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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



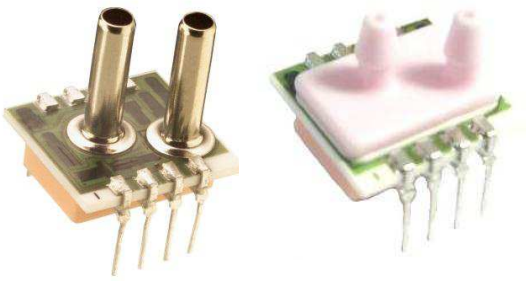
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## 1210

1psi

### SPECIFICATIONS

- **PC Board Mountable Pressure Sensor**
- **0-100 mV Output**
- **Current Excitation**
- **Gage and Differential**
- **Temperature Compensated**

The 1210 1psi is a temperature compensated, piezoresistive silicon pressure sensor packaged in a dual-in-line configuration. It is intended for cost sensitive applications where excellent performance and long-term stability are required.

Integral temperature compensation is provided over a range of 0-50°C using laser-trimmed resistors. An additional laser-trimmed resistor is included to normalize pressure sensitivity variations by programming the gain of an external differential amplifier. This provides sensitivity interchangeability of  $\pm 1\%$ .

Please refer to the 1210 standard datasheet for information on products with operating pressures greater than 1psi. For voltage excitation, please refer to the Model 1220.

## FEATURES

- Dual-in-Line Package
- 1.0% Interchangeable Span  
(provided by gain set resistor)
- $\pm 0.3\%$  Non Linearity
- Solid State Reliability

## APPLICATIONS

- Medical Instruments
- Airspeed Measurement
- Process Control
- Factory Automation
- Leak Detection

## STANDARD RANGES

Range	psid	psig	Port Styles
0 to 1	•	•	S, L, N, B*

\*Barb port styles are only available in lead configuration type 3. See Ordering Information.

## PERFORMANCE SPECIFICATIONS

Supply Current: 1.5 mA

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	PRESSURE RANGE 0 – 1 psi			UNITS	NOTES
	MIN	TYP	MAX		
Full Scale Output Span	50	100	150	mV	1
Zero Pressure Output (Offset)	-2.0		2.0	mV	
Pressure Non Linearity	-0.3		0.3	%Span	2
Pressure Hysteresis	-0.1	±0.01	0.1	%Span	
Input/Output Resistance	1800		6500	Ω	
Temperature Error – Span	-1.0	±0.5	1.0	%Span	3
Temperature Error – Zero	-1.0	±0.5	1.0	%Span	3
Thermal Hysteresis – Zero		±0.1		%Span	3
Long Term Stability (Offset & Span)		±0.2		%Span/year	
Supply Current	0.5	1.5	2.0	mA	4
Response Time (10% to 90%)		1.0		mSec	5
Output Noise		1.0		μV p-p	6
Output Load Resistance	2			MΩ	7
Insulation Resistance (50Vdc)	50			MΩ	
Pressure Overload			10	psi	
Operating Temperature	-40		+125	°C	
Storage Temperature	-50		+150	°C	
Media	Non-Corrosive Dry Gases Compatible with wetted materials				8
Weight	3 grams				

### Notes

1. Output span of unamplified sensor.
2. Best fit straight line.
3. Temperature range: 0°C to 50°C with reference to 25°C.
4. Guarantees input/output ratiometricity for span.
5. For a zero-to-full scale pressure step change.
6. 10Hz to 1kHz.
7. Prevents increase of TC-Span due to output loading.

