Model Number 102B10		ICP® P	RESSUR	E SENSOR
Performance	ENGLISH	SI		
Measurement Range(for ±5V output)	100 psi	690 kPa		Optional versions h
Useful Overrange(for ± 10V output)	200 psi	1,380 kPa	[1]	
Sensitivity(± 15 %)	50 mV/psi	7.25 mV/kPa		M - Metric Mour
Maximum Pressure(step)	1,000 psi	6,900 kPa		Supplied Accesso
Maximum Pressure(Total)	15 kpsi	103,425 kPa	[2]	
Resolution	2 mpsi	0.014 kPa	[3]	
Resonant Frequency	≥ 250 kHz	≥ 250 kHz		
Rise Time(Reflected)	≤ 2.0 µ sec	≤ 2.0 µ sec		
Low Frequency Response(- 5 %)	0.50 Hz	0.50 Hz		
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[4]	
Environmental				
Acceleration Sensitivity	≤ 0.002 psi/g	$\leq 0.0014 \text{ kPa/(m/s}^2)$		
Temperature Range(Operating)	-320 to +212 °F	-196 to +100 ℃		
Temperature Coefficient of Sensitivity	≤ 0.06 %/°F	≤ 0.108 %/°C		
Maximum Shock	20,000 g pk	196,133 m/s² pk		
Electrical				
Output Polarity(Positive Pressure)	Positive	Positive		
Discharge Time Constant(at room temp)	≥ 1.0 sec	≥ 1.0 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	Quartz	Quartz		
Housing Material	304L/316L Stainless Steel	304L/316L Stainless Stee	l	
Thread Adaptor Material	316L Stainless Steel	316L Stainless Steel		
Diaphragm	316L Stainless Steel	316L Stainless Steel		
Sealing	Welded Hermetic	Welded Hermetic		

10-32 Coaxial Jack

0.388 oz

## **OPTIONAL VERSIONS**

Revision: NR

ECN #: 51804

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

10-32 Coaxial Jack

11.00 gm

M - Metric Mount Supplied Accessory: Model 065A34 Seal ring 0.435" OD x 0.397" ID x 0.030" Cu (3)

## **NOTES:**

[1]Excitation voltage >=28 volts required.

[2] Due to high sensitivity, the static pressure should be applied and removed very slowly. Rate should prevent more than 10 Volt change in output until Output Bias Voltage returns to normal (approximately 15 times discharge time constant).

[3]Typical.

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

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

## **SUPPLIED ACCESSORIES:**

Model 065A44 Seal ring 0.435" OD x 0.377" ID x 0.030" thk Cu (3)

Entered: RB	Engineer: MP	Sales: MV	Approved: RPF	Spec Number:
Date: 06/18/2021	Date: 06/18/2021	Date: 06/18/2021	Date: 06/18/2021	74947



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**C E**<sub>[5]</sub>

Electrical Connector

Weight

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® is a registered trademark of PCB Piezotronics, Inc.