Model Number **109C12**	**ICP® PRESSURE SENSOR**	Revision E ECN #: 27048

Performance	**ENGLISH**	**SI**	
Measurement Range (for ± 7V output)	100 kpsi	690000 kPa	
Sensitivity (±15 %)	0.07 mV/psi	0.010 mV/kPa	
Maximum Pressure	125 kpsi	862000 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/s²)	
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	19620 m/s² pk	
Maximum Shock	50000 g pk	490330 m/s² 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	

CE[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 standard model except where noted below. More than one option maybe used.)

H - Hermetic Seal		
Maximum Shock	20000 g pk	196133 g pk
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel
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
065A06 Seal ring 0.318" OD x 0.250" ID x 0.010" thk 316L SS material (3)

Entered: BLS	Engineer: RPF	Sales: DPC	Approved: RPF	Spec Number:
Date: 08/11/2007	Date: 08/07/2007	Date: 08/07/2007	Date: 08/07/2007	**21925**

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