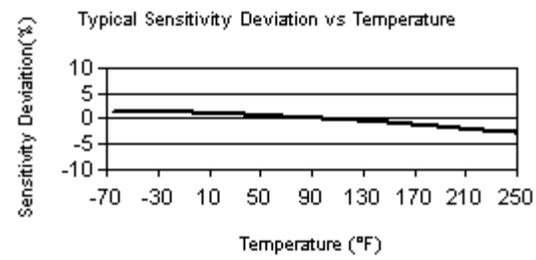


|                                      | <u>ENGLISH</u>     | <u>SI</u>                         |     |
|--------------------------------------|--------------------|-----------------------------------|-----|
| <b>Performance</b>                   |                    |                                   |     |
| Sensitivity(± 10 %)                  | 10 mV/g            | 1.02 mV/(m/s <sup>2</sup> )       |     |
| Measurement Range                    | ± 500 g pk         | ± 4905 m/s <sup>2</sup> pk        |     |
| Frequency Range(± 5 %)               | 1 to 10,000 Hz     | 1 to 10,000 Hz                    |     |
| Frequency Range(± 10 %)              | 0.7 to 17,000 Hz   | 0.7 to 17,000 Hz                  |     |
| Frequency Range(± 3 dB)              | 0.35 to 30,000 Hz  | 0.35 to 30,000 Hz                 |     |
| Resonant Frequency                   | ≥ 70 kHz           | ≥ 70 kHz                          |     |
| Broadband Resolution(1 to 10,000 Hz) | 0.005 g rms        | 0.05 m/s <sup>2</sup> rms         | [1] |
| Non-Linearity                        | ≤ 1 %              | ≤ 1 %                             | [2] |
| Transverse Sensitivity               | ≤ 5 %              | ≤ 5 %                             | [3] |
| <b>Environmental</b>                 |                    |                                   |     |
| Overload Limit(Shock)                | ± 10,000 g pk      | ± 98,100 m/s <sup>2</sup> pk      |     |
| Temperature Range(Operating)         | -65 to +250 °F     | -54 to +121 °C                    |     |
| Temperature Response                 | See Graph          | See Graph                         | [1] |
| Base Strain Sensitivity              | ≤ 0.002 g/µε       | ≤ 0.02 (m/s <sup>2</sup> )/µε     | [1] |
| <b>Electrical</b>                    |                    |                                   |     |
| 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 2.0 sec     | 0.5 to 2.0 sec                    |     |
| Settling Time(within 10% of bias)    | <5 sec             | <5 sec                            |     |
| Spectral Noise(1 Hz)                 | 2800 µg/√Hz        | 27,468 (µm/sec <sup>2</sup> )/√Hz | [1] |
| Spectral Noise(10 Hz)                | 700 µg/√Hz         | 6867 (µm/sec <sup>2</sup> )/√Hz   | [1] |
| Spectral Noise(100 Hz)               | 180 µg/√Hz         | 1766 (µm/sec <sup>2</sup> )/√Hz   | [1] |
| Spectral Noise(1 kHz)                | 64 µg/√Hz          | 628 (µm/sec <sup>2</sup> )/√Hz    | [1] |
| <b>Physical</b>                      |                    |                                   |     |
| Size (Height x Hex)                  | 0.59 in x 9/32 in  | 15.0 mm x 9/32 in                 |     |
| Weight(without cable)                | 0.06 oz            | 1.7 gm                            | [1] |
| Sensing Element                      | Quartz             | Quartz                            |     |
| Sensing Geometry                     | Shear              | Shear                             |     |
| Housing Material                     | Titanium           | Titanium                          |     |
| Sealing                              | Welded Hermetic    | Welded Hermetic                   |     |
| Electrical Connector                 | Integral Cable     | Integral Cable                    |     |
| Electrical Connection Position       | Top                | Top                               |     |
| Cable Termination                    | 10-32 Coaxial Plug | 10-32 Coaxial Plug                |     |
| Cable Length                         | 10 ft              | 3 m                               |     |
| Cable Type                           | 031 Twisted Pair   | 031 Twisted Pair                  |     |
| Mounting Thread                      | 5-40 Male          | 5-40 Male                         |     |
| Mounting Torque                      | 8 to 12 in-lb      | 90 to 135 N-cm                    |     |



