Model Number 138A10		ICP®	PRESSURE	SENSOR
Performance	ENGLISH	SI		0 11 1 1
Measurement Range(for ±5V output)	10,000 psi	68,950 kPa		Optional versions h
Useful Overrange(for ± 10V output)	20,000 psi	137,900 kPa	[1]	
Sensitivity(± 15 %)	0.5 mV/psi	0.073 mV/kPa		N - Negative Ou
Maximum Pressure	50,000 psi	344,750 kPa		W D
Resolution	0.2 psi	0.14 kPa	[2]	W - Water Resist
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	[3]	
Environmental				
Temperature Range(Operating)	-10 to +100 °F	-23 to +37.8 ℃		
Maximum Shock	20,000 g pk	196,140 m/s² 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	21.0 gm		

OPTIONAL VERSIONS

Revision: J

ECN #: 52121

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

[1] For +10 volt output, minimum 24 VDC supply voltage required. Negative 10 volt output may be limited by output bias.

[2]Typical.

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

(€[4]

Entered: ND Engineer: RPF Sales: MV Approved: BAM Spec Number: Date: 10/07/2021 Date: 10/07/2021 Date: 10/07/2021 Date: 10/07/2021 138-1100-80



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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. ICP^{\circledR} is a registered trademark of PCB Piezotronics, Inc.