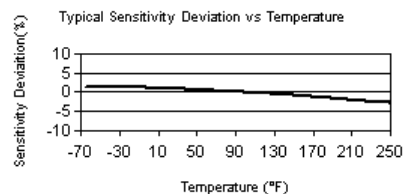


Model Number 353B15	ACCELEROMETER, ICP®		Revision M ECN #: 35369
Performance	ENGLISH	SI	Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)
Sensitivity (±10 %)	10 mV/g	1.02 mV/(m/s²)	A - Adhesive Mount Supplied Accessory: Model 080A90 Quick bond Gel (for use with accelerometer adhesive mtg bases to fill gaps on rough surfaces)
Measurement Range	±500 g pk	±4905 m/s² pk	B - Low bias electronics
Frequency Range (±5 %)	1 to 10000 Hz	1 to 10000 Hz	Output Bias Voltage 4.5 to 7.5 VDC 4.5 to 7.5 VDC
Frequency Range (±10 %)	0.7 to 18000 Hz	0.7 to 18000 Hz	Excitation Voltage 12 to 30 VDC 12 to 30 VDC
Frequency Range (±3 dB)	0.35 to 30000 Hz	0.35 to 30000 Hz	Constant Current Excitation 1 to 20 mA 1 to 20 mA
Resonant Frequency	≥70 kHz	≥70 kHz	Measurement Range ±300 g pk ±2943 m/s² pk
Broadband Resolution (1 to 10000 Hz)	0.005 g rms	0.05 m/s² rms [1]	J - Ground Isolated
Non-Linearity	≤1 % [2]	≤1 % [2]	Frequency Range (±5 %) 1 to 8000 Hz 1 to 8000 Hz
Transverse Sensitivity	≤5 % [3]	≤5 % [3]	Frequency Range (±10 %) 0.7 to 15000 Hz 0.7 to 15000 Hz
Environmental			Resonant Frequency ≥56 kHz ≥56 kHz
Overload Limit (Shock)	±10000 g pk	±98100 m/s² pk [1]	Electrical Isolation (Base) ≥10⁸ ohm ≥10⁸ ohm
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C [1]	Size (Hex x Height) 0.37 in x 0.57 in 9.5 mm x 14.5 mm [1]
Temperature Response	See Graph	See Graph [1]	Weight 0.11 oz 3.2 gm [1]
Base Strain Sensitivity	≤0.002 g/με	≤0.02 (m/s²)/με [1]	M - Metric Mount
Electrical			Mounting Thread M3 x 0.50 Male (M3 x 0.50 Male)
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	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
Constant Current Excitation	2 to 20 mA	2 to 20 mA	Q - Extended discharge time constant
Output Impedance	≤100 ohm	≤100 ohm	Frequency Range (±5 %) 0.15 to 10000 Hz 0.15 to 10000 Hz
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	Frequency Range (±10 %) 0.1 to 18000 Hz 0.1 to 18000 Hz
Discharge Time Constant	0.5 to 2.0 sec	0.5 to 2.0 sec	Discharge Time Constant ≥5 sec ≥5 sec
Settling Time (within 10% of bias)	<5 sec	<5 sec	Settling Time (within 10% of bias) ≤45 sec ≤45 sec
Spectral Noise (1 Hz)	2800 μg/√Hz	27468 (μm/sec²)/√Hz [1]	Supplied Accessory: Model ACS-4 Single-axis, low frequency phase and amplitude response calibration from 0.5 to 10 Hz
Spectral Noise (10 Hz)	700 μg/√Hz	6867 (μm/sec²)/√Hz [1]	W - Water Resistant Cable
Spectral Noise (100 Hz)	180 μg/√Hz	1766 (μm/sec²)/√Hz [1]	Electrical Connector Sealed Integral Sealed Integral
Spectral Noise (1 kHz)	64 μg/√Hz	628 (μm/sec²)/√Hz [1]	Electrical Connection Position Cable Side Cable Side
Physical			Notes
Sensing Element	Quartz	Quartz	[1] Typical.
Sensing Geometry	Shear	Shear	[2] Zero-based, least-squares, straight line method.
Housing Material	Titanium	Titanium	[3] Transverse sensitivity is typically ≤ 3%.
Sealing	Welded Hermetic	Welded Hermetic	[4] See PCB Declaration of Conformance PS023 for details.
Size (Hex x Height)	0.31 in x 0.43 in	7.9 mm x 10.9 mm [1]	Supplied Accessories
Weight	0.07 oz	2.0 gm	080A109 Petro Wax (1)
Electrical Connector	5-44 Coaxial	5-44 Coaxial	080A15 Adhesive Mounting Base (1)
Electrical Connection Position	Side	Side	ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
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.
In the interest of constant product improvement, we reserve the right to change specifications without notice.
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3425 Walden Avenue
Depew, NY 14043
UNITED STATES
Phone: 888-684-0013
Fax: 716-685-3886
E-mail: vibration@pcb.com
Web site: www.pcb.com

Entered: DMW	Engineer: BAM	Sales: WDC	Approved: EB	Spec Number:
Date: 03/25/2011	Date: 03/25/2011	Date: 03/25/2011	Date: 03/25/2011	353-2150-80

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