Model Number TRIAXIAL ICP® ACCELEROMETER 356A43 Performance **ENGLISH** SI **OPTIONAL VERSIONS** Sensitivity(± 10 %) 10 mV/g 1.02 mV/(m/s<sup>2</sup>) Optional versions have identical specifications and accessories as listed for the standard model ± 4905 m/s<sup>2</sup> pk except where noted below. More than one option may be used. Measurement Range ± 500 g pk Frequency Range(+/-5 %) 0.7 to 7000 Hz 0.7 to 7000 Hz HT - High temperature, extends normal operation temperatures Frequency Range(+/-10 %) 0.4 to 10.000 Hz 0.4 to 10.000 Hz Sensitivity(+/-10 %) 10 mV/a Resonant Frequency ≥ 30 kHz ≥ 30 kHz 0.0008 g rms [1] Broadband Resolution(1 to 10,000 Hz) .008 m/s<sup>2</sup> rms Frequency Range(+/-5 %) 1.6 to 7000 Hz Non-Linearity ≤ 1 % ≤ 1 % Frequency Range(+/-10 %) 1.1 to 10.000 Hz 1.1 to 10.000 Hz ≤ 6 % ≤6% Temperature Range(Operating) -65 to 325 °F Transverse Sensitivity TEDS Compliant(Per IEEE 1451.4) Yes Yes Discharge Time Constant 3 to 9 sec **Environmental** J - Ground Isolated Overload Limit(Shock) ± 5000 q pk ± 49,050 m/s<sup>2</sup> pk Temperature Range(Operating) -65 to 250 °F -54 to 121 °C Electrical Isolation(Base) >10<sup>9</sup> Ohm Temperature Response See Graph See Graph [1] Size - Height x Length x Width .43 in x .47 in x .47 in 11.0 mm x 11.8 mm x 11.8 mm Base Strain Sensitivity .001 g/με  $.01 (m/s^2)/\mu\epsilon$ [1] Electrical Excitation Voltage 20 to 30 VDC 20 to 30 VDC Constant Current Excitation 2 to 20 mA 2 to 20 mA Output Impedance ≤ 200 Ohm ≤ 200 Ohm 8 to 12 VDC 8 to 12 VDC Output Bias Voltage Discharge Time Constant 0.8 to 2.4 sec 0.8 to 2.4 sec Settling Time(within 10% of bias) ≤ 5 sec ≤ 5 sec [1] Spectral Noise(1 Hz) 300 µg/√Hz 2943 (µm/sec<sup>2</sup>)/√Hz [1] Spectral Noise(10 Hz) 50 μg/√Hz 491 (um/sec<sup>2</sup>)/√Hz NOTES: [1] Spectral Noise(100 Hz) 35 μg/√Hz 343 (µm/sec<sup>2</sup>)/√Hz [1] Typical. [1] Spectral Noise(1 kHz) 8 µg/√Hz 79 (µm/sec<sup>2</sup>)/√Hz [2] Zero-based, least-squares, straight line method. Physical [3] See PCB Declaration of Conformance PS023 for details. Sensing Element Ceramic Ceramic Sensing Geometry Shear Shear Housing Material Titanium Titanium Sealing Hermetic Hermetic Size (Height x Length x Width) 0.40 in x 0.40 in x 0.40 in 10.2 mm x 10.2 mm x 10.2 mm Weight 0.15 oz4.2 gm [1] **Electrical Connector** 1/4-28 4-Pin 1/4-28 4-Pin Electrical Connection Position Side Side Mounting Adhesive Adhesive Typical Sensitivity Deviation vs Temperature SUPPLIED ACCESSORIES: 20 Model 080A109 Petro Wax (1)



## 10 -10 -20 -65 -30 5 40 75 110 145 180 215 250 Temperature (°F)

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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Model 080A90 Quick Bonding Gel (1)

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

Entered: LK	Engineer: RB	Sales: WDC	Approved: BAM	Spec Number:
Date: 6/12/2017	Date: 6/12/2017	Date: 6/12/2017	Date: 6/12/2017	62798



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Revision: B

1.02 mV/(m/s<sup>2</sup>)

1.6 to 7000 Hz

-54 to 163 °C

.3 to .9 sec

>10<sup>9</sup> Ohm

ECN #: 46927