

Model Number <b>3741B12200G</b>	<b>DC RESPONSE ACCELEROMETER</b>	Revision: A ECN #: 39611
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	<u>ENGLISH</u>	<u>SI</u>	
<b>Performance</b>			
Sensitivity(± 5 %)	10 mV/g	1.02 mV/(m/s <sup>2</sup> )	[6]
Measurement Range	± 200 g pk	± 1961.3 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	0 to 850 Hz	0 to 850 Hz	
Frequency Range(± 10 %)	0 to 1250 Hz	0 to 1250 Hz	
Resonant Frequency	>11 kHz	>11 kHz	
Phase Response(100 Hz)	<10 °	<10 °	
Broadband Resolution(0.5 to 100 Hz)	21.1 mg rms	.21 m/s <sup>2</sup> rms	[2]
Non-Linearity	≤ 1 % FS	≤ 1 % FS	[7]
Transverse Sensitivity	≤ 3 %	≤ 3 %	
<b>Environmental</b>			
Overload Limit(Shock)	± 3000 g pk	± 29,420 m/s <sup>2</sup> 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	.0002 g/με	.002 (m/s <sup>2</sup> )/με	[2]
<b>Electrical</b>			
Excitation Voltage	6 to 30 VDC	6 to 30 VDC	
Current Consumption	≤ 6 mA	≤ 6 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 1000 Hz)	2518 μg/√Hz	24,693 (μm/sec <sup>2</sup> )/√Hz	[2]
Electrical Isolation(Case)	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> Ohm	[3]
<b>Physical</b>			
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	[2]
Weight(without cable)	0.35 oz	9.92 gm	
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)	

**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.

**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.

**SUPPLIED ACCESSORIES:**  
 Model 081A103 Mounting screw (2)  
 Model ACS-103 Phase and Amplitude Calibration from 2 Hz to +5% of frequency range (1)  
 Model M081A103 Mounting screw and washer, M3 x 0.5 thread (2)

**OPTIONAL ACCESSORIES:**  
 Model 080A208 Triaxial mounting block

Entered: AP	Engineer: RPF	Sales: RWM	Approved: BAM	Spec Number:
Date: 7/31/2012	Date: 7/31/2012	Date: 7/31/2012	Date: 7/31/2012	<b>46236</b>



[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.

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