

# Model 350B21

Product Type: Accelerometer, Shock Sensor

Shock, ceramic-shear, ICP® accel., 0.05 mV/g, 100k g range, case isolated,

10-ft integral cable

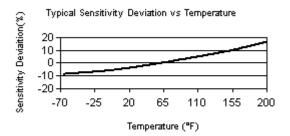
| PERFORMANCE   | ENGLISH              | SI                   |     |  |  |
|---|----------------------|----------------------|-----|--|--|
| Sensitivity(± 30 %)   | 0.05 mV/g            | 0.005 mV/(m/s²)      |     |  |  |
| Measurement Range   | ± 100,000 g pk       | ± 980,000 m/s² pk    |     |  |  |
| Frequency Range(± 1 dB)   | 1 to 10,000 Hz       | 1 to 10,000 Hz       |     |  |  |
| Frequency Range(± 3 dB)   | 0.5 to 35,000 Hz     | 0.5 to 35,000 Hz     |     |  |  |
| Resonant Frequency  | ≥ 200 kHz            | ≥ 200 kHz            |     |  |  |
| Broadband Resolution(1 to 10,000 Hz)                                      | 0.3 g rms            | 2.9 m/s² rms         | [1] |  |  |
| Non-Linearity(per 10,000 g (98,100 m/s²))                                 | ± 0.5 %              | ± 0.5 %              | [2] |  |  |
| Transverse Sensitivity  | ≤7%                  | ≤ 7 %                |     |  |  |
| ENVIRONMENTAL   |                      |                      |     |  |  |
| Overload Limit(Shock)   | ± 200,000 g pk       | ± 1,960,000 m/s² pk  |     |  |  |
| Temperature Range(Operating)  | -65 to +200 °F       | -54 to +93 °C        |     |  |  |
| Temperature Response  | See Graph            | See Graph            | [1] |  |  |
| Base Strain Sensitivity   | 0.2 g/με             | 2.0 (m/s²)/με        | [1] |  |  |
| ELECTRICAL  |                      |                      |     |  |  |
| Excitation Voltage  | 18 to 30 VDC         | 18 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          |     |  |  |
| Discharge Time Constant   | 0.5 to 0.7 sec       | 0.5 to 0.7 sec       | [1] |  |  |
| Settling Time(within 10% of bias)   |                      |                      |     |  |  |
| Electrical Isolation(Case)  | >10 <sup>8</sup> ohm | >10 <sup>8</sup> ohm |     |  |  |
| PHYSICAL  |                      |                      |     |  |  |
| Sensing Element   | Ceramic              | Ceramic              |     |  |  |
| Sensing Geometry  | Shear                | Shear                |     |  |  |
| Housing Material  | Titanium             | Titanium             |     |  |  |
| Sealing   | Hermetic             | Hermetic             |     |  |  |
| Size (Hex x Height)   | 0.375 in x 0.73 in   | 9.5 mm x 18.5 mm     |     |  |  |
| Weight(without cable)   | 0.15 oz              | 4.4 gm               | [1] |  |  |
| Electrical Connector  | Integral Cable       | Integral Cable       |     |  |  |
| Cable Length  | 10 ft                | 3.05 m               |     |  |  |
| Cable Type  | 031 Twisted Pair     | 031 Twisted Pair     |     |  |  |
| Mounting Thread   | 1/4-28 Male          | 1/4-28 Male          |     |  |  |
| SUPPLIED ACCESSORIES:   |                      |                      |     |  |  |
| Model ACS-22 NIST Traceable frequency response (100Hz to ±1 dB point) (1) |                      |                      |     |  |  |
| OPTIONAL VERSIONS   |                      |                      |     |  |  |
| M- Metric Mount   |                      |                      |     |  |  |
| Mounting Thread   | M6 x 0.75 Male       | M6 x 0.75 Male       |     |  |  |

All specifications are at room temperature unless otherwise specified.

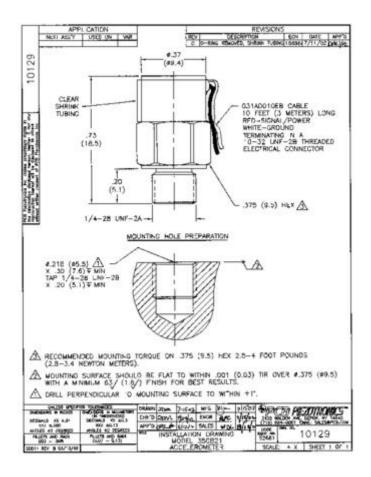
#### NOTES:

Typical. [1] [2]

Value depicts maximum sensitivity change.







