

Model Number 353B18	ICP® ACCELEROMETER		Revision: N ECN #: 35369
Performance	ENGLISH	SI	OPTIONAL VERSIONS
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s ²)	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.
Measurement Range	± 500 g pk	± 4905 m/s ² pk	A - Adhesive Mount Supplied Accessory : Model 080A90 Quick Bonding Gel (1) replaces Model 080A15
Frequency Range(± 5 %)	1 to 10,000 Hz	1 to 10,000 Hz	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 ± 300 g pk ± 2943 m/s ² pk
Frequency Range(± 10 %)	0.7 to 18,000 Hz	0.7 to 18,000 Hz	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 ⁸ ohm ≥ 10 ⁸ ohm Size - Hex x Height 3/8 in x 0.82 in 3/8 in x 20.8 mm Weight 0.10 oz 3.0 gm [1]
Frequency Range(± 3 dB)	0.35 to 30,000 Hz	0.35 to 30,000 Hz	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
Resonant Frequency	≥ 70 kHz	≥ 70 kHz	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)
Broadband Resolution(1 to 10,000 Hz)	0.005 g rms	0.05 m/s ² rms	W - Water Resistant Cable Electrical Connector Sealed Integral Cable Sealed Integral Cable Electrical Connection Position Top Top
Non-Linearity	≤ 1 %	≤ 1 %	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.
Transverse Sensitivity	≤ 5 %	≤ 5 %	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)
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s ² pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	
Base Strain Sensitivity	≤ 0.003 g/με	≤ 0.03 (m/s ²)/με	
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	
Spectral Noise(1 Hz)	2800 μg/√Hz	27,468 (μm/sec ²)/√Hz	
Spectral Noise(10 Hz)	700 μg/√Hz	6867 (μm/sec ²)/√Hz	
Spectral Noise(100 Hz)	180 μg/√Hz	1766 (μm/sec ²)/√Hz	
Spectral Noise(1 kHz)	64 μg/√Hz	628 (μm/sec ²)/√Hz	
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 0.74 in	9/32 in x 18.8 mm	
Weight	0.06 oz	1.8 gm	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
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	
<p>CE [4]</p> <p>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.</p>			
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