

Model Number
137B24A

ICP® PRESSURE SENSOR

Revision: C
ECN #: 55416

	ENGLISH	SI	
Performance			
Measurement Range(for ±5V output)	250 psi	1,724 kPa	
Useful Overrange(for ± 10V output)	500 psi	3,447 kpsi	[1]
Sensitivity(± 15 %)	20 mV/psi	2.90 mV/kPa	
Maximum Pressure	5 kpsi	34,474 kPa	
Resolution	.7 mpsi	.005 kPa	[2]
Resonant Frequency	≥ 400 kHz	≥ 400 kHz	
Rise Time(Incident)	≤ 6.5 μ sec	≤ 6.5 μ sec	
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS	[3]
Environmental			
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C	
Temperature Coefficient of Sensitivity	≤ 0.05 %/°F	≤ 0.090 %/°C	
Electrical			
Discharge Time Constant(at room temp)	≥ 0.2 sec	≥ 0.2 sec	
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	≤ 200 Ohm	≤ 200 Ohm	
Output Bias Voltage	8 to 14 VDC	8 to 14 VDC	
Physical			
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	Aluminum	Aluminum	
Diaphragm	Invar	Invar	
Sealing	Epoxy	Epoxy	
Electrical Connector	10-32 Coaxial Jack	10-32 Coaxial Jack	
Weight	12.5 oz	354 gm	[2]

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.

NOTES:

- [1] For +10 volt output, minimum 26 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 085A43 Connector Protector (1)
Model PCS-1AZ Sensitivity calibration at 100% and 10% of sensor range

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