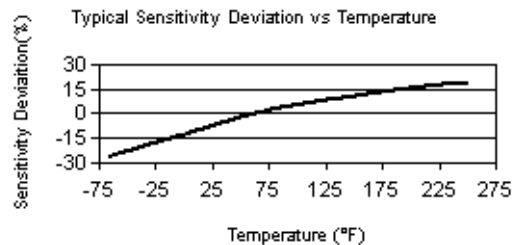
**RH** - RoHS Compliant

**NOTES:**

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