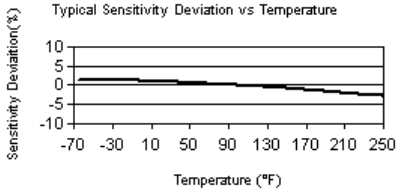
Model Number **353B16**	**ACCELEROMETER, ICP®**	Revision K ECN #: 35369

Performance	**ENGLISH**	**SI**	
Sensitivity (±10 %)	10 mV/g	1.02 mV/(m/s²)	
Measurement Range	±500 g pk	±4905 m/s² pk	
Frequency Range (±5 %)	1 to 10000 Hz	1 to 10000 Hz	
Frequency Range (±10 %)	0.7 to 20000 Hz	0.7 to 20000 Hz	
Frequency Range (±3 dB)	0.35 to 30000 Hz	0.35 to 30000 Hz	
Resonant Frequency	≥70 kHz	≥70 kHz	
Broadband Resolution (1 to 10000 Hz)	0.005 g rms	0.05 m/s² rms	[1]
Non-Linearity	≤1 %	≤1 %	[2]
Transverse Sensitivity	≤5 %	≤5 %	[3]
Environmental			
Overload Limit (Shock)	±10000 g pk	±98100 m/s² 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/s²)/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)	2800 μg/√Hz	27468 (μm/sec²)/√Hz	[1]
Spectral Noise (10 Hz)	700 μg/√Hz	6867 (μm/sec²)/√Hz	[1]
Spectral Noise (100 Hz)	180 μg/√Hz	1766 (μm/sec²)/√Hz	[1]
Spectral Noise (1 kHz)	64 μg/√Hz	628 (μm/sec²)/√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 0.68 in	9/32 in x 17.3 mm	
Weight	0.05 oz	1.5 gm	[1]
Electrical Connector	5-44 Coaxial	5-44 Coaxial	
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	

CE[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 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 mtg bases to fill gaps on rough surfaces) replaces Model 080A15

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/s² pk	

J - Ground Isolated

Frequency Range (±5 %)	1 to 8000 Hz	1 to 8000 Hz	
Frequency Range (±10 %)	0.7 to 15000 Hz	0.7 to 15000 Hz	
Resonant Frequency	≥56 kHz	≥56 kHz	
Electrical Isolation (Base)	$\geq 10^8$ ohm	$\geq 10^8$ ohm	
Size (Hex x Height)	3/8 in x 0.76 in	3/8 in x 19.3 mm	[1]
Weight	0.09 oz	2.7 gm	[1]

M - Metric Mount

Mounting Thread	M3 x 0.50 Male	(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	0.15 to 10000 Hz
Frequency Range (±10 %)	0.1 to 20000 Hz	0.1 to 20000 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

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.

Supplied Accessories
080A109 Petro Wax (1)
080A15 Adhesive Mounting Base (1)
ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)

Entered: DMW	Engineer: BAM	Sales: WDC	Approved: EB	Spec Number:
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