### Model Number TRIAXIAL ICP® ACCELEROMETER 354A04 Performance **ENGLISH** SI Sensitivity(± 5 %) 10.0 mV/g 1.02 mV/(m/s<sup>2</sup>) ± 4905 m/s<sup>2</sup> pk Measurement Range ± 500 g pk Frequency Range(± 5 %) .4 to 5000 Hz .4 to 5000 Hz Resonant Frequency ≥ 25 kHz ≥ 25 kHz [1] Broadband Resolution(1 to 10,000 Hz) .0005 g rms .005 m/s2 rms [2] Non-Linearity ≤ 1 % ≤ 1 % Transverse Sensitivity ≤ 5 % ≤ 5 % [3] TEDS Compliant(Per IEEE 1451.4) Yes Yes Environmental Overload Limit(Shock) $\pm 5000 \, q \, pk$ ± 49,050 m/s<sup>2</sup> pk Temperature Range(Operating) -65 to +200 °F -54 to +93 °C [1] Temperature Response See Graph See Graph Base Strain Sensitivity .04 (m/s²)/με [1] .004 g/με **Electrical Excitation Voltage** 24 to 30 VDC 24 to 30 VDC Constant Current Excitation 2 to 20 mA 2 to 20 mA Output Impedance ≤ 100 Ohm ≤ 100 Ohm Output Bias Voltage 8 to 12 VDC 8 to 12 VDC NOTES: Discharge Time Constant 1 to 3 sec 1 to 3 sec Settling Time(within 10% of bias) <5 sec <5 sec Spectral Noise(1 Hz) 170 µg/√Hz 1668 (µm/sec<sup>2</sup>)/√Hz [1] Spectral Noise(10 Hz) 25 μg/√Hz 245 (µm/sec<sup>2</sup>)/√Hz Spectral Noise(100 Hz) 8 μg/√Hz 78 (µm/sec<sup>2</sup>)/√Hz [1] [1] Spectral Noise(1 kHz) 6 μg/√Hz 59 (µm/sec<sup>2</sup>)/√Hz Spectral Noise(10 kHz) 4.0 μg/√Hz 39 ( $\mu$ m/sec<sup>2</sup>)/ $\sqrt{Hz}$ [1] Electrical Isolation(Case) >10<sup>8</sup> Ohm >10<sup>8</sup> Ohm **Physical** Ceramic Sensing Element Ceramic Sensing Geometry Shear Shear Housing Material Titanium Titanium Sealing Hermetic Hermetic Size (Height x Length x Width) .38 in x .82 in x .82 in 9.7 mm x 20.7 mm x 20.7 mm [1] Weight 0.51 oz 14.5 gm **Electrical Connector** 1/4-28 4-Pin 1/4-28 4-Pin Electrical Connection Position Side Mounting Through Hole Through Hole Typical Sensitivity Deviation vs Temperature 10 -10 -20

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.

-30

-70

10 50

Temperature (°F)

90 130 170

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# **OPTIONAL VERSIONS**

Revision: B

ECN #: 48470

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

## M - Metric Mount

Supplied Accessory: Model M039A22 Allen wrench for use with M3 thread (1) replaces Model 039A22

Supplied Accessory: Model M081A103 Mounting screw and washer, M3 x 0.5 thread (1) replaces Model 081A105

- [1] Typical.
- [2] Zero-based, least-squares, straight line method.
- [3] TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4
- [4] See PCB Declaration of Conformance PS023 for details.

# SUPPLIED ACCESSORIES:

Model 039A22 Allen wrench, 7/64" hex

Model 081A105 Mounting screw (6-32 x 1/2" schs 18-8) (1)

Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)

Entered: LK	Engineer: JJD	Sales: KK	Approved: BAM	Spec Number:
Date: 7/31/2018	Date: 7/31/2018	Date: 7/31/2018	Date: 7/31/2018	66279



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