

Model Number
3711F1130G

DC RESPONSE ACCELEROMETER

Revision: A
ECN #: 53791

Performance

	ENGLISH	SI	
Sensitivity(± 3 %)	45 mV/g	4.59 mV/(m/s ²)	[1]
Measurement Range	± 30 g pk	± 294.2 m/s ² pk	
Frequency Range(± 5 %)	0 to 1,500 Hz	0 to 1,500 Hz	
Frequency Range(± 10 %)	0 to 2,000 Hz	0 to 2,000 Hz	
Resonant Frequency	5.2 kHz	5.2 kHz	[2]
Phase Response(100 Hz)	< 10 °	< 10 °	
Non-Linearity(Typical)	0.3 %	0.3 %	[3]
Non-Linearity(Max)	1 %	1 %	[3]
Broadband Resolution(0.5 to 100 Hz)	0.9 mg rms	0.009 m/s ² rms	[4]
Transverse Sensitivity(Typical)	1 %	1 %	
Transverse Sensitivity(Max)	3 %	3 %	

Environmental

Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s ² 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 %	[4][5]
Zero g Offset Temperature Coefficient	± 1 % FSO	± 1 % FSO	[5][6][4]
Base Strain Sensitivity	0.001 g/με	0.01 (m/s ²)/με	[4]
Magnetic Sensitivity	40 μg/gauss	3.9 (m/s ²)/Tesla	[4]

Electrical

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	[7]
Spectral Noise(1 Hz)	90 μg/√Hz	883 (μm/s ²)/√Hz	[4]
Spectral Noise(10 Hz)	90 μg/√Hz	883 (μm/s ²)/√Hz	[4]
Spectral Noise(100 Hz)	90 μg/√Hz	883 (μm/s ²)/√Hz	[4]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	

Physical

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 100 Hz, 1 grms.
- [2] Typical value.
- [3] Zero-based, least-squares, straight line method.
- [4] Typical.
- [5] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
- [6] FSO= Full Scale Output over the Measurement Range
- [7] Offset tolerance is based on 10 ft of 010 test cable.
- [8] See PCB Declaration of Conformance PS027 for details.

SUPPLIED ACCESSORIES:

Model 080A152 Easy Mount Clip (1)
 Model 081A113 Mounting screw assembly (2)
 Model ACS-172 Phase and Amplitude Calibration from 5 Hz to +5% frequency range
 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.

Entered: ND	Engineer: NJF	Sales: JM	Approved: BAM	Spec Number:
Date: 05/10/2023	Date: 05/10/2023	Date: 05/10/2023	Date: 05/10/2023	70519

PCB PIEZOTRONICS Phone: 716-684-0001
 Fax: 716-684-0987
 E-Mail: info@pcb.com
 AN AMPHENOL COMPANY

3425 Walden Avenue, Depew, NY 14043