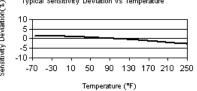
| Model Number<br>353B34               |  | ACCELEROMET                | ER, | , ICP <sup>®</sup>   |                     | Revision M<br>ECN #: 2681 | 0                  |  |
|--------------------------------------|--|----------------------------|-----|--|---------------------|---------------------------|--------------------|--|
| Performance                          | ENGLISH                                      | SI                         |     | Optional Versions (Optional versions   | have identical sp   | ecifications and acc      | essories as listed |  |
| Sensitivity (±5 %)                   | 100 mV/g                                     | 10.19 mV/(m/s²)            | [2] |  |                     |                           |                    |  |
| Measurement Range                    | ±50 g pk                                     | ±491 m/s² pk               |     |  |                     |                           | [2]                |  |
| Frequency Range (±5 %)               | 1 to 4000 Hz                                 | 1 to 4000 Hz               |     | Output Bias Voltage  | 4.5 to 7.5 \        | VDC 4.5 to 7.             | .5 VDC             |  |
| Frequency Range (±10 %)              | 0.7 to 7000 Hz                               | 0.7 to 7000 Hz             |     | Excitation Voltage   | 12 to 30 V          | DC 12 to 30               | 0 VDC              |  |
| Frequency Range (±3 dB)              | 0.35 to 12000 Hz                             | 0.35 to 12000 Hz           |     | Constant Current Excitation  | 1 to 20 m           | nA 1 to 2                 | 0 mA               |  |
| Resonant Frequency                   | ≥22 kHz                                      | ≥22 kHz                    |     | Measurement Range  | ±30 g p             | k ±294 m                  | n/s² pk            |  |
| Broadband Resolution (1 to 10000 Hz) | 0.0005 g rms                                 | 0.005 m/s <sup>2</sup> rms | [1] | J - Ground Isolated  |                     |                           |                    |  |
| Non-Linearity                        | ≤1 %   | ≤1 %                       | [3] | Frequency Range (±5 %)   | 1 to 4000           |                           |                    |  |
| Transverse Sensitivity               | ≤5 %   | ≤5 %                       | [4] | Frequency Range (±10 %)  | 0.7 to 6000         | 0.7 to 6                  | 000 Hz             |  |
| Environmental                        |  |                            |     | Resonant Frequency   | ≥18 kH:             | z ≥18                     | kHz                |  |
| Overload Limit (Shock)               | ±10000 g pk                                  | ±98100 m/s <sup>2</sup> pk |     | Electrical Isolation (Base)  | ≥10 <sup>8</sup> Oh | m ≥10 <sup>8</sup> (      | Ohm                |  |
| Temperature Range (Operating)        | -65 to +250 °F                               | -54 to +121 °C             |     | , , ,  |                     |                           |                    |  |
| Base Strain Sensitivity              | 0.0002 g/με                                  | 0.002 (m/s²)/με            | [1] |  |                     |                           |                    |  |
| Electrical                           | 0.000 <u>=</u> 9, p.c                        | 0.00 <u>= (,0</u> ), µe    |     | Q - Extended discharge time constan  | t                   |                           | [2]                |  |
| Excitation Voltage                   | 20 to 30 VDC                                 | 20 to 30 VDC               |     | Frequency Range (±5 %)   | 0.1 to 4000         | 0.1 to 4                  |                    |  |
| Constant Current Excitation          | 2 to 20 mA                                   | 2 to 20 mA                 |     | Frequency Range (±10 %)  | 0.07 to 700         | 0.07 to 7                 | '000 Hz            |  |
| Output Impedance                     | ≤100 Ohm                                     | ≤100 Ohm                   |     | Discharge Time Constant  | ≥10 sec             | c ≥10                     | sec                |  |
| Output Bias Voltage                  | 7.5 to 11.5 VDC                              | 7.5 to 11.5 VDC            |     | Settling Time (within 10% of bias)   | <120 se             |                           |                    |  |
| Discharge Time Constant              | 0.5 to 2.0 sec                               | 0.5 to 2.0 sec             |     | Supplied Accessory: Model ACS-4 Single-axis, low frequency phase and amplitude |                     |                           |                    |  |
| Settling Time (within 10% of bias)   | <25 sec                                      | <25 sec                    |     | response calibration from 0.5 to 10 Hz   |                     |                           |                    |  |
| Spectral Noise (1 Hz)                | 320 µg/√Hz                                   | 3139 (µm/sec <sup>2</sup>  | [1] | W - Water Resistant Cable  |                     |                           |                    |  |
| Oposital Holos (1112)                | ο2ο μg/α//ο1ου, 12                           | /√Hz                       | 1.1 | Electrical Connector   | Sealed Into         | egral Sealed              | Integral           |  |
| Spectral Noise (10 Hz)               | 70 μg/√Hz                                    | 687 (µm/sec <sup>2</sup>   | [1] |  | Cable               |                           |                    |  |
