

Model Number  
3711F112G

# DC RESPONSE ACCELEROMETER - TEST

Revision: B  
ECN #: 55722

Performance	ENGLISH	SI	
Sensitivity(± 3 %)	675 mV/g	68.8 mV/(m/s <sup>2</sup> )	[1]
Measurement Range	± 2 g pk	± 19.6 m/s <sup>2</sup> pk	
Frequency Range(± 5 %)	0 to 250 Hz	0 to 250 Hz	
Frequency Range(± 10 %)	0 to 350 Hz	0 to 350 Hz	
Resonant Frequency	1.2 kHz	1.2 kHz	[2]
Phase Response(10 Hz)	< 2.5 °	< 2.5 °	
Non-Linearity(Typical)	0.3 %	0.3 %	[3]
Non-Linearity(Max)	1 %	1 %	[3]
Broadband Resolution(0.5 to 100 Hz)	0.06 mg rms	0.0006 m/s <sup>2</sup> rms	[2]
Transverse Sensitivity(Typical)	1 %	1 %	
Transverse Sensitivity(Max)	3 %	3 %	
<b>Environmental</b>			
Overload Limit(Shock)	± 5,000 g pk	± 49,050 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	± 1 %	± 1 %	[2][4]
Zero g Offset Temperature Coefficient	± 1 % FSO	± 1 % FSO	[4][5][2]
Base Strain Sensitivity	0.001 g/µε	0.01 (m/s <sup>2</sup> )/µε	[2]
Magnetic Sensitivity	40 µg/gauss	3.9 (m/s <sup>2</sup> )/Tesla	[2]
<b>Electrical</b>			
Excitation Voltage	5 to 32 VDC	5 to 32 VDC	
Current Consumption	≤ 5 mA	≤ 5 mA	
Output Impedance	≤ 120 Ohm	≤ 120 Ohm	
Offset Voltage(0 g)	+/- 20 mVDC	+/- 20 mVDC	[6]
Spectral Noise(1 Hz)	6 µg/√Hz	59 (µm/s <sup>2</sup> )/√Hz	[2]
Spectral Noise(10 Hz)	6 µg/√Hz	59 (µm/s <sup>2</sup> )/√Hz	[2]
Spectral Noise(100 Hz)	6 µg/√Hz	59 (µm/s <sup>2</sup> )/√Hz	[2]
Electrical Isolation(Case)	> 10 <sup>8</sup> Ohm	> 10 <sup>8</sup> Ohm	
<b>Physical</b>			
Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Height x Length x Width)	0.45 in x 0.85 in x 0.85 in	11.4 mm x 21.6 mm x 21.6 mm	
Weight	0.58 oz	16.3 gm	
Electrical Connector	4-Pin	4-Pin	
Electrical Connection Position	Side	Side	
Mounting	Through Hole	Through Hole	

## 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] Measured at 5 Hz, 0.5 grms.
- [2] Typical.
- [3] Zero-based, least-squares, straight line method.
- [4] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [5] FSO= Full Scale Output over the Measurement Range
- [6] Offset tolerance is based on 10 ft of 010 test cable.
- [7] See PCB Declaration of Conformance PS027 for details.

## SUPPLIED ACCESSORIES:

- Model 080A152 Easy Mount Clip (1)
- Model 081A113 Mounting screw assembly (2)
- Model ACS-85 Phase and Magnitude calibration from 0.5 Hz to 5% pt Linear scale (1)
- Model M081A113 Mounting screw assembly (2)



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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