All specifications are at room temperature unless otherwise specified.  
**This specification requires customer approval prior to any changes.**  
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| 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. |                       |                            |
| <b>A - Adhesive Mount</b><br>Supplied Accessory : Model 080A90 Quick Bonding Gel (1)   |                       |                            |
| <b>B - Low bias electronics</b>  |                       |                            |
| Output Bias Voltage  | 4.5 to 7.5 VDC        | 4.5 to 7.5 VDC             |
| Excitation Voltage   | 12 to 30 VDC          | 12 to 30 VDC               |
| Constant Current Excitation  | 1 to 20 mA            | 1 to 20 mA                 |
| Measurement Range  | ± 300 g pk            | ± 2943 m/s <sup>2</sup> pk |
| <b>J - Ground Isolated</b>   |                       |                            |
| Frequency Range(± 5 %)   | 1 to 8000 Hz          | 1 to 8000 Hz               |
| Frequency Range(± 10 %)  | 0.7 to 15,000 Hz      | 0.7 to 15,000 Hz           |
| Resonant Frequency   | ≥ 56 kHz              | ≥ 56 kHz                   |
| Electrical Isolation(Base)   | ≥ 10 <sup>8</sup> Ohm | ≥ 10 <sup>8</sup> Ohm      |
| Size - Hex x Height  | 3/8 in x 0.77 in      | 3/8 in x 19.6 mm           |
| Weight(without cable)  | 0.10 oz               | 2.9 gm                     |
| <b>M - Metric Mount</b>  |                       |                            |
| Mounting Thread  | M3 x 0.50 Male        | M3 x 0.50 Male             |
| Supplied Accessory : Model M080A15 Adhesive Mounting Base (1) replaces Model 080A15  |                       |                            |
| <b>Q - Extended discharge time constant</b>  |                       |                            |
| Frequency Range(± 5 %)   | 0.15 to 10,000 Hz     | 0.15 to 10,000 Hz          |
| Frequency Range(± 10 %)  | 0.1 to 17,000 Hz      | 0.1 to 17,000 Hz           |
| Discharge Time Constant  | ≥ 5 sec               | ≥ 5 sec                    |
| Settling Time(within 10% of bias)  | <45 sec               | <45 sec                    |
| Supplied Accessory : Model ACS-97 Single axis, low frequency phase and amplitude response cal from 1 to 10 Hz (1)  |                       |                            |
| <b>W - Water Resistant Cable</b>   |                       |                            |
| Temperature Range(Operating)   | -20 to 220 °F         | -29 to 104 °C              |
| Electrical Connector   | Sealed Integral Cable | Sealed Integral Cable      |
| Electrical Connection Position   | Top                   | Top                        |
| Cable Length   | 10 ft                 | 3                          |
| Cable Type   | 018 Coaxial           | 018 Coaxial                |

**NOTES:**  
 [1]Typical.  
 [2]Zero-based, least-squares, straight line method.  
 [3]Transverse sensitivity is typically ≤ 3%.  
 [4]See PCB Declaration of Conformance PS135 for details.

**SUPPLIED ACCESSORIES:**  
 Model 080A109 Petro Wax (1)  
 Model 080A15 Adhesive Mounting Base (1)  
 Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)

|                 |                 |                 |                 |              |
|-----------------|-----------------|-----------------|-----------------|--------------|
| Entered: JM     | Engineer: NJF   | Sales: RWM      | Approved: NJF   | Spec Number: |
| Date: 6/29/2015 | Date: 6/29/2015 | Date: 6/29/2015 | Date: 6/29/2015 | 353-2170-80  |