## Model Number Revision: F PIEZORESISTIVE ACCELEROMETER ECN #: 43436 3641A122KG **ENGLISH** Performance **OPTIONAL VERSIONS** Sensitivity(± 50 %)(at 10 VDC excitation) 0.020 mV/(m/s<sup>2</sup>) 0.20 mV/a [2] Optional versions have identical specifications and accessories as listed for the standard Measurement Range ± 2000 g pk ± 19,620 m/s<sup>2</sup> pk model except where noted below. More than one option may be used. Frequency Range(± 10 %) 0 to 5000 Hz 0 to 5000 Hz Resonant Frequency >20 kHz >20 kHz 0.05 critical 0.05 critical Damping Ratio [1] Non-Linearity + 1 % + 1 % [7] Transverse Sensitivity ≤ 2 % ≤ 2 % Environmental Overload Limit(Shock) $\pm 10.000 \, a \, pk$ ± 98.100 m/s<sup>2</sup> pk [5][4] Overload Limit(Mechanical Stops) ≥ 2200 g pk ≥ 21.582 m/s<sup>2</sup> pk NOTES: Temperature Range(Operating) 0 to 150 °F -18 to 66 °C [1]Typical. Temperature Range(Storage) -65 to 250 °F -54 to 121 °C [2] Verified with test data provided on supplied calibration certificate. Temperature Coefficient of Sensitivity -0.10 %/°F -0.18 %/°C [3]Settling Time is the maximum time after power-up for the Offset Voltage to be within +/-2% of Zero g Offset Temperature Shift ± 20 mV ± 20 mV [6] Measurement Range output of the final offset value. Mounting surface must be at thermal $0.008 (m/s^2)/\mu\epsilon$ [1] Base Strain Sensitivity 0.0008 g/με equilibrium. **Electrical** [4]Individually tested to ensure compliance with specified value. Excitation Voltage(Maximum) 15 VDC 15 VDC [5]Half-sine pulse duration, ≥ 200 µsec. **Current Consumption** <10 mA <10 mA [6]-65 to +250 °F, ref. 75 °F (-54 to +121 °C, ref. 24 °C) Input Resistance(± 750 Ohm) 2250 Ohm 2250 Ohm [2] [7]% deviation per 1000g Output Resistance(± 750 Ohm) 2250 Ohm 2250 Ohm [2] Offset Voltage ± 50 mVDC ± 50 mVDC [2] Settling Time 0.01 sec 0.01 sec [3] Electrical Isolation(Case) ≥ 10<sup>8</sup> Ohm ≥ 10<sup>8</sup> Ohm [4] Physical Piezoresistive MEMS Piezoresistive MEMS Sensing Element SUPPLIED ACCESSORIES: Sensing Geometry Full Active Full Active Model 039A30 Allen wrench, 0.050 hex (1) Housing Material Anodized Aluminum Anodized Aluminum Model 080A191 Skt hd cap screw, QTY 2.0-80x3/16" with washer (1) Sealing Epoxv Epoxv Model ACS-29 Calibration of Piezoresistive Accelerometers Size (Height x Length x Width) 0.200 in x 0.470 in x 0.400 in 5.08 mm x 11.94 mm x 10.16 mm Weight(without cable) .035 oz 1 gm [1] **Electrical Connector** Integral Cable Integral Cable Entered: AP Engineer: LAB Sales: RWM Approved: NJF Spec Number: **Flectrical Connection Position** Side Side Cable Type 036 4-cond silicone iacket 036 4-cond silicone iacket Date: 10/20/2014 Date: 10/20/2014 Date: 10/20/2014 Date: 10/20/2014 45233

All specifications are at room temperature unless otherwise specified.

Cable Termination

Cable Length

Mounting

In the interest of constant product improvement, we reserve the right to change specifications without notice. ICP® is a registered trademark of PCB Group. Inc.

\*\*PCB PIEZOTRONICS\*\*
3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com



Pigtail Ends

30 ft

Through Holes (2)

Represented in India by Structural Solutions Pvt Ltd. | Phone: 040 2322 2380 | Email: sales@stsols.com

Pigtail Ends

9.14 m

Through Holes (2)

#4th Floor, Sudheer Tapani Towers, Himayath Nagar, Hyderabad - 500 029