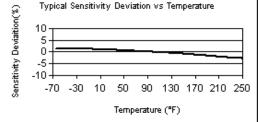
Model Number	
353B17	

ICP® ACCELEROMETER

Revision: U ECN #: 37278

000011			
Performance	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s ²)	
Measurement Range	± 500 g pk	± 4905 m/s² pk	
Frequency Range(± 5 %)	1 to 10,000 Hz	1 to 10,000 Hz	
Frequency Range(± 10 %)	0.7 to 17,000 Hz	0.7 to 17,000 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)	0.005 g rms	0.05 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[2]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[3]
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,100 m/s² pk	
Temperature Range(Operating)	-65 to +250 ℉	-54 to +121 ℃	
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	27,468 (µm/sec ²)/√Hz	[1]
Spectral Noise(10 Hz)	700 μg/√Hz	6867 (µm/sec ²)/√Hz	[1]
Spectral Noise(100 Hz)	180 μg/√Hz	1766 (µm/sec ²)/√Hz	[1]
Spectral Noise(1 kHz)	64 µg/√Hz	628 (µm/sec ²)/√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 0.59 in	9/32 in x 15.0 mm	
Weight(without cable)	0.06 oz	1.7 gm	[1]
Electrical Connector	Integral Cable	Integral Cable	
Electrical Connection Position	Тор	Тор	
Cable Termination	10-32 Coaxial Plug	10-32 Coaxial Plug	
Cable Length	10 ft	3 m	
Cable Type	031 Twisted Pair	031 Twisted Pair	
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. ICP® is a registered trademark of PCB Group, Inc.

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

Supplied Accessory: Model 080A90 Quick Bonding Gel (1)

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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 a pk	± 2943 m/s ² 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 ⁸ ohm	≥ 10 ⁸ ohm	
Size - Hex x Height	3/8 in x 0.77 in	3/8 in x 19.6 mm	
Weight(without cable)	0.10 oz	2.9 gm	[1]

M - Metric Mount

M3 x 0.50 Male Mounting Thread 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 17,000 Hz	0.1 to 17,000 Hz
Discharge Time Constant	≥ 5 sec	≥ 5 sec
Settling Time(within 10% of bias)	<45 sec	<45 sec
Supplied Accessory : Model ACS-97 Sing	gle axis, low frequency pha	ase and amplitude response
cal from 1 to 10 Hz (1)		

W - Water Resistant Cable

Temperature Range(Operating)	-20 to 220 ℉	-29 to 104 ℃
Electrical Connector	Sealed Integral Cable	Sealed Integral Cable
Electrical Connection Position	Тор	Тор
Cable Length	10 ft	3
Cable Type	018 Coaxial	018 Coaxial

NOTES:

- [1] Typical.
 [2] Zero-based, least-squares, straight line method.
 [3] Transverse sensitivity is typically ≤ 3%.

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: DMW	Engineer: BAM	Sales: WDC	Approved: RPF	Spec Number:
Date: 10/14/2011	Date: 10/14/2011	Date: 10/14/2011	Date: 10/14/2011	353-2170-80



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