

Model Number 3741B12100G		DC RESPONSE ACCELEROMETER			Revision A ECN #: 35076										
Performance		ENGLISH		SI											
Sensitivity (±5 %)		20 mV/g		2.04 mV/(m/s²) [6]											
Measurement Range		±100 g pk		±980.7 m/s² pk											
Frequency Range (±5 %)		0 to 1000 Hz		0 to 1000 Hz											
Frequency Range (±10 %)		0 to 1500 Hz		0 to 1500 Hz											
Resonant Frequency		>7.2 kHz		>7.2 kHz											
Phase Response (100 Hz)		<10 °		<10 °											
Broadband Resolution (0.5 to 100 Hz)		12.0 mg rms		.12 m/s² rms [2]											
Non-Linearity		≤1 % FS		≤1 % FS [7]											
Transverse Sensitivity		≤3 %		≤3 %											
Environmental															
Overload Limit (Shock)		±3000 g pk		±29420 m/s² pk											
Temperature Range (Operating)		-65 to 250 °F		-54.0 to 121 °C											
Temperature Range (Storage)		-65 to 250 °F		-54.0 to 121 °C											
Temperature Coefficient of Sensitivity		±3.0 %		±3.0 % [4]											
Zero g Offset Temperature Coefficient		±2.0 %FSO		±2.0 %FSO [5][4]											
Base Strain Sensitivity		0.0002 g/με		.002 (m/s²)/με [2]											
Electrical															
Excitation Voltage		6 to 30 VDC		6 to 30 VDC											
Current Consumption		≤5 mA		≤5 mA											
Output Impedance		≤100 ohm		≤100 ohm											
Offset Voltage (0 g)		±40 mVDC		±40 mVDC [1]											
Common Mode Voltage (±0.1 VDC)		+2.5 VDC		+2.5 VDC											
Spectral Noise (1 to 100 Hz)		1300 μg/√Hz		12749 (μm/sec²)/√Hz [2]											
Electrical Isolation (Case)		>10⁸ ohm		>10⁸ ohm [3]											
Physical															
Housing Material		Anodized Aluminum		Anodized Aluminum											
Sealing		Epoxy		Epoxy											
Size (Height x Length x Width)		0.30 in x 1.00 in x .85 in		7.62 mm x 25.4 mm x 21.6 mm											
Weight (without cable)		0.35 oz		9.92 gm [2]											
Electrical Connector		Integral Cable		Integral Cable											
Electrical Connection Position		Side		Side											
Cable Termination		Pigtail Ends		Pigtail Ends											
Cable Type		010 4-cond Shielded		010 4-cond Shielded											
Cable Length		10 ft		3 m											
Mounting		Through Holes (2)		Through Holes (2)											
 [8]															
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.															
		<table><tr><td>Entered: LLH</td><td>Engineer: TCJ</td><td>Sales: RWM</td><td>Approved: EB</td><td>Spec Number:</td></tr><tr><td>Date: 02/22/2011</td><td>Date: 02/15/2011</td><td>Date: 02/14/2011</td><td>Date: 02/17/2011</td><td>46235</td></tr></table>  3425 Walden Avenue Depew, NY 14043 UNITED STATES Phone: 888-684-0013 Fax: 716-685-3886 E-mail: vibration@pcb.com Web site: www.pcb.com				Entered: LLH	Engineer: TCJ	Sales: RWM	Approved: EB	Spec Number:	Date: 02/22/2011	Date: 02/15/2011	Date: 02/14/2011	Date: 02/17/2011	46235
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Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

Notes

- [1] Offset tolerance is based on manufacturers supplied cable length.
- [2] Typical.
- [3] Case and shield to mounting surface or cable leads.
- [4] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [5] FSO = Full Scale Output over the Measurement Range (4VDC).
- [6] Measured at 100 Hz, 10 grms.
- [7] Zero-based, least-squares, straight line method.
- [8] See PCB Declaration of Conformance PS027 for details.

Optional Accessories

080A208 Triaxial mounting block ()

Supplied Accessories

081A103 Mounting screw (2)

ACS-103 Phase and Amplitude Calibration from 2 Hz to +5% of frequency range (1)

M081A103 Mounting screw and washer, M3 x 0.5 thread (2)