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# Model 350C02

Product Type: Accelerometer, Shock Sensor

Shock, ICP® accel., 0.1 mV/g, 50 kg, 10-ft integral cable, 1/4-28 integral

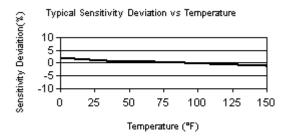
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| PERFORMANCE   | ENGLISH            | SI                              |        |  |
|---|--------------------|---------------------------------|--------|--|
| Sensitivity(± 30 %)   | 0.1 mV/g           | 0.01 mV/(m/s <sup>2</sup> )     |        |  |
| Measurement Range   | ± 50,000 g pk      | ± 490,000 m/s² pk               |        |  |
| Frequency Range(± 1 dB)   | 4 to 10,000 Hz     | 4 to 10,000 Hz                  |        |  |
| Frequency Range(-3 dB)  | 2 to 25,000 Hz     | 2 to 25,000 Hz                  | [2]    |  |
| Electrical Filter Corner Frequency(-3 dB)                                 | 13 kHz             | 13 kHz                          | [1][3] |  |
| Mechanical Filter Resonant Frequency                                      | 23 kHz             | 23 kHz                          | [1][4] |  |
| Resonant Frequency  | ≥ 100 kHz          | ≥ 100 kHz                       |        |  |
| Broadband Resolution(1 to 10,000 Hz)                                      | 0.5 g rms          | 4.9 m/s² rms                    | [1]    |  |
| Non-Linearity(per 10,000 g (98,100 m/s²))                                 | ≤ 2.5 %            | ≤ 2.5 %                         |        |  |
| Transverse Sensitivity  | ≤ 7 %              | ≤ 7 %                           |        |  |
| ENVIRONMENTAL   |                    |                                 |        |  |
| Overload Limit(Shock)   | ± 150,000 g pk     | ± 1,471,500 m/s <sup>2</sup> pk |        |  |
| Temperature Range(Operating)  | 0 to +150 °F       | -18 to +66 °C                   |        |  |
| Temperature Range(Storage)  | -40 to +200 °F     | -40 to +93 °C                   |        |  |
| Temperature Response  | See Graph          | See Graph                       | [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                       |        |  |
| Output Bias Voltage   | 8 to 14 VDC        | 8 to 14 VDC                     |        |  |
| Discharge Time Constant   | 0.10 sec           | 0.10 sec                        | [1]    |  |
| Settling Time(within 10% of bias)   |                    |                                 |        |  |
| Electrical Isolation(Case)  | >1,000,000 ohm     | >1,000,000 ohm                  |        |  |
| PHYSICAL  |                    |                                 |        |  |
| Sensing Element   | Ceramic            | Ceramic                         |        |  |
| Sensing Geometry  | Shear              | Shear                           |        |  |
| Housing Material  | Titanium           | Titanium                        |        |  |
| Sealing   | Hermetic           | Hermetic                        |        |  |
| Size (Hex x Height)   | 0.375 in x 0.75 in | 9.5 mm x 19.1 mm                |        |  |
| Weight(without cable)   | 0.15 oz            | 4.2 gm                          | [1]    |  |
| Electrical Connector  | Integral Cable     | Integral Cable                  |        |  |
| Cable Length  | 10 ft              | 3.05 m                          |        |  |
| Cable Type  | 031 Twisted Pair   | 031 Twisted Pair                |        |  |
| Mounting Thread   | 1/4-28 Male        | 1/4-28 Male                     |        |  |
| SUPPLIED ACCESSORIES:   | ·                  |                                 |        |  |
| Model ACS-22 NIST Traceable frequency response (100Hz to ±1 dB point) (1) |                    |                                 |        |  |
| OPTIONAL VERSIONS   |                    |                                 |        |  |
| M- Metric Mount   |                    |                                 |        |  |
| Mounting Thread   | M6 x 0.75 Male     | M6 x 0.75 Male                  |        |  |

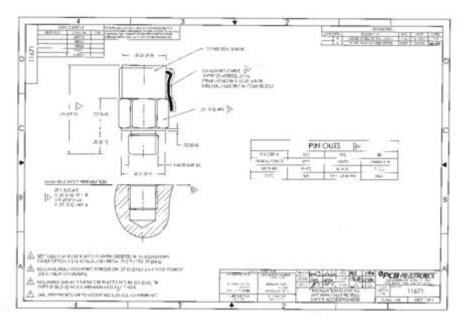
### All specifications are at room temperature unless otherwise specified.

### NOTES:

- Typical.
  Typical corner frequency for coupled electrical and mechanical filters.
  Electrical filter is a second order filter.
- [4] Amplitude at resonance is +9 dB.