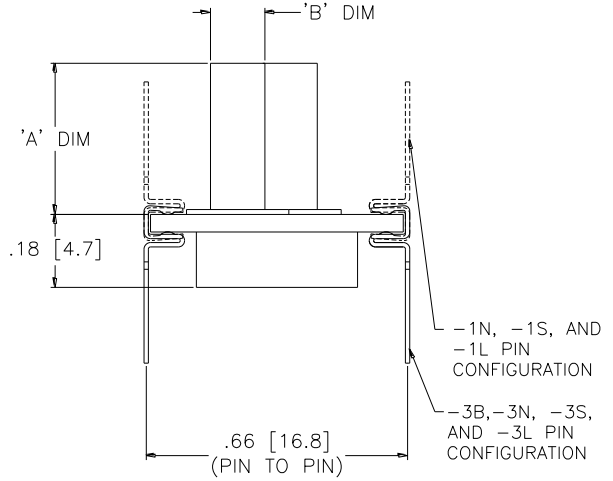
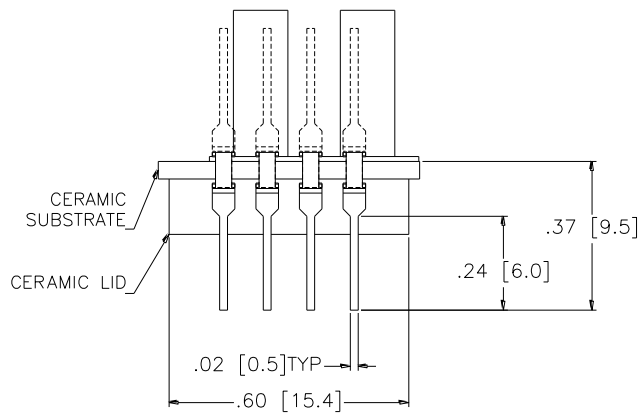
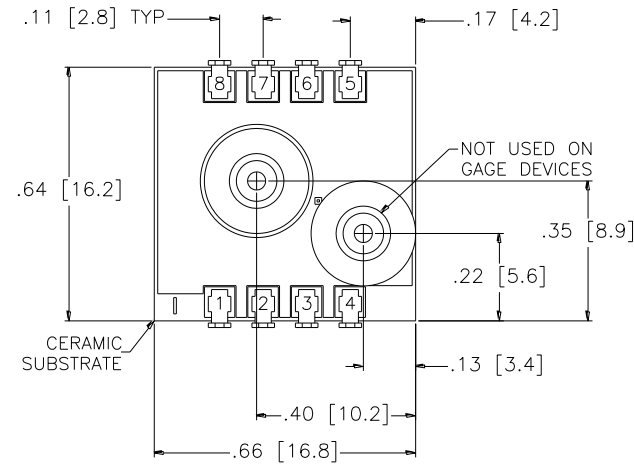
Wetted materials: glass, ceramic, silicon, fluorosilicone, nickel, gold and aluminum

### Additional Notes

Soldering leads pins: 250°C for 5 seconds, maximum.

## DIMENSIONS (TUBE VERSION)

DIMENSIONS IN INCHES [mm]

