Model Number 101A05	ICP® PRESSURE SENSOR	Revision: M ECN #: 54949

Performance	ENGLISH	SI	
Measurement Range(for ±5V output)	100 psi	689 kPa	
Useful Overrange(for ± 10V output)	200 psi	1,379 kPa	[1]
Sensitivity(± 10 mV/psi)	50 mV/psi	7.3 mV/kPa	
Maximum Pressure	1,000 psi	6,895 kPa	
Resolution	0.002 psi	0.014 kPa	[2]
Resonant Frequency	≥ 400 kHz	≥ 400 kHz	
Rise Time(Reflected)	≤ 1.5 µ sec	≤ 1.5 µ sec	
Low Frequency Response(- 5 %)	0.5 Hz	0.5 Hz	
Non-Linearity	≤ 2.0 % FS	≤ 2.0 % FS	[3]
Environmental			
Acceleration Sensitivity	0.002 psi/g	0.014 kPa/(m/s²)	[2]
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C	
Temperature Coefficient of Sensitivity	≤ 0.03 %/°F	≤ 0.054 %/°C	
Maximum Flash Temperature	3,000 °F	1,650 °C	
Maximum Vibration	2,000 g pk	19,600 m/s² pk	
Maximum Shock	20,000 g pk	196,000 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	
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	0.44 oz	12.5 gm	

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)
Model PCS-1AZ Sensitivity calibration at 100% and 10% of sensor range

CE
UK CA [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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Entered: ND	Engineer: AJA	Sales: RWM	Approved: RPF	Spec Number:
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