

Model Number
356A67

TRIAxIAL ICP® ACCELEROMETER

Revision: A
ECN #: 29834

Performance

Sensitivity(± 10 %) 1.02 mV/(m/s²)
Measurement Range ± 4900 m/s² pk
Frequency Range(-5 %)(y or z axis) 0.5 to 2500 Hz
Frequency Range(-5 %)(x axis) 0.5 to 3000 Hz
Resonant Frequency ≥ 25 kHz
Filter Type single pole
Electrical Filter Roll-off 6 dB/octave
Electrical Filter Cutoff Frequency 10 kHz
Broadband Resolution(1 to 10,000 Hz) 0.0005 g rms
Non-Linearity(400 g, 3920 m/s²) ≤ 1 %
Non-Linearity(500 g, 4900 m/s²) ≤ 2 %
Transverse Sensitivity ≤ 5 %

Environmental

Overload Limit(Shock) ± 7000 g pk
Temperature Range(Operating) -65 to +250 °F
Temperature Response See Graph
Base Strain Sensitivity 0.001 g/µε

Electrical

Excitation Voltage 20 to 30 VDC
Constant Current Excitation 2 to 20 mA
Output Impedance ≤ 200 ohm
Output Bias Voltage 8 to 12 VDC
Discharge Time Constant 1.0 to 2.0 sec
Settling Time(within 10% of bias) <5 sec

Spectral Noise(1 Hz) 150 µg/√Hz
Spectral Noise(10 Hz) 25 µg/√Hz
Spectral Noise(100 Hz) 10 µg/√Hz
Spectral Noise(1 kHz) 5 µg/√Hz

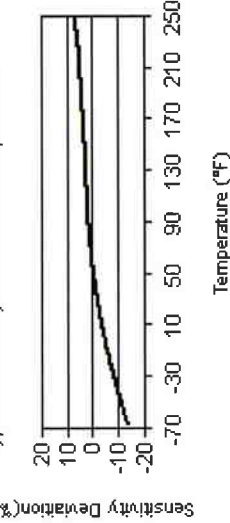
Physical

Sensing Element Ceramic
Sensing Geometry Shear
Housing Material Titanium
Sealing Hermetic
Size (Height x Length x Width) 0.55 in x 0.80 in x 0.55 in 14.0 mm x 20.3 mm x 14.0 mm
Weight 0.37 oz 10.5 gm
Electrical Connector 1/4-28 4-Pin
Electrical Connection Position Side
Mounting Thread 10-32 Female
Mounting Torque 10 to 20 in-lb 113 to 225 N-cm



[4]

Typical Sensitivity Deviation vs Temperature



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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SI
1.02 mV/(m/s²)
± 4900 m/s² pk
0.5 to 2500 Hz
0.5 to 3000 Hz
≥ 25 kHz
single pole
6 dB/octave
10 kHz
0.0005 m/s² rms
≤ 1 %
≤ 2 %
≤ 5 %
± 68,600 m/s² pk
-54 to +121 °C
See Graph
0.01 (m/s²)/µε
20 to 30 VDC
2 to 20 mA
≤ 200 ohm
8 to 12 VDC
1.0 to 2.0 sec
<5 sec
1472 (µm/sec²)/√Hz
245 (µm/sec²)/√Hz
98 (µm/sec²)/√Hz
49 (µm/sec²)/√Hz
Ceramic
Shear
Titanium
Hermetic
14.0 mm x 20.3 mm x 14.0 mm
10.5 gm
1/4-28 4-Pin
Side
10-32 Female
113 to 225 N-cm

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] Typical.
- [2] Upper frequency response is ± 500 Hz from the specified value.
- [3] Zero-based, least-squares, straight line method.
- [4] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

- Model 080A109 Petro Wax (1)
- Model 080A12 Adhesive Mounting Base (1)
- Model 081B05 Mounting Stud (10-32 to 10-32) (1)
- Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)
- Model M081B05 Mounting Stud 10-32 to M6 X 0.75 (1)

Entered: JGA	Engineer: BGM	Sales: RDL	Approved: EP	Spec Number:
Date: 12-15-08	Date: 12-12-08	Date: 12-10-08	Date: 12-15-08	22169

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