

**Model Number**  
137B23A

# ICP® PRESSURE SENSOR

Revision: E  
ECN #: 55416

	ENGLISH	SI	
<b>Performance</b>			
Measurement Range(for ±5V output)	50 psi	345 kPa	
Useful Overrange(for ± 10V output)	100 psi	690 kPa	[1]
Sensitivity(± 15 %)	100 mV/psi	14.5 mV/kPa	
Maximum Pressure	1,000 psi	6,895 kPa	
Resolution	0.01 psi	0.069 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]
<b>Environmental</b>			
Temperature Range(Operating)	-100 to +275 °F	-73 to +135 °C	
Temperature Coefficient of Sensitivity	≤ 0.05 %/°F	≤ 0.090 %/°C	
<b>Electrical</b>			
Discharge Time Constant(at room temp)	≥ 0.2 sec	≥ 0.2 sec	
Excitation Voltage	22 to 30 VDC	22 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	
<b>Physical</b>			
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	353 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-1 Calibration of dynamic pressure sensors up to 100% range

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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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