

Model Number

138A50

## ICP® PRESSURE SENSOR

Revision: E

ECN #: 21174

**Performance**

	ENGLISH	SI	
Measurement Range (for ± 5V output)	50 kpsi	344,737 kPa	
Sensitivity (± 15 %)	0.1 mV/psi	0.015 mV/kPa	
Maximum Pressure	50 kpsi	344,737 kPa	
Resolution	1.0 psi	6.89 kPa	
Resonant Frequency	≥ 1000 kHz	≥ 1000 kHz	
Rise Time (Reflected)	≤ 1.5 μ sec	≤ 1.5 μ sec	
Low Frequency Response (-5 %)	2.5 Hz	2.5 Hz	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[1]

**Environmental**

Temperature Range (Operating)	0 to +100 °F	-17.8 to +37.8 °C
Maximum Vibration	20,000 g pk	196 140 m/s <sup>2</sup> pk

**Electrical**

Output Polarity (Positive Pressure)	Positive	Positive
Discharge Time Constant (at room temp)	≥ 0.2 sec	≥ 0.2 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 Element	Tourmaline	Tourmaline
Housing Material	Stainless Steel	Stainless Steel
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack
Weight	0.75 oz	21 gm



[2]

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.

**N** - Negative Output Polarity

**W** - Water Resistant Cable

**NOTES:**

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

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

Entered: BLS	Engineer: RF	Sales: DPC	Approved: MEM	Spec Number:
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