
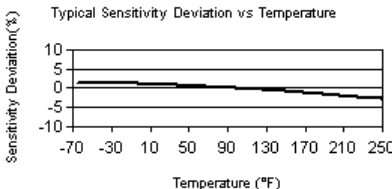


Model Number <b>353B31</b>	<b>ACCELEROMETER, ICP®</b>			Revision K ECN #: 26810
<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>		<b>Optional Versions</b> (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)
Sensitivity (±5 %)	50 mV/g	5.10 mV/(m/s <sup>2</sup> )	[2]	<b>B - Low bias electronics</b> [2]
Measurement Range	±100 g pk	±981 m/s <sup>2</sup> pk		Output Bias Voltage 4.5 to 7.5 VDC 4.5 to 7.5 VDC
Frequency Range (±5 %)	1 to 5000 Hz	1 to 5000 Hz		Excitation Voltage 12 to 30 VDC 12 to 30 VDC
Frequency Range (±10 %)	0.7 to 8000 Hz	0.7 to 8000 Hz		Constant Current Excitation 1 to 20 mA 1 to 20 mA
Frequency Range (±3 dB)	0.35 to 15000 Hz	0.35 to 15000 Hz		Measurement Range ±60 g pk ±589 m/s <sup>2</sup> pk
Resonant Frequency	≥30 kHz	≥30 kHz		<b>J - Ground Isolated</b>
Broadband Resolution (1 to 10000 Hz)	0.001 g rms	0.01 m/s <sup>2</sup> rms	[1]	Frequency Range (±5 %) 1 to 4000 Hz 1 to 4000 Hz
Non-Linearity	≤1 %	≤1 %	[3]	Frequency Range (±10 %) 0.7 to 7000 Hz 0.7 to 7000 Hz
Transverse Sensitivity	≤5 %	≤5 %	[4]	Resonant Frequency ≥22 kHz ≥22 kHz
<b>Environmental</b>				Electrical Isolation (Base) ≥10 <sup>8</sup> ohm ≥10 <sup>8</sup> ohm
Overload Limit (Shock)	±10000 g pk	±98000 m/s <sup>2</sup> pk		<b>Q - Extended discharge time constant</b> [2]
Temperature Range (Operating)	-65 to +250 °F	-54 to +121 °C		Frequency Range (±5 %) 0.1 to 5000 Hz 0.1 to 5000 Hz
Temperature Response	See Graph	See Graph	[1]	Frequency Range (±10 %) 0.07 to 8000 Hz 0.07 to 8000 Hz
Base Strain Sensitivity	≤0.0002 g/με	≤0.002 (m/s <sup>2</sup> )/με	[1]	Discharge Time Constant >10 sec >10 sec
<b>Electrical</b>				Settling Time (within 10% of bias) <90 sec <90 sec
Excitation Voltage	18 to 30 VDC	18 to 30 VDC		Supplied Accessory: Model ACS-4 Single-axis, low frequency phase and amplitude response calibration from 0.5 to 10 Hz
Constant Current Excitation	2 to 20 mA	2 to 20 mA		<b>W - Water Resistant Cable</b>
Output Impedance	≤100 ohm	≤100 ohm		Electrical Connector Sealed Integral Cable Sealed Integral Cable
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC		Electrical Connection Position Side Side
Discharge Time Constant	0.5 to 2.0 sec	0.5 to 2.0 sec		<b>Notes</b>
Settling Time (within 10% of bias)	<10 sec	<10 sec		[1] Typical.
Spectral Noise (1 Hz)	640 μg/√Hz	6278 (μm/sec <sup>2</sup> /√Hz)	[1]	[2] B and Q options supplied with a sensitivity tolerance of ± 10 %.
Spectral Noise (10 Hz)	140 μg/√Hz	1373 (μm/sec <sup>2</sup> /√Hz)	[1]	[3] Zero-based, least-squares, straight line method.
Spectral Noise (100 Hz)	36 μg/√Hz	353 (μm/sec <sup>2</sup> /√Hz)	[1]	[4] Transverse sensitivity is typically ≤= 3%.
Spectral Noise (1 kHz)	13 μg/√Hz	128 (μm/sec <sup>2</sup> /√Hz)	[1]	[5] See PCB Declaration of Conformance PS023 for details.
<b>Physical</b>				<b>Supplied Accessories</b>
Sensing Element	Quartz	Quartz		080A109 Petro Wax (1)
Sensing Geometry	Shear	Shear		080A12 Adhesive Mounting Base ()
Housing Material	Titanium	Titanium		081B05 Mounting Stud (10-32 to 10-32) (1)
Sealing	Welded Hermetic	Welded Hermetic		ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
Size (Hex x Height)	0.75 in x 0.85 in	19.1 mm x 21.6 mm		M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)
Weight	0.7 oz	20 gm	[1]	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack		
Electrical Connection Position	Side	Side		
Mounting Thread	10-32 Female	10-32 Female		




Typical Sensitivity Deviation vs Temperature



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