

Model Number
351B41

ICP[®] ACCELEROMETER

Revision: E
ECN #: 14901

	ENGLISH	SI	
Performance			
Sensitivity (±10 %)	100 mV/g	10.2 mV/(m/s ²)	
Measurement Range	±15 g pk	± 147 m/s ² pk	
Frequency Range (±5 %)	1 to 2000 Hz	1 to 2000 Hz	
Frequency Range (±10 %)	0.7 to 3500 Hz	0.7 to 3500 Hz	
Frequency Range (±3 dB)	0.35 to 5000 Hz	0.35 to 5000 Hz	
Resonant Frequency	≥15 kHz	≥15 kHz	
Broadband Resolution	0.0005 g rms	0.005 m/s ² rms	[1]
Non-Linearity	≤1 %	≤1 %	[2]
Transverse Sensitivity	≤5 %	≤5 %	[3]
Environmental			
Overload Limit	±1000 g pk	± 9810 m/s ² pk	
Temperature Range (Operating)	-320 to +250 °F	-196 to +121 °C	
Base Strain Sensitivity	<0.0005 g/με	< 0.005 (m/s ²)/με	[1]
Electrical			
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤100 ohms	≤100 ohms	
Output Bias Voltage	3 to 10 VDC	3 to 10 VDC	
Discharge Time Constant	>0.5 sec	>0.5 sec	
Settling Time (within 10% of bias)	<5 sec	<5 sec	
Spectral Noise (1 Hz)	100 μg/√Hz	980 (μm/s ²)/√Hz	[1]
Spectral Noise (10 Hz)	22 μg/√Hz	216 (μm/s ²)/√Hz	[1]
Spectral Noise (100 Hz)	6 μg/√Hz	58.9 (μm/s ²)/√Hz	[1]
Spectral Noise (1 kHz)	1.6 μg/√Hz	15.7 (μm/s ²)/√Hz	[1]
Electrical Isolation	None (Optional) ohms	None (Optional) ohms	
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	1.4 oz	40 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	

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.

J - Ground Isolated

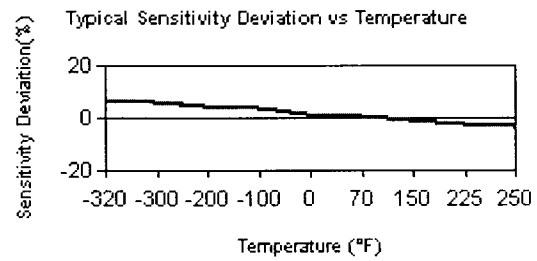
Frequency Range (5 %)	2 kHz	2 kHz
Frequency Range (10 %)	3.5 kHz	3.5 kHz
Resonant Frequency	≥13 kHz	≥ 13 kHz
Electrical Isolation (Base)	>10 ⁸ ohms	>10 ⁸ ohms
Size (Hex x Height)	0.75 in x 0.90 in	19.1 mm x 22.9 mm

NOTES:

[1] Typical.
 [2] Zero-based, least-squares, straight line method.
 [3] Transverse sensitivity is typically ≤ 3%.
 [4] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081B05 Mounting Stud (10-32 to 10-32) (1)
 Model ACS-1 NIST traceable frequency response (10 Hz to +5% point). (1)
 Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)



Entered: <i>[Signature]</i>	Engineer: <i>DJS</i>	Sales: <i>WJD</i>	Approved: <i>[Signature]</i>	Spec Number:
Date: <i>5/20/02</i>	Date: <i>5/20/02</i>	Date: <i>5/20/02</i>	Date: <i>5/21/02</i>	351-2410-80

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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PCB PIEZOTRONICS
 VIBRATION DIVISION
 3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001
 Fax: 716-685-3886
 E-Mail: vibration@pcb.com