

Model Number

333B35

ICP® ACCELEROMETER

Revision: H

ECN #: 17403

Performance

	ENGLISH	SI	
Sensitivity ($\pm 10\%$)	100 mV/g	10.2 mV/(m/s ²)	
Measurement Range	± 50 g pk	± 490 m/s ² pk	
Frequency Range ($\pm 5\%$)	0.5 to 3000 Hz	0.5 to 3000 Hz	
Resonant Frequency	≥ 40 kHz	≥ 40 kHz	
Phase Response ($\pm 5^\circ$) (at 70° F [21° C])	2 to 3000 Hz	2 to 3000 Hz	
Broadband Resolution (1 to 10000 Hz)	0.00015 g rms	0.0015 m/s ² rms	[1]
Non-Linearity	$\leq 1\%$	$\leq 1\%$	[2]
Transverse Sensitivity	$\leq 5\%$	$\leq 5\%$	[3]

Environmental

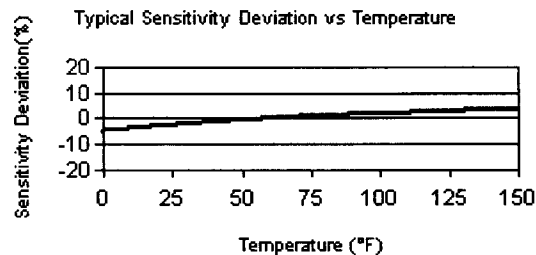
Overload Limit (Shock)	± 5000 g pk	± 49000 m/s ² pk	
Temperature Range (Operating)	0 to +150 °F	-18 to +66 °C	
Temperature Response	See Graph	See Graph	
Base Strain Sensitivity	0.01 g/ $\mu\epsilon$	0.1 (m/s ²)/ $\mu\epsilon$	[1]

Electrical

Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 300 ohms	≤ 300 ohms	
Output Bias Voltage	7 to 12 VDC	7 to 12 VDC	
Discharge Time Constant	1.0 to 3.0 sec	1.0 to 3.0 sec	
Settling Time (within 10% of bias)	<12 sec	<12 sec	
Spectral Noise (1 Hz)	39 $\mu\text{g}/\sqrt{\text{Hz}}$	380 ($\mu\text{m/s}^2$)/ $\sqrt{\text{Hz}}$	[1]
Spectral Noise (10 Hz)	11 $\mu\text{g}/\sqrt{\text{Hz}}$	110 ($\mu\text{m/s}^2$)/ $\sqrt{\text{Hz}}$	[1]
Spectral Noise (100 Hz)	3.4 $\mu\text{g}/\sqrt{\text{Hz}}$	33 ($\mu\text{m/s}^2$)/ $\sqrt{\text{Hz}}$	[1]
Spectral Noise (1 kHz)	1.4 $\mu\text{g}/\sqrt{\text{Hz}}$	14 ($\mu\text{m/s}^2$)/ $\sqrt{\text{Hz}}$	[1]

Physical

Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.57 in x 0.40 in x 0.40 in	14.5 mm x 10.2 mm x 10.2 mm	
Weight	0.14 oz	4.0 gm	[1]
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Electrical Connection Position	Top	Top	
Mounting	Adhesive	Adhesive	
Mounting Thread	5-40 Female	5-40 Female	
Mounting Torque	4 to 5 in-lb	45 to 56 N-cm	



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.

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.

T - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4

Output Bias Voltage 7.5 to 13 VDC 7.5 to 13 VDC

NOTES:

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

SUPPLIED ACCESSORIES:

- Model 080A109 Petro Wax (1)
Model 080A25 Adhesive base, 0.438" hex, 5-40 tapped hole, aluminum hardcoat. (1)
Model 080A90 Quick Bonding Gel (1)
Model 081A27 Mounting Stud (5-40 to 5-40) (1)
Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)
Model M081A27 Metric mounting stud, 5-40 to M3 x 0.50" long (1)

Entered: <i>AK</i>	Engineer: <i>APC</i>	Sales: <i>WZ</i>	Approved: <i>AM</i>	Spec Number:
Date: <i>4/23/3</i>	Date: <i>4/23/3</i>	Date: <i>4/23/3</i>	Date: <i>4/25/3</i>	11831

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

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