Model Number 123B21		ICP® F	PRESSURE	SENSOR
Performance	ENGLISH	SI		
Measurement Range(for ±5V output)	250 psi	1,724 kPa		Optional versions
Useful Overrange(for ± 10V output)	500 psi	3,448 kPa	[1]	
Sensitivity(± 15 %)	20 mV/psi	2.90 mV/kPa		
Maximum Pressure	5,000 psi	34,475 kPa		
Resolution	0.005 psi	0.034 kPa	[2]	
Resonant Frequency	≥ 25 kHz	≥ 25 kHz	[3]	
Rise Time(Reflected)	≤ 20 µ sec	≤ 20 µ sec	[3]	
Low Frequency Response(- 5 %)	0.5 Hz	0.5 Hz		
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[4]	
Environmental				
Acceleration Sensitivity	0.002 psi/g	$0.0014  \text{kPa/(m/s}^2)$	[2]	
Temperature Range(Operating)	-100 to +250 °F	-73 to +121 ℃	[5]	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C		
Maximum Flash Temperature	10,000 °F	5,538 ℃		
Maximum Vibration	2,000 g pk	19,600 m/s² pk		
Maximum Shock	10,000 g pk	98,070 m/s² pk		
Electrical				
Output Polarity(Positive Pressure)	Positive	Positive		
Discharge Time Constant	≥ 1 sec	≥ 1 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				
Housing Material	17-4 Stainless Steel	17-4 Stainless Steel		
Diaphragm	Invar	Invar		
Sealing	Hermetic	Hermetic		
Electrical Connector	Integral Cable	Integral Cable		
Weight	4.59 oz	130 gm		
Helium Flow Rate(at 1,500 psi)	40 scf/hr	1.13 m³/hr		
Water Flow Rate(at 50 psi)	1.2 gal/min	4.5 L/min		
Cable Length	4 ft	1.2 m		

## **OPTIONAL VERSIONS**

Revision: B

ECN #: 55076

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

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

[2]Typical.

[3] With helium flow.

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

[5] Applies to internal amplifer, not to external housing.

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

## **SUPPLIED ACCESSORIES:**

Model 065A15 Seal, .624" OD x .553" ID x .080", brass (3)

Model 065A72 Water cooling tubes (o-ring sealed) (2)

Model 070A08 Cable adaptor (micro 10-32 jack to BNC jack) (1)

Model PCS-5 Calibration of Models series 122,123,124: Dynamic pressure calibration to 100% full scale. Helium Flow test and water pressure test (where applicable).

Entered: ND	Engineer: AJA	Sales: RWM	Approved: RPF	Spec Number:
Date: 08/14/2024	Date: 08/14/2024	Date: 08/14/2024	Date: 08/14/2024	77630



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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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This model, designated with an RH prefix, is RoHS compliant. For further details, and to obtain PCB's RoHS Statement of