Model Number 138A50	ICP® PRESSURE SENSOR		
Performance	ENGLISH	SI	
Measurement Range(for ±5V output)	50,000 psi	344,737 kPa	Optional versions h
Sensitivity(± 15 %)	0.1 mV/psi	0.015 mV/kPa	
Maximum Pressure	50,000 psi	344,737 kPa	N - Negative Ou
Resolution	1.0 psi	6.89 kPa	
Resonant Frequency	≥ 1,000 kHz	≥ 1,000 kHz	W - Water Resist
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 [1]	
Environmental			
Temperature Range(Operating)	-10 to +100 °F	-23 to +37.8 ℃	
Maximum Vibration	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	

10-32 Coaxial Jack

0.75 oz

10-32 Coaxial Jack

21 gm

OPTIONAL VERSIONS

Revision: G

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]Zero-based, least-squares, straight line method. [2] See PCB Declaration of Conformance PS023 for details.

(€[2]

Electrical Connector

Weight

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 138-1500-80

3425 Walden Avenue, Depew, NY 14043

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.