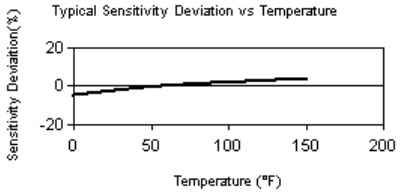
| Model Number **333B50** | **ACCELEROMETER, ICP®** | Revision H ECN #: 35173 |
|---|---|---|

| **Performance** | **ENGLISH** | **SI** | |
|---|---|---|---|
| Sensitivity (±10 %) | 1000 mV/g | 102 mV/(m/s²) | |
| Measurement Range | ±5 g pk | ±49 m/s² pk | |
| Frequency Range (±5 %) | 0.5 to 3000 Hz | 0.5 to 3000 Hz | |
| Resonant Frequency | ≥20 kHz | ≥20 kHz | |
| Phase Response (±5 °) (at 70&#176F [21&#176C]) | 2.5 to 3000 Hz | 2.5 to 3000 Hz | |
| Broadband Resolution (1 to 10000 Hz) | 0.00005 g rms | 0.0005 m/s² rms | [1] |
| Non-Linearity | ≤1 % | ≤1 % | [2] |
| Transverse Sensitivity | ≤5 % | ≤5 % | [3] |
| **Environmental** | | | |
| Overload Limit | ±4000 g pk | ±39000 m/s² pk | |
| Temperature Range | 0 to +150 °F | -18 to +66 °C | |
| Temperature Response | See Graph | See Graph | [1] |
| Base Strain Sensitivity | 0.01 g/με | 0.1 (m/s²)/με | [1] |
| **Electrical** | | | |
| Excitation Voltage | 18 to 30 VDC | 18 to 30 VDC | |
| Constant Current Excitation | 2 to 20 mA | 2 to 20 mA | |
| Output Impedance | ≤500 ohm | ≤500 ohm | |
| Output Bias Voltage | 7 to 12 VDC | 7 to 12 VDC | |
| Discharge Time Constant | 0.7 to 2.0 sec | 0.7 to 2.0 sec | |
| Spectral Noise (10 Hz) | 3.8 μg/√Hz | 37 (μm/sec²)/√Hz | [1] |
| Spectral Noise (100 Hz) | 1.1 μg/√Hz | 11 (μm/sec²)/√Hz | [1] |
| Spectral Noise (1 kHz) | 0.4 μg/√Hz | 3.9 (μm/sec²)/√Hz | [1] |
| **Physical** | | | |
| Sensing Element | Ceramic | Ceramic | |
| Sensing Geometry | Shear | Shear | |
| Housing Material | Titanium | Titanium | |
| Sealing | Hermetic | Hermetic | |
| Size (Length x Width) | 0.68 in x 0.45 in | 17.3 mm x 11.4 mm | |
| Weight | 0.26 oz | 7.5 gm | [1] |
| Electrical Connector | 10-32 Coaxial Jack | 10-32 Coaxial Jack | |
| Electrical Connection Position | Side | Side | |
| Mounting Thread | 5-40 Female | 5-40 Female | |
| Mounting Torque | 4 to 5 in-lb | 45 to 56 N-cm | |

CE[4]




*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 group, Inc.

**Optional Versions** (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

**T** - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4
**TLA** - TEDS LMS International - Free Format
**TLB** - TEDS LMS International - Automotive Format
**TLC** - TEDS LMS International - Aeronautical Format
**TLD** - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4

| | | |
|---|---|---|
| Output Bias Voltage | 7.5 to 13 VDC | 7.5 to 13 VDC |

**Notes**

[1] Typical.
[2] Zero-based, least-squares, straight line method.
[3] Transverse sensitivity is typically <= 3%.
[4] See PCB Declaration of Conformance PS023 for details.

**Supplied Accessories**

080A109 Petro Wax (1)
080A25 Adhesive base, 0.438" hex, 5-40 tapped hole, aluminum hardcoat. (1)
080A90 Quick Bonding Gel (1)
081A27 Mounting Stud (5-40 to 5-40) (1)
ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
M081A27 Metric mounting stud, 5-40 to M3 x 0.50 long (1)

| Entered: DMW | Engineer: JDK | Sales: RWM | Approved: TB | Spec Number: |
|---|---|---|---|---|
| Date: 03/02/2011 | Date: 03/02/2011 | Date: 03/02/2011 | Date: 03/02/2011 | **11867** |

PCB PIEZOTRONICS VIBRATION DIVISION
3425 Walden Avenue
Depew, NY 14043
UNITED STATES
Phone: 888-684-0013
Fax: 716-685-3886
E-mail: vibration@pcb.com
Web site: www.pcb.com