

Model Number
3743F1150G

TRIAxIAL DC RESPONSE ACCELEROMETER

Revision: A
ECN #: 53791

Performance

	ENGLISH	SI	
Sensitivity(± 3 %)	54 mV/g	5.5 mV/(m/s ²)	[1]
Measurement Range	± 50 g pk	± 490.5 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	6.5 kHz	6.5 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)	1.5 mg rms	0.015 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/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][2]
Zero g Offset Temperature Coefficient	± 1 % FSO	± 1 % FSO	[4][5][2]
Base Strain Sensitivity	.001 g/με	.01 (m/s ²)/με	[2]
Magnetic Sensitivity	40 μg/gauss	3.9 (m/s ²)/Tesla	[2]

Electrical

Excitation Voltage	5 to 28 VDC	5 to 28 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)	150 μg/√Hz	1,472 (μm/s ²)/√Hz	[2]
Spectral Noise(10 Hz)	150 μg/√Hz	1,472 (μm/s ²)/√Hz	[2]
Spectral Noise(100 Hz)	150 μg/√Hz	1,472 (μm/s ²)/√Hz	[2]
Electrical Isolation(Case)	> 10 ⁸ Ohm	> 10 ⁸ Ohm	

Physical

Housing Material	Titanium	Titanium	
Sealing	Hermetic	Hermetic	
Size (Length x Width x Height)	0.8 in x 0.8 in x 0.8 in	20.3 mm x 20.3 mm x 20.3 mm	
Weight	0.6 oz	17.3 gm	
Electrical Connector	9-Pin	9-Pin	
Electrical Connection Position	Side	Side	
Mounting Thread	10-32 Female	10-32 Female	

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 10 ft of 037 test cable.
- [7] See PCB Declaration of Conformance PS027 for details.

SUPPLIED ACCESSORIES:

- Model 080A12 Adhesive Mounting Base (1)
- Model 081B05 Mounting Stud (10-32 to 10-32) (1)
- Model ACS-172T Triaxial Phase and Amplitude Calibration from 5 Hz to +5% frequency range (1)
- Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)



Entered: ND	Engineer: NJF	Sales: JM	Approved: BAM	Spec Number:
Date: 05/16/2023	Date: 05/16/2023	Date: 05/16/2023	Date: 05/16/2023	76548

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

3425 Walden Avenue, Depew, NY 14043

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.