Eliminates need for high temperature triaxial measurements to be taken with three separate single-axis accelerometers mounted on a triaxial mounting block

ATEX/CSA/IECEx intrinsic safety certification allows sensor to be used worldwide in potentially-explosive environments

Smaller, lighter design allows for simplified installation in even the tightest of spaces

Use of UHT-12™ sensing element and hermetically-sealed, nickel alloy housing provides sensor endurance in very high temperatures

PCB Piezotronics utilizes a UHT-12™ element that features a proprietary crystal technology sealed in a hermetic package for long-term reliability. The element has no pyroelectric output that provides accurate low-frequency measurements and reduced thermal noise spikes that eliminate false alarms during monitoring. The element also has a more consistent sensitivity over a wide temperature change to provide greater accuracy. The shear mode crystals prevent base strain and transverse measurement errors.

**Typical Applications**

- Aviation/Power Generation Turbine Research & Development
- Commissioning of Nuclear Power Plants
- Vehicle Exhaust System NVH
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>EX356A73</th>
</tr>
</thead>
</table>

**Performance**

- **Sensitivity (±5%)**: 3.2 pC/g  
  0.33 pC/(m/s²)
- **Measurement Range**: ± 500 g pk  
  ±4,905 m/s² pk
- **Frequency Range (±5%)**: Up to 4 kHz
- **Resonant Frequency**: 25 kHz
- **Transverse Sensitivity**: ≤ 5 %
- **Non-Linearity**: ≤ 1 %

**Environmental**

- **Overload Limit (Shock)**: ±2,000 g pk  
  ±19,620 m/s² pk
- **Operating Temperature Range**: -67 to +900 °F  
  -55 to +482 °C
- **Base Strain Sensitivity**: 0.003 g/µε  
  0.029 (m/s²)/µε
- **Radiation Exposure Limit (Integrated Neutron Flux)**: 1 E10 N/cm²
- **Radiation Exposure Limit (Integrated Gamma Flux)**: 1 E8 rad

**Electrical**

- **Capacitance (Pole-to-Pole)**: 120 pF
- **Insulation Resistance (Room Temp)**: >1 GΩhm
- **Insulation Resistance (900 °F / 482 °C)**: >100 kΩhm
- **Output Polarity**: Negative
- **Electrical Isolation**: Case Isolated (>1E6 Ohm)

**Physical**

- **Sensing Geometry**: Shear
- **Sensing Element**: UHT-12™
- **Housing Material**: Nickel Alloy
- **Sealing**: Hermetic Welded
- **Mounting Thread**: 8-32 Male
- **Electrical Connector**: Three 10-32 Coaxial Jacks
- **Electrical Connector Position**: Side
- **Weight**: 5.3 oz  
  150 g

<table>
<thead>
<tr>
<th>Non-Radiation Environment</th>
<th>Radiation Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sensor</strong></td>
<td>EX356A73</td>
</tr>
<tr>
<td><strong>Hardline Cable</strong></td>
<td>023FZX0X0GA</td>
</tr>
<tr>
<td><strong>Softline Cable</strong></td>
<td>003EBXXXXEB</td>
</tr>
<tr>
<td><strong>Charge Amplifier</strong></td>
<td>422E35 (1 mV/pC)</td>
</tr>
<tr>
<td></td>
<td>422E36 (10 mV/pC)</td>
</tr>
</tbody>
</table>

PCB Piezotronics, Inc. is a designer and manufacturer of microphones, vibration, pressure, force, torque, load, and strain sensors, as well as the pioneer of ICP® technology used by design engineers and predictive maintenance professionals worldwide for test, measurement, monitoring, and control requirements in automotive, aerospace, industrial, R&D, military, educational, commercial, OEM applications, and more. With a worldwide customer support team, 24-hour SensorLine®, and a global distribution network, PCB® is committed to Total Customer Satisfaction. Visit www.pcb.com for more information. PCB Piezotronics, Inc. is a wholly owned subsidiary of MTS Systems Corporation. Additional information on MTS can be found at www.mts.com.

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