Model Number 3743G11100G

TRIAXIAL DC RESPONSE ACCELEROMETER

Revision: A ECN #: 55463

3743G11100G						
Performance	ENGLISH	SI				
Sensitivity(± 3 %)	27 mV/g	2.75 mV/(m/s ²)	[1]			
Measurement Range	± 100 g pk	± 980.7 m/s² pk				
Frequency Range(± 5 %)	0 to 1,500 Hz	0 to 1,500 Hz				
Frequency Range(± 10 %)	0 to 2,500 Hz	0 to 2,500 Hz				
Resonant Frequency	8.5 kHz	8.5 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)	3 mg rms	0.03 m/s ² rms	[2]			
Transverse Sensitivity(Typical)	1 %	1 %				
Transverse Sensitivity(Max)	3 %	3 %				
Environmental						
Overload Limit(Shock)	± 5,000 g pk	± 49,050 m/s² pk				
Temperature Range(Operating)	-65 to +250 °F	-54.0 to +121 ℃				
Temperature Range(Storage)	-65 to +250 °F	-54.0 to +121 ℃				
Temperature Coefficient of Sensitivity	± 1 %	± 1 %	[4][2]			
Zero g Offset Temperature Coefficient	± 1 % FSO	± 1 % FSO	[4][5][2]			
Base Strain Sensitivity	.001 g/με	.01 (m/s²)/με	[2]			
Magnetic Sensitivity	40 μg/gauss	3.9 (m/s²)/Tesla	[2]			
Electrical						
Excitation Voltage	5 to 32 VDC	5 to 32 VDC				
Current Consumption	≤ 15 mA	≤ 15 mA				
Output Impedance	≤ 120 Ohm	≤ 120 Ohm				
Offset Voltage(0 g)	± 20 mVDC	± 20 mVDC	[6]			
Common Mode Voltage(+/- 0.1 VDC)	1.65 VDC	1.65 VDC				
Spectral Noise(1 Hz)	300 μg/√Hz	2,943 (µm/s²)/√Hz	[2]			
Spectral Noise(10 Hz)	300 μg/√Hz	2,943 (µm/s²)/√Hz	[2]			
Spectral Noise(100 Hz)	300 μg/√Hz	2,943 (µm/s²)/√Hz	[2]			
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm				
Physical						
Housing Material	Stainless Steel	Stainless Steel				
Sealing	Hermetic	Hermetic				
Size (Length x Width x Height)	0.76 in x 1.03 in x 0.66 in	19.3 mm x 26.2 mm x 16.8				
		mm				
Weight	0.92 oz	26 gm	[2]			
Electrical Connector	8-Pin	8-Pin	1			
Electrical Connection Position	Side	Side				
Mounting Thread	Through Hole	Through Hole				
, ~	<u> </u>	_				

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, 10 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 10ft of 528 test cable.

[7]See PCB Declaration of Conformance PS027 for details.

SUPPLIED ACCESSORIES:

Model 081A135 Mounting screw and washer, 4-40 x 7/8" thread (2) Model ACS-172T Triaxial Phase and Amplitude Calibration from 5 Hz to +5% frequency range (1)

Entered: ND	Engineer: JJD	Sales: JM	Approved: NJF	Spec Number:
Date: 01/09/2025	Date: 01/09/2025	Date: 01/09/2025	Date: 01/09/2025	79001



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. This model, designated with an RH prefix, is RoHS compliant. For further details, and to obtain PCB's RoHS Statement of Conformance, please visit http://www.pcb.com

PCB PIEZOTRONICS Fax: 716-684-0987

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

3425 Walden Avenue, Depew, NY 14043