

Model Number 353B18	ACCELEROMETER, ICP®		Revision N ECN #: 35369
Performance Sensitivity (±10 %) 10 mV/g Measurement Range ±500 g pk Frequency Range (±5 %) 1 to 10000 Hz Frequency Range (±10 %) 0.7 to 18000 Hz Frequency Range (±3 dB) 0.35 to 30000 Hz Resonant Frequency ≥70 kHz Broadband Resolution (1 to 10000 Hz) 0.005 g rms Non-Linearity ≤1 % Transverse Sensitivity ≤5 %	ENGLISH 10 mV/g ±500 g pk 1 to 10000 Hz 0.7 to 18000 Hz 0.35 to 30000 Hz ≥70 kHz 0.005 g rms ≤1 % ≤5 %	SI 1.02 mV/(m/s²) ±4905 m/s² pk 1 to 10000 Hz 0.7 to 18000 Hz 0.35 to 30000 Hz ≥70 kHz 0.05 m/s² rms ≤1 % ≤5 %	Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.) A - Adhesive Mount Supplied Accessory: Model 080A90 Quick bond Gel (for use with accelerometer adhesive mntg bases to fill gaps on rough surfaces) replaces Model 080A15 B - Low bias electronics Output Bias Voltage 4.5 to 7.5 VDC Excitation Voltage 12 to 30 VDC Constant Current Excitation 1 to 20 mA Measurement Range ±300 g pk J - Ground Isolated Frequency Range (±5 %) 1 to 8000 Hz Frequency Range (±10 %) 0.7 to 15000 Hz Resonant Frequency ≥56 kHz Electrical Isolation (Base) ≥10⁸ Ohm Size (Hex x Height) 3/8 in x 0.82 in Weight 0.10 oz M - Metric Mount Mounting Thread M3 x 0.50 Male Supplied Accessory: Model M080A15 Metric adhesive base, 0.31" hex x 0.125" thk, M3 x 0.50 thd, aluminum with insulating hardcoat finish replaces Model 080A15 Q - Extended discharge time constant Frequency Range (±5 %) 0.15 to 10000 Hz Frequency Range (±10 %) 0.1 to 18000 Hz Discharge Time Constant >5 sec Settling Time (within 10% of bias) <45 sec Supplied Accessory: Model ACS-97 Single axis, low frequency phase and amplitude response cal from 1 to 10 Hz W - Water Resistant Cable Electrical Connector Sealed Integral Cable Electrical Connection Position Top
Environmental Overload Limit (Shock) ±10000 g pk Temperature Range (Operating) -65 to +250 °F Base Strain Sensitivity ≤0.003 g/με	±10000 g pk -65 to +250 °F ≤0.003 g/με	±98100 m/s² pk -54 to +121 °C ≤0.03 (m/s²)/με	
Electrical Excitation Voltage 18 to 30 VDC Constant Current Excitation 2 to 20 mA Output Impedance ≤100 Ohm Output Bias Voltage 8 to 12 VDC Discharge Time Constant 0.5 to 2.0 sec Spectral Noise (1 Hz) 2800 μg/√Hz Spectral Noise (10 Hz) 700 μg/√Hz Spectral Noise (100 Hz) 180 μg/√Hz Spectral Noise (1 kHz) 64 μg/√Hz	18 to 30 VDC 2 to 20 mA ≤100 Ohm 8 to 12 VDC 0.5 to 2.0 sec 2800 μg/√Hz 700 μg/√Hz 180 μg/√Hz 64 μg/√Hz	18 to 30 VDC 2 to 20 mA ≤100 Ohm 8 to 12 VDC 0.5 to 2.0 sec 27468 (μm/sec²)/√Hz 6867 (μm/sec²)/√Hz 1766 (μm/sec²)/√Hz 628 (μm/sec²)/√Hz	
Physical Size (Height) 0.74 in Weight 0.06 oz Sensing Element Quartz Size (Hex) 9/32 in Sensing Geometry Shear Housing Material Titanium Sealing Welded Hermetic Electrical Connector 10-32 Coaxial Jack Electrical Connection Position Top Mounting Thread 5-40 Male Mounting Torque 8 to 12 in-lb	0.74 in 0.06 oz Quartz 9/32 in Shear Titanium Welded Hermetic 10-32 Coaxial Jack Top 5-40 Male 8 to 12 in-lb	18.8 mm 1.8 gm Quartz 9/32 in Shear Titanium Welded Hermetic 10-32 Coaxial Jack Top 5-40 Male 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>			
<p>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.</p>			
<p>Supplied Accessories 080A109 Petro Wax (1) 080A15 Adhesive Mounting Base (1) ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)</p>			
Entered: DMW	Engineer: BAM	Sales: WDC	Approved: ECB
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Spec Number: 353-2180-80			
		3425 Walden Avenue Depew, NY 14043 UNITED STATES Phone: 800-828-8840 Fax: 716-684-0987 E-mail: info@pcb.com	

