

Model Number  
118A02

# CHARGE OUTPUT PRESSURE SENSOR

Revision: K  
ECN #: 55114

	ENGLISH	SI	
<b>Performance</b>			
Sensitivity(± 15 %)	0.1 pC/psi	0.014 pC/kPa	
Measurement Range	20,000 psi	137,900 kPa	
Maximum Pressure	50,000 psi	345,000 kPa	
Resolution	0.2 psi	1.4 kPa	
Resonant Frequency	≥ 250 kHz	≥ 250 kHz	
Rise Time(Reflected)	≤ 2.0 μ sec	≤ 2.0 μ sec	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[1]
<b>Environmental</b>			
Acceleration Sensitivity	0.05 psi/g	0.035 kPa/(m/s <sup>2</sup> )	[2]
Temperature Range(Operating)	-320 to +400 °F	-196 to +204 °C	
Temperature Coefficient of Sensitivity	≤ 0.1 %/°F	≤ 0.18 %/°C	
Maximum Flash Temperature	3,000 °F	1,649 °C	
Maximum Vibration	2,000 g pk	19,600 m/s <sup>2</sup> pk	
Maximum Shock	20,000 g pk	196,200 m/s <sup>2</sup> pk	
<b>Electrical</b>			
Output Polarity(Positive Pressure)	Negative	Negative	
Capacitance	10 pF	10 pF	[2]
Insulation Resistance(at room temp)	≥ 10 <sup>12</sup> Ohm	≥ 10 <sup>12</sup> Ohm	
<b>Physical</b>			
Sensing Element	Quartz	Quartz	
Sensing Geometry	Compression	Compression	
Housing Material	C-300	C-300	
Diaphragm	C-300	C-300	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.42 oz	12.0 gm	

## 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.

- M** - Metric Mount
- P** - Positive Output Polarity
- W** - Water Resistant Cable

## NOTES:

- [1]Zero-based, least-squares, straight line method.
- [2]Typical.
- [3]See PCB Declaration of Conformance PS158 for details.

## SUPPLIED ACCESSORIES:

Model 065A06 Seal ring 0.318" OD x 0.250" ID x 0.010" thk 316L SS material (3)  
Model PCS-2 Calibration of dynamic pressure sensors to full scale measurement range up to 100k psi

Entered: ND	Engineer: RPF	Sales: MV	Approved: RPF	Spec Number:
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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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