Model Number 102B18	ICP® PRESSURE SENSOR	Revision: D ECN #: 53357

Performance	ENGLISH	SI	
Measurement Range(for ±5V output)	50 psi	344.7 kPa	
Useful Overrange(for ± 10V output)	100 psi	689.4 kPa	[1]
Sensitivity(± 5 mV/psi)	100 mV/psi	14.5 mV/kPa	
Maximum Pressure(static)	1,000 psi	6,895 kPa	
Resolution	1.0 mpsi	0.007 kPa	[2]
Resonant Frequency	≥ 500 kHz	≥ 500 kHz	
Rise Time(Reflected)	≤ 1.0 µ sec	≤ 1.0 µ sec	
Low Frequency Response(- 5 %)	0.5 Hz	0.5 Hz	
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[3]
Environmental			
Acceleration Sensitivity	≤ 0.002 psi/g	≤ 0.0014 kPa/(m/s^2)	
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C	[2]
Maximum Flash Temperature	3,000 °F	1,650 °C	
Maximum Vibration	2,000 g pk	19,600 m/s^2 pk	
Maximum Shock	20,000 g pk	196,000 m/s^2 pk	
Electrical			
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 15 VDC	8 to 15 VDC	
Electrical Isolation	10^8 Ohm	10^8 Ohm	
Physical			
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	Stainless Steel	Stainless Steel	
Diaphragm	Invar	Invar	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	0.50 oz	14.3 gm	

CE[4]

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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OPTIONAL VERSIONS

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

CA - Ablative Coating

M - Metric Mount
Supplied Accessory: Model 065A40 Seal ring 0.435" OD x 0.397" ID x 0.030" thk brass (3) replaces Model 065A03

N - Negative Output Polarity

S - Stainless Steel Diaphragm

Diaphragm	316L Stainless Steel	316L Stainless Steel

W - Water Resistant Cable

NOTES:

[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.

SUPPLIED ACCESSORIES:

Model 065A03 Seal ring 0.435" OD x 0.377" ID x 0.030" thk brass (3)

Entered: ND	Engineer: RPF	Sales: RWM	Approved: RPF	Spec Number:
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