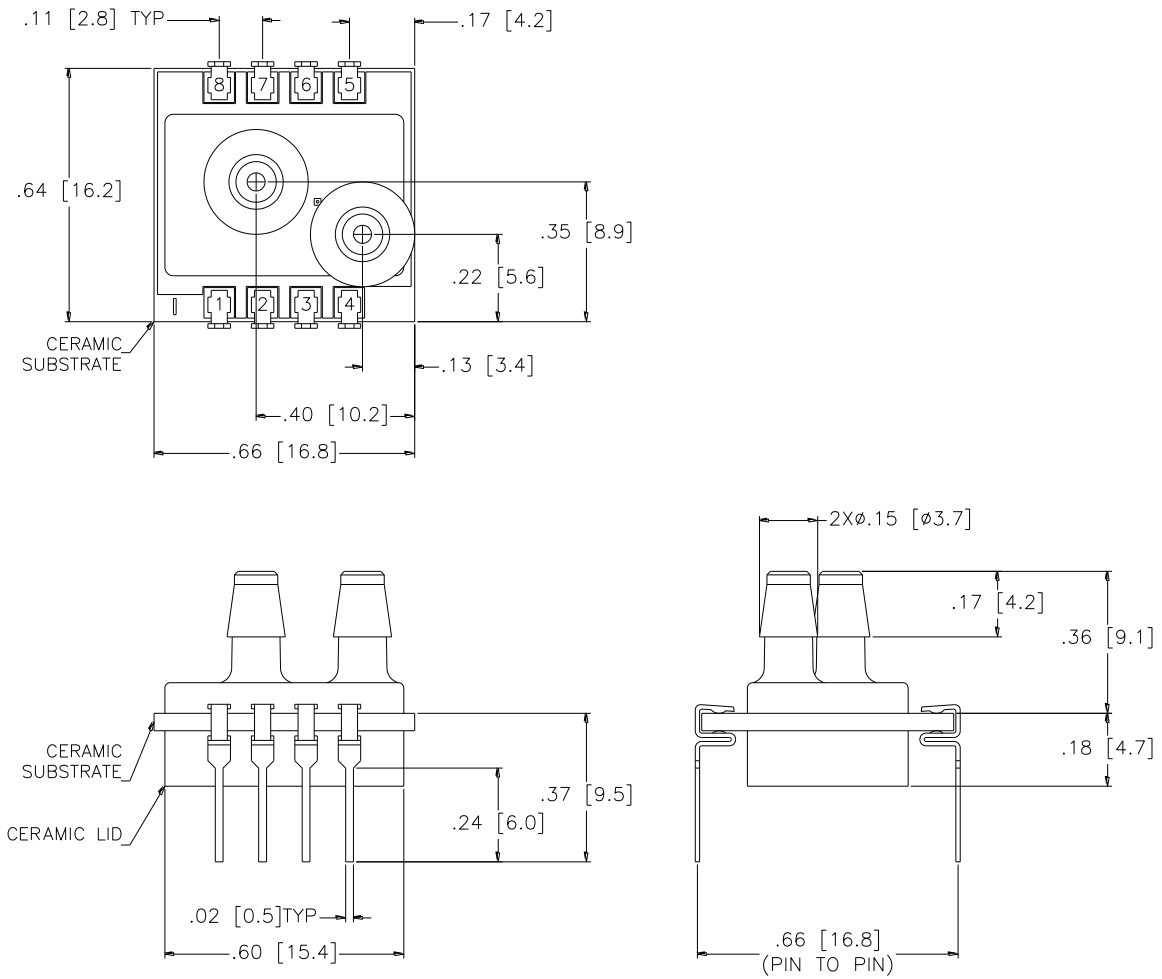


VENT TUBE DIMENSIONS		
MODEL	'A' DIM	'B' DIM
1N/3N	N/A	N/A
1L/3L	.490±.005 [12.45±0.13]	∅.127±.005 [∅3.23±0.13]
1S/3S	.325±.005 [8.26±0.13]	∅.125±.005 [∅3.18±0.13]

PAD NO	FUNCTION
1	-OUT
2	-EX
3	+OUT
4	+EX
5,6	GAIN
7,8	TEST

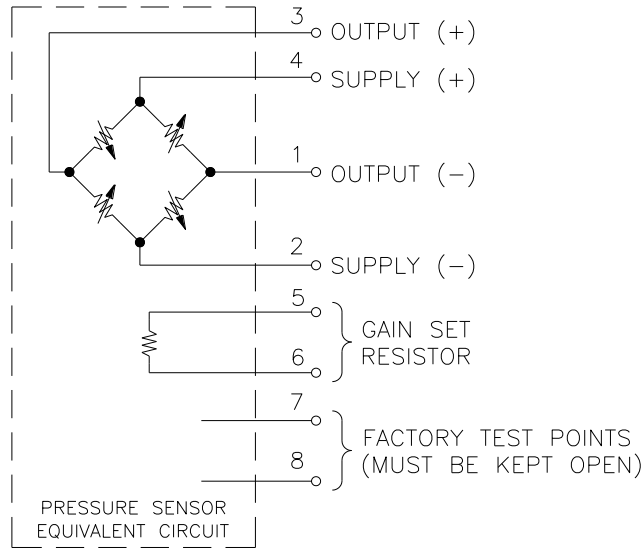
### DIMENSIONS (BARB VERSION)

DIMENSIONS IN INCHES [mm]

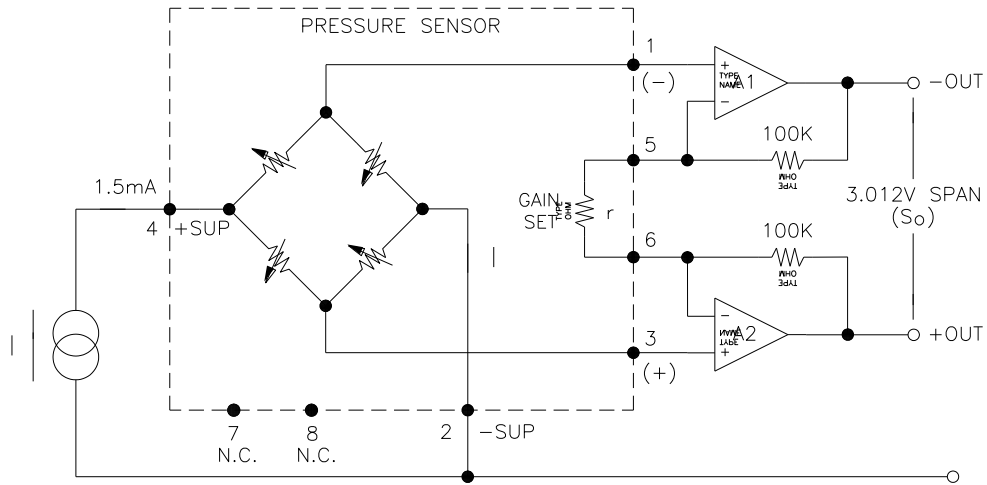


PAD NO	FUNCTION
1	-OUT
2	-EX
3	+OUT
4	+EX
5,6	GAIN
7,8	TEST

CONNECTIONS

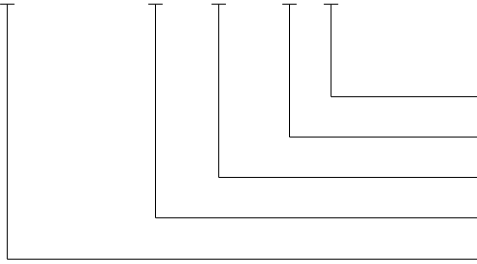


APPLICATION SCHEMATIC



## ORDERING INFORMATION

1210A - 001 G - 3 S



Vent (L = Long, S = Short, N = None, B = Barb)

Lead Configuration (1 = Same side as vent, 3 = Opposite side as vent)

Type (G= Gage, D = Differential)

Pressure Range

Model

\*Barb vent port style only available in lead configuration type 3.

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