

**Performance**

	ENGLISH	SI	
Sensitivity(± 10 %)	5 mV/g	0.51 mV/(m/s <sup>2</sup> )	
Measurement Range	± 1000 g pk	± 9810 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 18,000 Hz	0.7 to 18,000 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)	0.01 g rms	0.1 m/s <sup>2</sup> rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[3]

**Environmental**

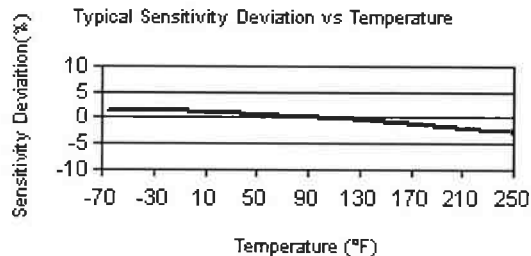
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s <sup>2</sup> pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	≤ 0.005 g/με	≤ 0.05 (m/s <sup>2</sup> )/με	[1]

**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 2.0 sec	0.5 to 2.0 sec	
Settling Time(within 10% of bias)	<5 sec	<5 sec	
Spectral Noise(1 Hz)	6400 μg/√Hz	62,784 (μm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(10 Hz)	1400 μg/√Hz	13,734 (μm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(100 Hz)	360 μg/√Hz	3532 (μm/sec <sup>2</sup> )/√Hz	[1]
Spectral Noise(1 kHz)	128 μg/√Hz	1256 (μm/sec <sup>2</sup> )/√Hz	[1]

**Physical**

Sensing Element	Quartz	Quartz	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Hex x Height)	9/32 in x .74 in	9/32 in x 18.8 mm	
Weight	0.06 oz	1.8 gm	[1]
Electrical Connector	10-32 Coaxial Plug	10-32 Coaxial Plug	
Electrical Connection Position	Top	Top	
Mounting Thread	5-40 Male	5-40 Male	
Mounting Torque	8 to 12 in-lb	90 to 135 N-cm	



[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 the standard model except where noted below. More than one option may be used.

**A - Adhesive Mount** [5]  
Supplied Accessory : Model 080A90 Quick Bonding Gel (1)

**B - Low bias electronics**  
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 ± 600 g pk ± 5886 m/s<sup>2</sup> pk

**J - Ground Isolated**  
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 0.82 in 3/8 in x 0.82 mm  
Weight 0.10 oz 3.0 gm

**M - Metric Mount**  
Mounting Thread M3 x 0.50 Male M3 x 0.50 Male  
Supplied Accessory : Model M080A15 Adhesive Mounting Base (1) replaces Model 080A15

**Q - Extended discharge time constant**  
Frequency Range(± 5 %) 0.15 to 10,000 Hz 0.15 to 10,000 Hz  
Frequency Range(± 10 %) 0.1 to 18,000 Hz 0.1 to 18,000 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)

**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.  
[5] Adhesive mounting base is not required. "Quick Bonding Gel" has maximum temperature range of 180 °F (82°C).

**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: ECB	Engineer: BAM	Sales: WDC	Approved: JJB	Spec Number:
Date: 12/9/09	Date: 12/9/09	Date: 12/9/09	Date: 12/9/09	353-2140-80

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