Model Number DC RESPONSE ACCELEROMETER 3741F125G Performance **ENGLISH** SI Sensitivity(± 3 %) 540 mV/g $55.0 \, \text{mV/(m/s}^2)$ [1] Measurement Range ±5gpk $\pm 49.0 \text{ m/s}^2 \text{ pk}$ 0 to 700 Hz Frequency Range(± 5 %) 0 to 700 Hz Frequency Range(± 10 %) 0 to 1,000 Hz 0 to 1,000 Hz Resonant Frequency 1.9 kHz 1.9 kHz [2] Phase Response(100 Hz) < 10° < 10° Non-Linearity(Typical) 0.3 % 0.3 % [3] Non-Linearity(Max) 1 % [3] Broadband Resolution(0.5 to 100 Hz) 0.15 mg rms $0.0015 \text{ m/s}^2 \text{ rms}$ [2] Transverse Sensitivity(Typical) 1 % 1 % 3 % Transverse Sensitivity(Max) 3 % Environmental Overload Limit(Shock) ± 5,000 g pk $\pm 49,050 \text{ m/s}^2 \text{ pk}$ Temperature Range(Operating) -65 to 250 °F -54.0 to 121 °C -54.0 to 121 °C Temperature Range(Storage) -65 to 250 °F Temperature Coefficient of Sensitivity ±1% ±1% [4][2] Zero q Offset Temperature Coefficient ± 1 % FSO ± 1 % FSO [5][4][2] Base Strain Sensitivity .001 g/με $.01 (m/s^2)/\mu\epsilon$ [2] Magnetic Sensitivity $3.9 \, (m/s^2)/Tesla$ [2] 40 µg/gauss 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 [6] Common Mode Voltage(± 0.1 VDC) + 1.65 VDC + 1.65 VDC Spectral Noise(1 Hz) 15 µg/√Hz 147 (µm/s²)/√Hz [2] Spectral Noise(10 Hz) 15 µg/√Hz 147 (µm/s²)/√Hz [2] Spectral Noise(100 Hz) 15 µg/√Hz 147 (µm/s²)/√Hz [2] Electrical Isolation(Case) [7] > 10⁸ Ohm > 10⁸ Ohm Physical Housing Material Anodized Aluminum Anodized Aluminum Sealing Epoxy Ероху Size (Height x Length x Width) 0.30 in x 1.00 in x .85 in 7.62 mm x 25.4 mm x 21.6 mm

0.35 oz

Integral Cable

Side

Pigtail Ends

010 4-cond Shielded

10 ft

Through Holes (2)

9.92 gm

Integral Cable

Side

Pigtail Ends

010 4-cond Shielded

3 m

Through Holes (2)

[2]

OPTIONAL VERSIONS

Revision: NR

ECN #: 55613

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.

[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 manufacturers supplied cable length.

[7] Case and shield to mounting surface or cable leads.

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

SUPPLIED ACCESSORIES:

Model 081A103 Mounting screw (2)

Model ACS-172 Phase and Amplitude Calibration from 5 Hz to +5% frequency range (1)

Model M081A103 Mounting screw and washer, M3 x 0.5 thread (2)

OPTIONAL ACCESSORIES:

Model 080A208 Triaxial mounting block

Entered: ND	Engineer: NJF	Sales: JM	Approved: NJF	Spec Number:
Date: 03/31/2025	Date: 03/31/2025	Date: 03/31/2025	Date: 03/31/2025	79772



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Weight(without cable)

Electrical Connection Position

Electrical Connector

Cable Termination

Cable Type

Mounting

Cable Length

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