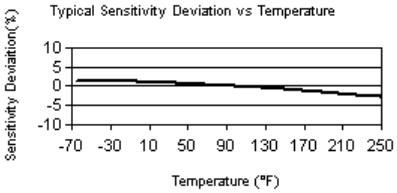
Model Number 353B02	ACCELEROMETER, ICP®	Revision F ECN #: 35369

Performance	ENGLISH	SI	
Sensitivity (±5 %)	20 mV/g	2.04 mV/(m/s²)	[2]
Measurement Range	±250 g pk	±2453 m/s² pk	
Frequency Range (±5 %)	1 to 7000 Hz	1 to 7000 Hz	
Frequency Range (±10 %)	0.7 to 10000 Hz	0.7 to 10000 Hz	
Frequency Range (±3 dB)	0.35 to 18000 Hz	0.35 to 18000 Hz	
Resonant Frequency	≥38 kHz	≥38 kHz	
Broadband Resolution (1 to 10000 Hz)	0.003 g rms	0.03 m/s² rms	[1]
Non-Linearity	≤1 %	≤1 %	[3]
Transverse Sensitivity	≤5 %	≤5 %	[4]
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	≤0.0005 g/με	≤0.005 (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 2.6 sec	0.5 to 2.6 sec	
Settling Time (within 10% of bias)	<5 sec	<5 sec	
Spectral Noise (1 Hz)	1600 μg/√Hz	15700 (μm/sec²/√Hz	[1]
Spectral Noise (10 Hz)	350 μg/√Hz	3433 (μm/sec²/√Hz	[1]
Spectral Noise (100 Hz)	90 μg/√Hz	883 (μm/sec²/√Hz	[1]
Spectral Noise (1 kHz)	32 μg/√Hz	314 (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)	0.50 in x 1.19 in	12.7 mm x 30.2 mm	
Weight	0.35 oz	10 gm	[1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Top	Top	
Mounting Thread	10-32 Female	10-32 Female	

CE[5]



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.)

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	±150 g pk	±1418 m/s² pk
Broadband Resolution (1 to 10000 Hz)	0.01 g rms	0.1 m/s² rms
Spectral Noise (1 Hz)	2300 μg/√Hz	22563 (μm/sec²/√Hz
Spectral Noise (10 Hz)	560 μg/√Hz	5494 (μm/sec²/√Hz
Spectral Noise (100 Hz)	230 μg/√Hz	2256 (μm/sec²/√Hz
Spectral Noise (1000 Hz)	65 μg/√Hz	638 (μm/sec²/√Hz
J - Ground Isolated		
Frequency Range (±5 %)	1 to 5000 Hz	1 to 5000 Hz
Frequency Range (±10 %)	0.7 to 10000 Hz	0.7 to 10000 Hz
Resonant Frequency	≥22 kHz	≥22 kHz
Electrical Isolation (Base)	$\geq 10^8$ ohm	$\geq 10^8$ ohm
Q - Extended discharge time constant		
Frequency Range (±5 %)	0.1 to 7000 Hz	0.1 to 7000 Hz
Frequency Range (±10 %)	0.07 to 10000 Hz	0.07 to 10000 Hz
Discharge Time Constant	>10 sec	>10 sec
Settling Time (within 10% of bias)	45 sec	45 sec
Supplied Accessory: Model ACS-4 Single-axis, low frequency phase and amplitude response calibration from 0.5 to 10 Hz		
W - Water Resistant Cable		
Electrical Connector	Sealed Integral Cable	Sealed Integral Cable
Electrical Connection Position	Top	Top

Notes

[1] Typical.
[2] B and Q options supplied with a sensitivity tolerance of ± 10 %.
[3] Zero-based, least-squares, straight line method.
[4] Transverse sensitivity is typically <= 3%.
[5] See PCB Declaration of Conformance PS023 for details.

Supplied Accessories

080A Adhesive Mounting Base (1)
080A109 Petro Wax (1)
081B05 Mounting Stud (10-32 to 10-32) (1)
ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)

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