| Openia (10112)                       | 7 ο μg/απο 7 ο ο,1 12                        | /√Hz                       | ניו | Electrical Connection Position   | Тор                 | To                        |                    |  |
| Spectral Noise (100 Hz)              | 18 μg/√Hz                                    | 177 (µm/sec <sup>2</sup>   | [1] | Notes  |                     |                           | -                  |  |
| Opeoural (100 112)                   | 10 μg/α//0100,112                            | /√Hz                       | ניו | [1] Typical.   |                     |                           |                    |  |
| Spectral Noise (1 kHz)               | 6.4 µg/√Hz 63 (µm/sec <sup>2</sup> [         |                            |     | [2] B and Q options supplied with a sensitivity tolerance of ± 10 %.           |                     |                           |                    |  |
| opeonar voice (TRT2)                 | ο. <del>-</del> μg/α//ο/ οο, 1/2             | /√Hz                       | ניו | [3] Zero-based, least-squares, straight line method.                           |                     |                           |                    |  |
| Physical                             |  | 70,70700,112               |     | [4] Transverse sensitivity is typically <= 3%.                                 |                     |                           |                    |  |
| Size (Height)                        | 1.26 in                                      | 32.0 mm                    |     | [5] See PCB Declaration of Conformance PS023 for details.                      |                     |                           |                    |  |
| Weight                               | 0.96 oz                                      | 27 gm                      | [1] | _ <del></del>  |                     |                           |                    |  |
| Sensing Element                      | Quartz                                       | Quartz                     | ניו |  |                     |                           |                    |  |
| Size (Hex)                           | 0.75 in                                      | 19.1 mm                    |     | Supplied Accessories   |                     |                           |                    |  |
| Sensing Geometry                     | Shear  | Shear                      |     | 080A109 Petro Wax (1)  |                     |                           |                    |  |
| Housing Material                     | Titanium                                     | Titanium                   |     | 080A12 Adhesive Mounting Base (1)  |                     |                           |                    |  |
| Sealing                              | Welded Hermetic                              | Welded Hermetic            |     | 081B05 Mounting Stud (10-32 to 10-32) (1)                                      |                     |                           |                    |  |
| Electrical Connector                 | 10-32 Coaxial Jack                           | 10-32 Coaxial Jack         |     | ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)         |                     |                           |                    |  |
| Electrical Connection Position       | Top  | Top                        |     | M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)                                   |                     |                           |                    |  |
| Mounting Thread                      | 10-32 Female                                 | 10-32 Female               |     | Moorboo Mounting Staa 10 02 to Mc  | 77(0.70(1)          |                           |                    |  |
| Modifiling Timeau                    | 10-32 i emale                                | 10-32 i emale              |     | Entered: BLB Engineer: BAM   | Sales: WDC          | Approved: BLB             | Spec Number:       |  |
|                                      |  |                            |     | Date: Date:  | Date:               | Date:                     | 353-2340-80        |  |
|                                      |  |                            |     | 07/10/2007 07/02/2007  | 07/02/2007          | 07/13/2007                | 333-2340-00        |  |
|                                      | Typical Sensitivity Deviation vs Temperature |                            |     | 01/10/2001   01/02/2001  | 01/02/2001          | 01/13/2001                | 1                  |  |
|                                      | 10 Jypical Senstri                           |                            |     | <b>A</b> DIFFORM   | == 3425 \M          | alden Avenue              |                    |  |
|                                      | ig 5   |                            |     | <b>PCB</b> PIF70TRONIC   |                     | NY 14043                  |                    |  |
| <i>(</i>                             | ã ŏ <del> −−−</del>                          |                            |     | VIBRATION DIVISIO  |                     | STATES                    |                    |  |
| <b>C</b> [5]                         | .≩ -5 <del> </del>                           | <del></del>                |     | TIDITATION DIVIDIO   | 0.1                 | 000 000 0040              |                    |  |





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| All specifications are at room temperature unless otherwise specified.                                 |  |
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