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# Model 350B03

Product Type: Accelerometer, Shock Sensor

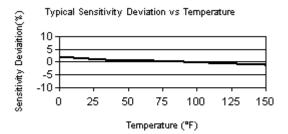
Shock, ceramic-shear, ICP® accel., 0.5 mV/g, 10k g range, LP filter, 10-32 top conn.

| PERFORMANCE   | ENGLISH               | SI                            |  |  |
|---|-----------------------|-------------------------------|--|--|
| Sensitivity(± 30 %)   | 0.5 mV/g              | 0.05 mV/(m/s²)                |  |  |
| Measurement Range   | ± 10,000 g pk         | ± 98,000 m/s² pk              |  |  |
| Frequency Range(± 1 dB)   | 0.4 to 10,000 Hz      | 0.4 to 10,000 Hz              |  |  |
| Frequency Range(-3 dB)  | 0.2 to 25,000 Hz      | 0.2 to 25,000 Hz [2]          |  |  |
| Electrical Filter Corner Frequency(-3 dB)                                 | 13 kHz                | 13 kHz [1][3]                 |  |  |
| Mechanical Filter Resonant Frequency                                      | 23 kHz                | 23 kHz [1][4]                 |  |  |
| Resonant Frequency  | ≥ 100 kHz             | ≥ 100 kHz                     |  |  |
| Broadband Resolution(1 to 10,000 Hz)                                      | 0.04 g rms            | 0.39 m/s² rms [1]             |  |  |
| Non-Linearity   | ≤ 2.0 %               | ≤ 2.0 %                       |  |  |
| Transverse Sensitivity  | ≤ 7 %                 | ≤ 7 %                         |  |  |
| ENVIRONMENTAL   |                       |                               |  |  |
| Overload Limit(Shock)   | ± 50,000 g pk         | ± 490,000 m/s <sup>2</sup> pk |  |  |
| Temperature Range(Operating)  | 0 to +150 °F          | -18 to +66 °C                 |  |  |
| Temperature Range(Storage)  | -40 to +200 °F        | -40 to +93 °C                 |  |  |
| Temperature Response  | See Graph             | See Graph                     |  |  |
| Base Strain Sensitivity   | 0.002 g/με            | 0.02 (m/s²)/με [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                     |  |  |
| Output Bias Voltage   | 8 to 14 VDC           | 8 to 14 VDC                   |  |  |
| Discharge Time Constant   | 1.0 to 2.0 sec        | 1.0 to 2.0 sec                |  |  |
| Settling Time(within 10% of bias)   |                       |                               |  |  |
| PHYSICAL  |                       |                               |  |  |
| Sensing Element   | Ceramic               | Ceramic                       |  |  |
| Sensing Geometry  | Shear                 | Shear                         |  |  |
| Housing Material  | Titanium              | Titanium                      |  |  |
| Sealing   | Hermetic              | Hermetic                      |  |  |
| Size (Hex x Height)   | 0.375 in x 1.02 in    | 9.5 mm x 25.9 mm              |  |  |
| Weight  | 0.16 oz               | 4.5 gm [1]                    |  |  |
| Electrical Connector  | 10-32 Coaxial Jack    | 10-32 Coaxial Jack            |  |  |
| Electrical Connection Position  | Тор                   | Тор                           |  |  |
| Mounting Thread   | 1/4-28 Male           | 1/4-28 Male                   |  |  |
| SUPPLIED ACCESSORIES:   |                       |                               |  |  |
| Model ACS-22 NIST Traceable frequency response (100Hz to ±1 dB point) (1) |                       |                               |  |  |
| OPTIONAL VERSIONS   |                       |                               |  |  |
| M- Metric Mount   |                       |                               |  |  |
| Mounting Thread   | M6 x 0.75 Male        | M6 x 0.75 Male                |  |  |
| <b>W</b> - Water Resistant Cable  |                       |                               |  |  |
| Electrical Connector  | Sealed Attached Cable |                               |  |  |

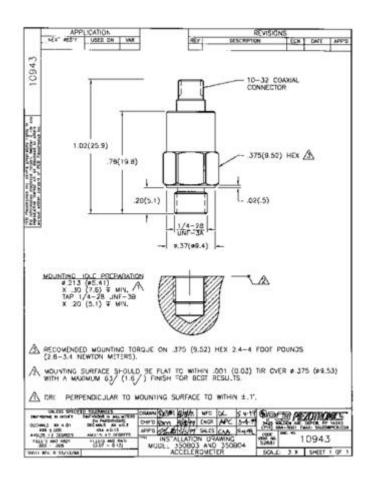
### All specifications are at room temperature unless otherwise specified.

### NOTES:

- Typical corner frequency for coupled electrical and mechanical filters. Electrical filter is a second order filter. Typical corner frequency for coup
   Electrical filter is a second order fi
   Amplitude at resonance is +9 dB.







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