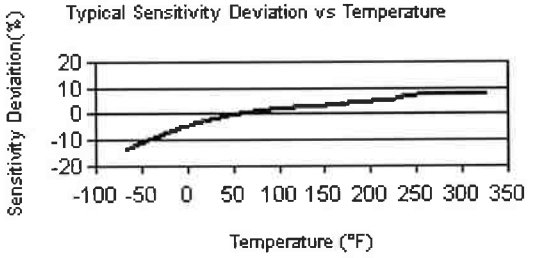
Model Number	TRIAXIAL ICP® ACCELEROMETER	Revision: P
356A02		ECN #: 32915

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	10 mV/g	1.02 mV/(m/s²)	
Measurement Range	± 500 g pk	± 4900 m/s² pk	
Frequency Range(± 5 %)	1 to 5000 Hz	1 to 5000 Hz	
(± 10 %)	0.5 to 6000 Hz	0.5 to 6000 Hz	
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	
Broadband Resolution(1 to 10,000 Hz)	0.0005 g rms	0.005 m/s² rms	[1]
Non-Linearity(400 g, 3920 m/s²)	≤ 1 %	≤ 1 %	[4]
(500 g, 4900 m/s²)	≤ 2 %	≤ 2 %	[4]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 7000 g pk	± 68,600 m/s² pk	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	[3]
Temperature Response	See Graph	See Graph	[3][1]
Base Strain Sensitivity	0.001 g/με	0.01 (m/s²)/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	≤ 200 ohm	≤ 200 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Discharge Time Constant	0.6 to 2.0 sec	0.6 to 2.0 sec	
Settling Time(within 10% of bias)	<5 sec	<5 sec	
Spectral Noise(1 Hz)	150 μg/√Hz	1472 (μm/sec²)/√Hz	[1]
(10 Hz)	25 μg/√Hz	245 (μm/sec²)/√Hz	[1]
(100 Hz)	10 μg/√Hz	98 (μm/sec²)/√Hz	[1]
(1 kHz)	5 μg/√Hz	49 (μm/sec²)/√Hz	[1]
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.55 in x 0.80 in x 0.55 in	14.0 mm x 20.3 mm x 14.0 mm	
Weight	0.37 oz	10.5 gm	[1]
Electrical Connector	1/4-28 4-Pin	1/4-28 4-Pin	
Electrical Connection Position	Side	Side	
Mounting Thread	10-32 Female	10-32 Female	
Mounting Torque	10 to 20 in-lb	113 to 225 N-cm	

CE [5]



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.

HT - High temperature, extends normal operation temperatures [3]

Frequency Range(± 5 %)	1 to 5000 Hz	1 to 5000 Hz
(± 10 %)	0.7 to 6000 Hz	0.7 to 6000 Hz
Broadband Resolution(1 to 10,000 Hz)	0.0008 g rms	0.008 μm/sec² rms
Temperature Range(Operating)	-65 to +325 °F	-54 to +163 °C
Excitation Voltage	22 to 30 VDC	22 to 30 VDC
Output Bias Voltage	7 to 15 VDC	7 to 15 VDC [2]
Discharge Time Constant	0.5 to 1.5 sec	0.5 to 1.5 sec
Spectral Noise(1 Hz)	400 μg/√Hz	3920 (μm/sec²)/√Hz
(10 Hz)	50 μg/√Hz	490 (μm/sec²)/√Hz
(100 Hz)	25 μg/√Hz	245 (μm/sec²)/√Hz
(1 kHz)	6 μg/√Hz	58.8 (μm/sec²)/√Hz

T - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4
TLA - TEDS LMS International - Free Format
TLB - TEDS LMS International - Automotive Format
TLC - TEDS LMS International - Aeronautical Format
TLD - TEDS Capable of Digital Memory and Communication Compliant with IEEE 1451.4

Temperature Range	-65 to +250 °F	-54 to +121 °C
Output Bias Voltage	8.5 to 13.0 VDC	8.5 to 13.0 VDC

NOTES:

[1] Typical.
[2] TEDS option adds 1.0 VDC to bias voltage.
[3] 250° F to 325° F data valid with HT option only.
[4] Zero-based, least-squares, straight line method.
[5] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 080A109 Petro Wax (1)
Model 080A12 Adhesive Mounting Base (1)
Model 080A90 Quick Bonding Gel (1)
Model 081B05 Mounting Stud (10-32 to 10-32) (1)
Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
Model M081B05 Mounting Stud 10-32 to M6 X 0.75

Entered: JLt	Engineer: BAM	Sales: WDC	Approved: EB	Spec Number:
Date: 5-12-10	Date: 5-6-10	Date: 5-7-10	Date: 5-11-10	10927

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

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