



| Model Number 102B10 | ICP® PRESSURE SENSOR | | | Revision: A ECN #: 54975 |
|---|---|---|--|---|
| <p>Performance</p> <p>Measurement Range(for ±5V output) Useful Overrange(for ± 10V output) Sensitivity(± 15 %) Maximum Pressure(step) Maximum Pressure(Total) Resolution Resonant Frequency Rise Time(Reflected) Low Frequency Response(- 5 %) Non-Linearity</p> <p>Environmental</p> <p>Acceleration Sensitivity Temperature Range(Operating) Temperature Coefficient of Sensitivity Maximum Vibration Maximum Shock</p> <p>Electrical</p> <p>Output Polarity(Positive Pressure) Discharge Time Constant(at room temp) Excitation Voltage Constant Current Excitation Output Impedance Output Bias Voltage</p> <p>Physical</p> <p>Sensing Element Housing Material Thread Adaptor Material Diaphragm Sealing Electrical Connector Weight</p> | <p>ENGLISH</p> <p>100 psi 200 psi 50 mV/psi 1,000 psi 15 kpsi 2 mpsi ≥ 250 kHz ≤ 2.0 μ sec 0.50 Hz ≤ 1.0 % FS</p> <p>0.002 psi/g -320 to +212 °F ≤ 0.06 %/°F 2,000 g pk 20,000 g pk</p> <p>Positive ≥ 1.0 sec 20 to 30 VDC 2 to 20 mA < 100 Ohm 8 to 14 VDC</p> <p>Quartz 304L/316L Stainless Steel 316L Stainless Steel 316L Stainless Steel Welded Hermetic 10-32 Coaxial Jack 0.388 oz</p> | <p>SI</p> <p>690 kPa 1,380 kPa 7.25 mV/kPa 6,900 kPa 103,425 kPa 0.014 kPa ≥ 250 kHz ≤ 2.0 μ sec 0.50 Hz ≤ 1.0 % FS</p> <p>0.0014 kPa/(m/s²) -196 to +100 °C ≤ 0.108 %/°C 19,600 m/s² pk 196,000 m/s² pk</p> <p>Positive ≥ 1.0 sec 20 to 30 VDC 2 to 20 mA < 100 Ohm 8 to 14 VDC</p> <p>Quartz 304L/316L Stainless Steel 316L Stainless Steel 316L Stainless Steel Welded Hermetic 10-32 Coaxial Jack 11.00 gm</p> | <p>[1]</p> <p>[2]</p> <p>[3]</p> <p>[4]</p> <p>[3]</p> | <p>OPTIONAL VERSIONS</p> <p>Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.</p> <p>M - Metric Mount Supplied Accessory: Model 065A34 Seal ring 0.435" OD x 0.397" ID x 0.030" Cu (3)</p> |
| <p>NOTES:</p> <p>[1]Excitation voltage >=28 volts required. [2]Due to high sensitivity, the static pressure should be applied and removed very slowly. Rate should prevent more than 10 Volt change in output until Output Bias Voltage returns to normal (approximately 15 times discharge time constant). [3]Typical. [4]Zero-based, least-squares, straight line method. [5]See PCB Declaration of Conformance PS023 for details.</p> | | | | |
| <p>SUPPLIED ACCESSORIES:</p> <p>Model 065A44 Seal ring 0.435" OD x 0.377" ID x 0.030" thk Cu (3) Model PCS-10AA Single point sensitivity coefficient at sensor minimum operating temperature (-320°F / -196°C limit) Model PCS-1AZ Sensitivity calibration at 100% and 10% of sensor range</p> | | | | |
| Entered: ND | Engineer: AJA | Sales: RWM | Approved: RPF | Spec Number: |
| Date: 07/16/2024 | Date: 07/16/2024 | Date: 07/16/2024 | Date: 07/16/2024 | 74947 |
| <p> [5]</p> <p>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.</p> <p> PCB PIEZOTRONICS AN AMPHENOL COMPANY Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com</p> <p>3425 Walden Avenue, Depew, NY 14043</p> | | | | |