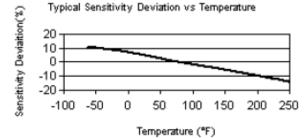
## SEN041F

## TRIAXIAL ICP® ACCELEROMETER

| Performance                          | ENGLISH               | SI                          | Notes |
|--------------------------------------|-----------------------|-----------------------------|-------|
| Voltage Sensitivity (± 15 %)         | 10 mV/g               | 1.02 mV/(m/s <sup>2</sup> ) |       |
| Measurement Range                    | ± 500 g pk            | ± 4905 m/s² pk              |       |
| Frequency Range (- 5 %)              | 2 to 4000 Hz          | 2 to 4000 Hz                |       |
| Resonant Frequency                   | ≥ 55 kHz              | ≥ 5 kHz                     |       |
| Electrical Filter Roll-off           | 6 dB/octave           | 6 dB/octave                 | [1]   |
| Electrical Filter Corner Frequency   | 15 kHz                | 15 kHz                      | [1]   |
| Broadband Resolution (1 to 10000 Hz) | 0.008 g rms           | 0.08 m/s <sup>2</sup> rms   | [1]   |
| Non-Linearity                        | ≤ 1 %                 | ≤ 1 %                       | [2]   |
| Transverse Sensitivity               | ≤ 5 %                 | ≤ 5 %                       |       |
| Environmental                        |                       |                             |       |
| Overload Limit (Shock)               | ± 10000 g pk          | ± 98100 m/s² pk             |       |
| Temperature Range (Operating)        | -65 to +250 °F        | -54 to +121 °C              |       |
| Temperature Response                 | See Graph             | See Graph                   |       |
| Electrical                           |                       |                             |       |
| Excitation Voltage                   | 18 to 30 VDC          | 18 to 30 VDC                |       |
| Constant Current Excitation          | 2 to 20 mA            | 2 to 20 mA                  |       |
| Output Impedance                     | ≤ 200 Ohms            | ≤ 200 Ohms                  |       |
| Output Bias Voltage                  | 7 to 12 VDC           | 7 to 12 VDC                 |       |
| Discharge Time Constant              | 0.3 to 1.0 s          | 0.3 to 1.0 s                |       |
| Settling Time (within 10 % of bias)  | < 3 s                 | < 3 s                       |       |
| Spectral Noise (1 Hz)                | 445 µg/√Hz            | 4365 (µm/s²)/√Hz            | [1]   |
| Spectral Noise (10 Hz)               | 135 µg/√Hz            | 1325 (µm/s²)/√Hz            | [1]   |
| Spectral Noise (100 Hz)              | 90 μg/√Hz             | 883 (µm/s²)/√Hz             | [1]   |
| Spectral Noise (1 kHz)               | 80 µg/√Hz             | 785 (μm/s²)/√Hz             | [1]   |
| Physical                             |                       |                             |       |
| Sensing Element                      | Ceramic               | Ceramic                     |       |
| Sensing Geometry                     | Shear                 | Shear                       |       |
| Housing Material                     | Titanium              | Titanium                    |       |
| Sealing                              | Hermetic              | Hermetic                    |       |
| Size (Height x Length x Width)       | 0.40 x 0.77 x 0.40 in | 10.2 x 19.6 x 10.2 mm       |       |
| Weight                               | 0.19 oz               | 5.3 gm                      | [1]   |
| Electrical Connector                 | 1/4-28 4-Pin          | 1/4-28 4-Pin                |       |
| Electrical Connector Position        | Side                  | Side                        |       |
| Mounting Thread                      | 5-40 Female           | 5-40 Female                 |       |
|                                      |                       |                             |       |





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. ICP® is a registered trademark of PCB Piezotronics, Inc.



## **Notes**

- [1] Typica
- [2] Zero-based, least-square, straight line method

## **Supplied Accessories**

NIST Traceable Calibration Certificate
Model 081A90 Mounting Stud, 10-32 to 5-40 (1)



3425 Walden Ave Depew, NY 14043 www.LarsonDavis.com