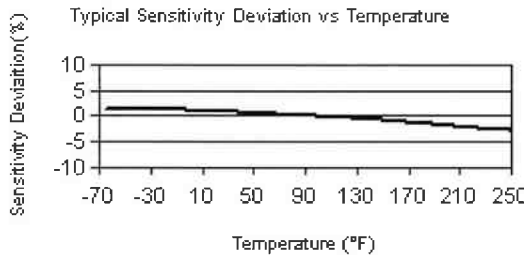


Model Number
353B31

ICP® ACCELEROMETER

Revision: K
ECN #: 26810

	ENGLISH	SI	
Performance			
Sensitivity(± 5 %)	50 mV/g	5,10 mV/(m/s ²)	[2]
Measurement Range	± 100 g pk	± 981 m/s ² pk	
Frequency Range(± 5 %)	1 to 5000 Hz	1 to 5000 Hz	
Frequency Range(± 10 %)	0.7 to 8000 Hz	0.7 to 8000 Hz	
Frequency Range(± 3 dB)	0.35 to 15,000 Hz	0.35 to 15,000 Hz	
Resonant Frequency	≥ 30 kHz	≥ 30 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.001 g rms	0.01 m/s ² rms	[1]
Non-Linearity	≤ 1 %	≤ 1 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	[4]
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,000 m/s ² pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	≤ 0.0002 g/με	≤ 0.002 (m/s ²)/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)	<10 sec	<10 sec	
Spectral Noise(1 Hz)	640 μg/√Hz	6278 (μm/s ²)/√Hz	[1]
Spectral Noise(10 Hz)	140 μg/√Hz	1373 (μm/s ²)/√Hz	[1]
Spectral Noise(100 Hz)	36 μg/√Hz	353 (μm/s ²)/√Hz	[1]
Spectral Noise(1 kHz)	13 μg/√Hz	128 (μm/s 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)	0.75 in x 0.85 in	19.1 mm x 21.6 mm	
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	



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 the standard model except where noted below. More than one option may be used.		
B - Low bias electronics		[2]
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	± 60 g pk	± 589 m/s ² pk
J - Ground Isolated		
Frequency Range(± 5 %)	1 to 4000 Hz	1 to 4000 Hz
Frequency Range(± 10 %)	0.7 to 7000 Hz	0.7 to 7000 Hz
Resonant Frequency	≥ 22 kHz	≥ 22 kHz
Electrical Isolation(Base)	≥ 10 ⁸ ohm	≥ 10 ⁸ ohm
Size - Hex x Height	0.75 in x 0.90 in	19.1 mm x 22.9 mm
Q - Extended discharge time constant		[2]
Frequency Range(± 5 %)	0.1 to 5000 Hz	0.1 to 5000 Hz
Frequency Range(± 10 %)	0.07 to 8000 Hz	0.07 to 8000 Hz
Discharge Time Constant	>10 sec	>10 sec
Settling Time(within 10% of bias)	<90 sec	<90 sec
Supplied Accessory : Model ACS-4 Single-axis, low frequency phase and amplitude response calibration. (1)		
W - Water Resistant Cable		
Electrical Connector	Sealed Integral Cable	Sealed Integral Cable
Electrical Connection Position	Side	Side

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:
 Model 080A109 Petro Wax (1)
 Model 080A12 Adhesive Mounting Base
 Model 081B05 Mounting Stud (10-32 to 10-32) (1)
 Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
 Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)

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

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