Model	Number
3711	E112G

## DC RESPONSE ACCELEROMETER

Revision: B ECN #: 46196

	011121120				
Performance		<u>ENGLISH</u>	<u>SI</u>		
	Sensitivity(± 3 %)	1000 mV/g	101.9 mV/(m/s²)	[5]	
Measurement Range		± 2 g pk	± 19.6 m/s² pk		
Frequency Range(± 3 dB)		0 to 400 Hz	0 to 400 Hz	[2]	
Frequency Range(± 3 dB)		0 to 200 Hz	0 to 200 Hz	[6]	
	Phase Response(10 Hz)	<3.0 °	<3.0 °		
Broadband Resolution(0.5 to 100 Hz)		.1 mg rms	.001 m/s <sup>2</sup> rms	[2]	
Non-Linearity		≤ 1 %	≤ 1 %	[7]	
Transverse Sensitivity		≤ 5 %	≤ 5 %		
	Environmental				
	Overload Limit(Shock)	± 2000 g pk	± 19,620 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	± 5 %	± 5 %	[3]	
Zero g Offset Temperature Coefficient		± 4 % FSO	± 4 % FSO	[3][4]	
	Base Strain Sensitivity(Measured at 25	. ,	.002 (m/s²)/με	[2]	
Magnetic Sensitivity		100 μg/gauss	9.8 (m/s²)/Tesla	[2]	
	Electrical				
Excitation Voltage		6 to 30 VDC	6 to 30 VDC		
Current Consumption		≤ 10 mA	≤ 10 mA		
	Output Impedance	≤ 120 Ohm	≤ 120 Ohm		
	Offset Voltage(0 g)	± 160 mVDC	± 160 mVDC	[1]	
	Spectral Noise(1 to 100 Hz)	15 μg/√Hz	147 (µm/sec <sup>2</sup> )/√Hz	[2]	
	Electrical Isolation(Case)	>10 <sup>8</sup> Ohm	>10 <sup>8</sup> 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 Holes (2)	Through Holes (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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## **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 10 ft of 010 test cable.
- [2] Typical.
- [3] -65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C)
  [4] FSO = Full Scale Output over the Measurement Range (4VDC).
- [5] Measured at 10 Hz, 1.0 pk
- [6] Minimum, verified with Calibration data.
- [7] Least-squares, straight line method, % FSO.
- [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-145 Phase and Amplitude Calibration from 2 Hz to ±3 dB of frequency range (1) Model M081A113 Mounting screw assembly (2)

Entered: LK	Engineer: JJD	Sales: WDC	Approved: NJF	Spec Number:
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