M	lodel Number				
137B27					

ICP® PRESSURE SENSOR

Revision: NR ECN #: 47071

Performance	<u>ENGLISH</u>	SI	
Measurement Range(for ±5V output)	500 psi	3447 kPa	
Useful Overrange(for ± 10V output)	1 kpsi	6895 kPa	[1]
Sensitivity(± 15 %)	10 mV/psi	1.45 mV/kPa	[2]
Maximum Pressure	5 kpsi	34,474 kPa	
Resolution	1 mpsi	0.007 kPa	[3]
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	[4]
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	≤ 100 Ohm	≤ 100 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	4-Pin	4-Pin	[2]
Weight	16.1 oz	456 gm	[3]



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 Group, Inc.

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] Two identically spec'd elements spaced 10cm apart see drawing #65310 for details. Individual calibration certs supplied for each channel.

- [4] Zero-based, least-squares, straight line method.
 [5] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model PCS-6 Calibration of Series 134, 137, and 138 (2)

Entered: LK	Engineer: DK	Sales: RWM	Approved: BAM	Spec Number:
Date: 7/26/2017	Date: 7/26/2017	Date: 7/26/2017	Date: 7/26/2017	67323



Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com