| Model Number |  |
|--------------|--|
| 356403       |  |

## TRIAXIAL ICP® ACCELEROMETER

Revision: F ECN #: 43467

| 0007.00                              |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| Performance                          | ENGLISH                                      | <u>SI</u>                              |  |  |  |
| Sensitivity(± 20 %)                  | 10 mV/g                                      | 1.02 mV/(m/s²)                         |  |  |  |
| Measurement Range                    | ± 500 g pk                                   | ± 4905 m/s² pk                         |  |  |  |
| Frequency Range(± 5 %)(y or z axis)  | 2 to 8000 Hz                                 | 2 to 8000 Hz                           |  |  |  |
| Frequency Range(± 5 %)(x axis)       | 2 to 5000 Hz                                 | 2 to 5000 Hz                           |  |  |  |
| Frequency Range(+1 dB)(x axis)       | ≥ 8 kHz                                      | ≥ 8 kHz                                |  |  |  |
| Resonant Frequency                   | ≥ 50 kHz                                     | ≥ 50 kHz                               |  |  |  |
| Broadband Resolution(1 to 10,000 Hz) | 0.003 g rms                                  | 0.03 m/s <sup>2</sup> rms              | [1]  |  |  |
| Non-Linearity                        | ≤ 1 %  | ≤ 1 %                                  | [2]  |  |  |
| Transverse Sensitivity               | ≤ 5 %  | ≤ 5 %                                  |  |  |  |
| Environmental                        |  |  |  |  |  |
| Overload Limit(Shock)                | ± 5000 g pk                                  | ± 49,050 m/s² pk                       |  |  |  |
| Temperature Range(Operating)         | -65 to +250 °F                               | -54 to +121 °C                         |  |  |  |
| Temperature Response                 | See Graph                                    | See Graph                              | [1]  |  |  |
| Electrical                           |  |  |  |  |  |
| Excitation Voltage                   | 22 to 30 VDC                                 | 22 to 30 VDC                           |  |  |  |
| Constant Current Excitation          | 2 to 20 mA                                   | 2 to 20 mA                             |  |  |  |
| Output Impedance                     | ≤ 100 Ohm                                    | ≤ 100 Ohm                              |  |  |  |
| Output Bias Voltage                  | 9 to 16 VDC                                  | 9 to 16 VDC                            |  |  |  |
| Discharge Time Constant              | 0.24 to 1.0 sec                              | 0.24 to 1.0 sec                        |  |  |  |
| Settling Time(within 10% of bias)    | <3 sec                                       | <3 sec                                 |  |  |  |
| Spectral Noise(1 Hz)                 | 1200 μg/√Hz                                  | 11,772 (µm/sec²)/√Hz                   | [1]  |  |  |
| Spectral Noise(10 Hz)                | 300 µg/√Hz                                   | 2943 (µm/sec²)/√Hz                     | [1]  |  |  |
| Spectral Noise(100 Hz)               | 100 µg/√Hz                                   | 981 (µm/sec²)/√Hz                      | [1]  |  |  |
| Spectral Noise(1 kHz)                | 30 μg/√Hz                                    | 961 (μm/sec )/√Hz<br>294 (μm/sec²)/√Hz | [1]  |  |  |
| Physical                             | ου μg/ 1112                                  | 294 (μπ/sec )/\HZ                      | [1]  |  |  |
| Sensing Element                      | Ceramic                                      | Ceramic                                |  |  |  |
| Sensing Clement Sensing Geometry     | Shear  | Shear                                  |  |  |  |
| Housing Material                     | Titanium                                     | Titanium                               |  |  |  |
| 9                                    |  |  |  |  |  |
| Sealing                              | Hermetic                                     | Hermetic                               |  |  |  |
| Size (Height x Length x Width)       | 0.25 in x 0.25 in x 0.25 in                  | 6.35 mm x 6.35 mm x 6.35 mm            |  |  |  |
| Weight(without cable)                | 0.04 oz                                      | 1.0 gm                                 | [1]  |  |  |
| Electrical Connector                 | Integral Cable                               | Integral Cable                         |  |  |  |
| Electrical Connection Position       | Side   | Side                                   |  |  |  |
| Cable Termination                    | 1/4-28 4-Pin Jack                            | 1/4-28 4-Pin Jack                      |  |  |  |
| Cable Length                         | 5 ft   | 1.5 m                                  |  |  |  |
| Cable Type                           | 034 4-cond Shielded                          | 034 4-cond Shielded                    |  |  |  |
| Mounting                             | Adhesive                                     | Adhesive                               |  |  |  |
|                                      | Typical Sensitivity Deviation vs Temperature |  |  |  |  |
|                                      | 20 100 -50                                   | ,                                      |  |  |  |
|                                      | .≘ 20 ┯───                                   |  | _  |  |  |
|                                      | 흥 10 <del> </del>                            |  | _  |  |  |
|                                      | ã Ö <del>l —</del>                           |  |  |  |  |
| CE                                   | ₹ -10  |  |  |  |  |
|                                      | ₹ -20  |  | <u>.                                    </u> |  |  |
| ્ગ                                   | .E -20 T T                                   | 0 50 400 450 200 2                     |  |  |  |
|                                      | த் -100 -50                                  | 0 50 100 150 200 25                    | 5U   |  |  |

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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Temperature (°F)

## **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]Zero-based, least-squares, straight line method.

[3]See PCB Declaration of Conformance PS023 for details.

## **SUPPLIED ACCESSORIES:**

Model 034G05 4-cond. shielded cable, 5 ft (1.5M), 4-pin plug to (3) BNC plugs (1) Model 080A109 Petro Wax (1)

Model 080A90 Quick Bonding Gel (1)

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

| Entered: AP      | Engineer: JJB    | Sales: WDC       | Approved: DY     | Spec Number: |
|------------------|------------------|------------------|------------------|--------------|
| Date: 10/29/2014 | Date: 10/29/2014 | Date: 10/29/2014 | Date: 10/29/2014 | 46486        |



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