| Model Number 108A02 | | PRESSURE SENSOR, ICP® | | | |
|-------------------------------------|--------------------------|-----------------------|-----------------------------|-----|-----------------|
| Performance | | ENGLISH | SI | | Optional \ |
| Measurement Ra | nge (for ±5V output) | 10 kpsi | 68950 kPa | | for standa |
| Useful Overrange | | 20 kpsi | 137900 kPa | [1] | M - Metri |
| Sensitivity (±15 %) | | 0.5 mV/psi | 0.073 mV/kPa | | N - Nega |
| Maximum Pressure (static) | | 50 kpsi | 344750 kPa | | S - Stain |
| Resolution | | 200 mpsi | 1.4 kPa | | Diaphra |
| Resonant Freque | ency | ≥250 kHz | ≥250 kHz | | |
| Rise Time (Reflected) | | ≤2 µ sec | ≤2 µ sec | | W - Wate |
| Low Frequency F | Response (-5 %) | 0.002 Hz | 0.002 Hz | | |
| Non-Linearity | | ≤2 % FS | ≤2 % FS | [2] | |
| Environmental | | | | | Notes |
| Acceleration Sen | sitivity | ≤0.05 psi/g | ≤0.035 kPa/(m/s²) | | [1] F |
| Temperature Rar | nge (Operating) | -100 to +275 °F | -73 to +135 °C [′] | | outp |
| Temperature Coe | efficient of Sensitivity | ≤0.10 %/°F | ≤0.18 %/°C | | [2] 2 |
| Maximum Vibration | on | 2000 g pk | 19614 m/s² pk | | [3] 9 |
| Maximum Shock | | 20000 g pk | 196140 m/s ² pk | | |
| Electrical | | • . | | | |
| Output Polarity (Positive Pressure) | | Positive | Positive | | Supplied |
| Discharge Time (| Constant (at room temp) | ≥250 sec | ≥250 sec | | 065A06 |
| Excitation Voltage | Э | 20 to 30 VDC | 20 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 14 VDC | 8 to 14 VDC | | |
| Physical | | | | | |
| Sensing Geomet | | Compression | Compression | | |
| Sensing Element | | Quartz | Quartz | | |
| Housing Material | | C-300 | C-300 | | |
| Diaphragm | | C-300 | C-300 | | |
| Sealing | | Welded Hermetic | Welded Hermetic | | |
| Electrical Connec | ctor | 10-32 Coaxial Jack | 10-32 Coaxial Jack | | |
| Weight | | 0.42 oz | 12 gm | | |
| | | | | | l |

ECN #: 16194 Optional Versions (Optional versions have identical specifications and accessories as listed for standard model except where noted below. More than one option maybe used.)

Revision A

M - Metric Mount

N - Negative Output Polarity

S - Stainless Steel Diaphragm

Diaphragm 316L Stainless 316L Stainless Steel Steel

W - Water Resistant Cable

Notes

[1] For +10 volt output, minimum 24 VDC supply voltage required. Negative 10 volt output may be limited by output bias.

[2] Zero-based, least-squares, straight line method.

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

Supplied Accessories

065A06 Seal ring 0.318" OD x 0.250" ID x 0.010" thk 316L SS material (3)

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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| Entered: WSH | Engineer: MBD | Sales: MEM | Approved: JMF | Spec Number: |
|--------------|------------------|------------|---------------|--------------|
| Date: | Date: | Date: | Date: | 6913 |
| 10/04/2002 | 10/04/2002 | 10/04/2002 | 10/07/2002 | |



Depew, NY 14043 **UNITED STATES** Phone: 800-828-8840 Fax: 716-684-0987 E-mail: info@pcb.com Web site: www.pcb.com

3425 Walden Avenue