

Model Number
357B11

CHARGE OUTPUT ACCELEROMETER

Revision: N
ECN #: 30143

Performance	ENGLISH	SI	
Sensitivity(± 10 %)	3.0 pC/g	0.31 pC/(m/s ²)	
Measurement Range	± 2300 g pk	± 22,600 m/s ² pk	
Frequency Range(+5 %)	12 kHz	12 kHz	[2]
Frequency Range(+10 %)	16 kHz	16 kHz	[2]
Frequency Range(+3 dB)	26 kHz	26 kHz	[2]
Resonant Frequency	≥ 50 kHz	≥ 50 kHz	
Non-Linearity(1700 g, 16700 m/s ²)	≤ 1 %	≤ 1 %	[3]
Non-Linearity	≤ 2 %	≤ 2 %	[3]
Transverse Sensitivity	≤ 5 %	≤ 5 %	
Environmental			
Overload Limit(Shock)	± 10,000 g pk	± 98,000 m/s ² pk	
Temperature Range	-95 to +500 °F	-71 to +260 °C	
Temperature Response	See Graph	See Graph	[1]
Base Strain Sensitivity	0.002 g/με	0.02 (m/s ²)/με	[1]
Electrical			
Capacitance	485 pF	485 pF	[1]
Insulation Resistance(at 70° F [21°C])	>10 ¹² ohm	>10 ¹² ohm	
Insulation Resistance(at 500°F)	>10 ⁸ ohm	>10 ⁸ ohm	[1]
Output Polarity	Negative	Negative	
Physical			
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Titanium	Titanium	
Sealing	Welded Hermetic	Welded Hermetic	
Size (Hex x Height)	0.28 in x 0.33 in	7.1 mm x 8.4 mm	
Weight	0.071 oz	2.0 gm	[1]
Electrical Connector	5-44 Coaxial	5-44 Coaxial	
Electrical Connection Position	Side	Side	
Mounting Thread	5-40 Male	5-40 Male	
Mounting Torque	4 to 5 in-lb	45 to 57 N-cm	

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.

A - Adhesive Mount [5]
Supplied Accessory : Model 080A90 Quick Bonding Gel (1)

J - Ground Isolated
Frequency Range(+5 %) 10 kHz 10 kHz
Frequency Range(+10 %) 13.5 kHz 13.5 kHz
Resonant Frequency ≥ 49 kHz ≥ 49 kHz
Electrical Isolation(Base) >10⁸ ohm >10⁸ ohm
Size - Hex x Height 0.375 in x 0.39 in 9.5 mm x 9.91 mm
Weight 0.11 oz 3.2 gm

M - Metric Mount
Mounting Thread M3 x 0.50 Male M3 x 0.50 Male

P - Positive Output Polarity
Output Polarity Positive Positive

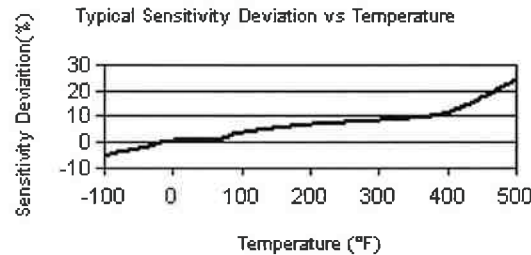
W - Water Resistant Cable
Electrical Connector Sealed Integral Cable Sealed Integral Cable
Electrical Connection Position Side Side
Cable Type 003 Low-noise, blue, coaxial, Teflon cable 003 Low-noise, blue, coaxial, Teflon cable [4]

NOTES:

- [1] Typical.
- [2] Low frequency response is determined by external signal conditioning electronics.
- [3] Zero-based, least-squares, straight line method.
- [4] Capacitance will vary based on cable length. Typical cable capacitance is 29 pF/ft (95 pF/m).
- [5] Adhesive mounting base is not required. "Quick Bonding Gel" has maximum temperature range of 180 ° F (82°C).

SUPPLIED ACCESSORIES:

Model ACS-1 NIST traceable frequency response (10 Hz to upper 5% point). (1)



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.

Entered: BLS	Engineer: JJB	Sales: MDC	Approved: EB	Spec Number:
Date: 2/24/09	Date: 2/18/09	Date: 2/11/09	Date: 2/23/09	1247

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

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