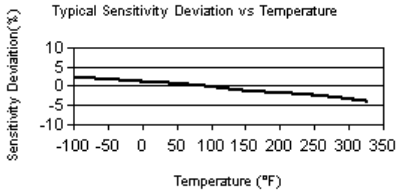
| Model Number **320C04** | **ACCELEROMETER, ICP®** | Revision D ECN #: 35369 |
|---|---|---|

| **Performance** | **ENGLISH** | **SI** | |
|---|---|---|---|
| Sensitivity (±10 %) | 10 mV/g | 1.02 mV/(m/s²) | |
| Measurement Range | ±500 g pk | ±4900 m/s² pk | |
| Frequency Range (±5 %) | 1 to 6000 Hz | 1 to 6000 Hz | |
| Frequency Range (±10 %) | 0.7 to 9000 Hz | 0.7 to 9000 Hz | |
| Frequency Range (±3 dB) | 0.35 to 15000 Hz | 0.35 to 15000 Hz | |
| Resonant Frequency | ≥35 kHz | ≥35 kHz | |
| Broadband Resolution (1 to 10000 Hz) | 0.003 g rms | 0.03 m/s² rms | [1] |
| Non-Linearity | ≤1 % | ≤1 % | [2] |
| Transverse Sensitivity | ≤5 % | ≤5 % | [3] |
| **Environmental** | | | |
| Overload Limit (Shock) | ±10000 g pk | ±98100 m/s² pk | |
| Temperature Range (Operating) | -100 to +325 °F | -73 to +163 °C | |
| Temperature Response | See Graph | See Graph | [1] |
| Base Strain Sensitivity | ≤0.0005 g/με | ≤0.005 (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 | ≤100 ohm | ≤100 ohm | |
| Output Bias Voltage | 8 to 12 VDC | 8 to 12 VDC | |
| Discharge Time Constant | 0.5 to 2.6 sec | 0.5 to 2.6 sec | |
| Spectral Noise (1 Hz) | 2800 μg/√Hz | 27468 (μm/sec$^2$ /√Hz | [1] |
| Spectral Noise (10 Hz) | 700 μg/√Hz | 6867 (μm/sec$^2$ /√Hz | [1] |
| Spectral Noise (100 Hz) | 180 μg/√Hz | 1766 (μm/sec$^2$ /√Hz | [1] |
| Spectral Noise (1 kHz) | 64 μg/√Hz | 628 (μm/sec$^2$ /√Hz | [1] |
| **Physical** | | | |
| Sensing Element | Quartz | Quartz | |
| Sensing Geometry | Shear | Shear | |
| Housing Material | Titanium | Titanium | |
| Sealing | Welded Hermetic | Welded Hermetic | |
| Size (Hex x Height) | 0.50 in x 1.14 in | 12.7 mm x 29.0 mm | |
| Weight | 0.38 oz | 10.5 gm | [1] |
| Electrical Connector | 10-32 Coaxial Jack | 10-32 Coaxial Jack | |
| Electrical Connection Position | Top | Top | |
| Mounting Thread | 10-32 Female | 10-32 Female | |
| Mounting Torque | 10 to 20 in-lb | 113 to 225 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.
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**Optional Versions** (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

**J** - Ground Isolated

| | | |
|---|---|---|
| Frequency Range (5 %) | 4000 Hz | 4000 Hz |
| Frequency Range (10 %) | 7000 Hz | 7000 Hz |
| Frequency Range (3 dB) | 10000 Hz | 10000 Hz |
| Resonant Frequency | ≥22 kHz | ≥22 kHz |
| Electrical Isolation (Base) | >$10^8$ ohm | >$10^8$ ohm |

**W** - Water Resistant Cable

| | | |
|---|---|---|
| Electrical Connector | Sealed Integral Cable | Sealed Integral Cable |
| Electrical Connection Position | Top | Top |

**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)
081B05 Mounting Stud (10-32 to 10-32) (1)
ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)

| Entered: DMW | Engineer: BAM | Sales: WDC | Approved: EB | Spec Number: |
|---|---|---|---|---|
| Date: 03/25/2011 | Date: 03/25/2011 | Date: 03/25/2011 | Date: 03/25/2011 | **10762** |

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