

Model Number 353B31	ICP® ACCELEROMETER			Revision: K ECN #: 26810										
Performance	ENGLISH	SI		OPTIONAL VERSIONS										
Sensitivity(± 5 %)	50 mV/g	5,10 mV/(m/s²)	[2]	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.										
Measurement Range	± 100 g pk	± 981 m/s² pk												
Frequency Range(± 5 %)	1 to 5000 Hz	1 to 5000 Hz		B - Low bias electronics [2]										
Frequency Range(± 10 %)	0.7 to 8000 Hz	0.7 to 8000 Hz		Output Bias Voltage 4.5 to 7.5 VDC 4.5 to 7.5 VDC										
Frequency Range(± 3 dB)	0.35 to 15,000 Hz	0.35 to 15,000 Hz		Excitation Voltage 12 to 30 VDC 12 to 30 VDC										
Resonant Frequency	≥ 30 kHz	≥ 30 kHz		Constant Current Excitation 1 to 20 mA 1 to 20 mA										
Broadband Resolution(1 to 10,000 Hz)	0,001 g rms	0,01 m/s² rms	[1]	Measurement Range ± 60 g pk ± 589 m/s² pk										
Non-Linearity	≤ 1 %	≤ 1 %	[3]											
Transverse Sensitivity	≤ 5 %	≤ 5 %	[4]	J - Ground Isolated										
Environmental				Frequency Range(± 5 %) 1 to 4000 Hz 1 to 4000 Hz										
Overload Limit(Shock)	± 10,000 g pk	± 98,000 m/s² pk		Frequency Range(± 10 %) 0.7 to 7000 Hz 0.7 to 7000 Hz										
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C		Resonant Frequency ≥ 22 kHz ≥ 22 kHz										
Temperature Response	See Graph	See Graph	[1]	Electrical Isolation(Base) ≥ 10 ⁸ ohm ≥ 10 ⁸ ohm										
Base Strain Sensitivity	≤ 0,0002 g/με	≤ 0,002 (m/s²)/με	[1]	Size - Hex x Height 0,75 in x 0,90 in 19,1 mm x 22,9 mm										
Electrical				Q - Extended discharge time constant [2]										
Excitation Voltage	18 to 30 VDC	18 to 30 VDC		Frequency Range(± 5 %) 0.1 to 5000 Hz 0.1 to 5000 Hz										
Constant Current Excitation	2 to 20 mA	2 to 20 mA		Frequency Range(± 10 %) 0.07 to 8000 Hz 0.07 to 8000 Hz										
Output Impedance	≤ 100 ohm	≤ 100 ohm		Discharge Time Constant >10 sec >10 sec										
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC		Settling Time(within 10% of bias) <90 sec <90 sec										
Discharge Time Constant	0.5 to 2.0 sec	0.5 to 2.0 sec		Supplied Accessory : Model ACS-4 Single-axis, low frequency phase and amplitude response calibration. (1)										
Settling Time(within 10% of bias)	<10 sec	<10 sec		W - Water Resistant Cable										
Spectral Noise(1 Hz)	640 μg/√Hz	6278 (μm/s²)/√Hz	[1]	Electrical Connector Sealed Integral Cable Sealed Integral Cable										
Spectral Noise(10 Hz)	140 μg/√Hz	1373 (μm/s²)/√Hz	[1]	Electrical Connection Position Side Side										
Spectral Noise(100 Hz)	36 μg/√Hz	353 (μm/s²)/√Hz	[1]											
Spectral Noise(1 kHz)	13 μg/√Hz	128 (μm/s²)/√Hz	[1]											
Physical														
Sensing Element	Quartz	Quartz												
Sensing Geometry	Shear	Shear												
Housing Material	Titanium	Titanium												
Sealing	Welded Hermetic	Welded Hermetic												
Size (Hex x Height)	0.75 in x 0.85 in	19,1 mm x 21,6 mm	[1]											
Weight	0.7 oz	20 gm												
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack												
Electrical Connection Position	Side	Side												
Mounting Thread	10-32 Female	10-32 Female												
<p>Typical Sensitivity Deviation vs. Temperature</p> <p>Sensitivity Deviation(%)</p> <p>Temperature (°F)</p>														
<p>NOTES:</p> <p>[1] Typical.</p> <p>[2] B and Q options supplied with a sensitivity tolerance of ± 10 %.</p> <p>[3] Zero-based, least-squares, straight line method.</p> <p>[4] Transverse sensitivity is typically ≤ 3%.</p> <p>[5] See PCB Declaration of Conformance PS023 for details.</p>														
<p>SUPPLIED ACCESSORIES:</p> <p>Model 080A109 Petro Wax (1)</p> <p>Model 080A12 Adhesive Mounting Base</p> <p>Model 081B05 Mounting Stud (10-32 to 10-32) (1)</p> <p>Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)</p> <p>Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)</p>														
<table border="1"> <tr> <td>Entered: BLS</td> <td>Engineer: BAM</td> <td>Sales: WDC</td> <td>Approved: EB</td> <td>Spec Number:</td> </tr> <tr> <td>Date: 7-10-07</td> <td>Date: 7-2-07</td> <td>Date: 7-2-07</td> <td>Date: 7-5-07</td> <td>353-2310-80</td> </tr> </table>					Entered: BLS	Engineer: BAM	Sales: WDC	Approved: EB	Spec Number:	Date: 7-10-07	Date: 7-2-07	Date: 7-2-07	Date: 7-5-07	353-2310-80
Entered: BLS	Engineer: BAM	Sales: WDC	Approved: EB	Spec Number:										
Date: 7-10-07	Date: 7-2-07	Date: 7-2-07	Date: 7-5-07	353-2310-80										
<p>PCB PIEZOTRONICS™</p> <p>VIBRATION DIVISION</p> <p>3425 Walden Avenue, Depew, NY 14043</p> <p>Phone: 716-684-0001 Fax: 716-685-3886 E-Mail: vibration@pcb.com</p>														

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.