

Model Number

109C12

ICP® PRESSURE SENSOR

Revision: E

ECN #: 27048

Performance

	ENGLISH	SI	
Measurement Range(for ± 7V output)	100 kpsi	690,000 kPa	
Sensitivity(± 15 %)	0.07 mV/psi	0.010 mV/kPa	
Maximum Pressure	125 kpsi	862,000 kPa	
Resolution	2.0 psi	13.8 kPa	
Resonant Frequency	≥ 400 kHz	≥ 400 kHz	
Rise Time	≤ 2.0 μ sec	≤ 2.0 μ sec	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[1]

Environmental

Acceleration Sensitivity	≤ 0.02 psi/g	≤ 0.015 kPa/(m/s ²)	
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C	
Temperature Coefficient of Sensitivity	≤ 0.07 %/°F	≤ 0.126 %/°C	
Maximum Flash Temperature	3000 °F	1650 °C	
Maximum Vibration	2000 g pk	19,620 m/s ² pk	
Maximum Shock	50,000 g pk	490,330 m/s ² pk	

Electrical

Output Polarity(Positive Pressure)	Positive	Positive	
Discharge Time Constant(at room temp)	≥ 2000 sec	≥ 2000 sec	
Excitation Voltage	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 Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	C-300	C-300	
Diaphragm	C-300	C-300	[2]
Sealing	Epoxy	Epoxy	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.6 oz	17 gm	



[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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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.

H - Hermetic Seal		
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel
Maximum Shock	20,000 g pk	196,133
Sealing	Welded Hermetic	Welded Hermetic

M - Metric Mount**N** - Negative Output Polarity**W** - Water Resistant Cable**NOTES:**

- [1] Zero-based, least-squares, straight line method.
[2] Ceramic coated.
[3] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

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

Entered: BLS	Engineer: RF	Sales: DRC	Approved: RF	Spec Number:
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