

Model Number 138A50		ICP® PRESSURE SENSOR		Revision: H ECN #: 55416	
Performance		ENGLISH	SI	OPTIONAL VERSIONS	
Measurement Range(for ±5V output)	50,000 psi	344,737 kPa		Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.	
Sensitivity(± 15 %)	0.1 mV/psi	0.015 mV/kPa		W - Water Resistant Cable	
Maximum Pressure	50,000 psi	344,737 kPa			
Resolution	1.0 psi	6.89 kPa	[1]		
Resonant Frequency	≥ 1,000 kHz	≥ 1,000 kHz			
Rise Time(Reflected)	≤ 1.5 μ sec	≤ 1.5 μ sec			
Low Frequency Response(- 5 %)	1.7 Hz	1.7 Hz			
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[2]		
Environmental					
Temperature Range(Operating)	-10 to +100 °F	-23 to +37.8 °C			
Maximum Vibration	20,000 g pk	196 140 m/s ² pk			
Electrical					
Output Polarity(Positive Pressure)	Positive	Positive			
Discharge Time Constant(at room temp)	≥ 0.3 sec	≥ 0.3 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			
NOTES: [1]Typical. [2]Zero-based, least-squares, straight line method. [3]See PCB Declaration of Conformance PS023 for details.					
SUPPLIED ACCESSORIES: Model PCS-6AE Calibration of dynamic pressure sensors at 10% and 100% of sensor range up to a maximum of 20k psi					
Entered: ND		Engineer: RPF		Sales: MV	
Date: 12/14/2024		Date: 12/14/2024		Date: 12/14/2024	
				Approved: RPF	
				Spec Number:	
				Date: 12/14/2024	
				138-1500-80	
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CE

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CA

[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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