

✓RoHS

## 50

### SPECIFICATIONS

- **PC Board Mountable Pressure Sensor**
- **0-60 mV Output**
- **Voltage Excitation**
- **Absolute Pressure**
- **Low Cost**
- **OEM Applications**

The 50 is a piezoresistive silicon pressure sensor packaged in a TO-5 configuration. Absolute pressure ranges from 0-15 to 0-500 psi are available. It is intended for high volume applications where small size, light weight, and low cost are required. This design is intended for non-corrosive gases and is not recommended for liquids. A gel filling can be applied to provide mild protection against humidity and dust. The devices are shipped in plastic anti-static shipping tubes for use with automated production equipment. For high volume gage applications, contact the factory.

## FEATURES

T0-5 Package  
-40°C to +125°C Operating Range  
±0.25% Pressure Non Linearity  
Solid State Reliability

## APPLICATIONS

Tire Pressure Sensor  
Consumer Appliances  
Medical Instrumentation  
Altitude Measurement  
Barometric Pressure

## STANDARD RANGES

| Range    | psia |
|----------|------|
| 0 to 15  | •    |
| 0 to 30  | •    |
| 0 to 50  | •    |
| 0 to 100 | •    |
| 0 to 250 | •    |
| 0 to 500 | •    |

## PERFORMANCE SPECIFICATIONS

**Supply Voltage: 3 Vdc**

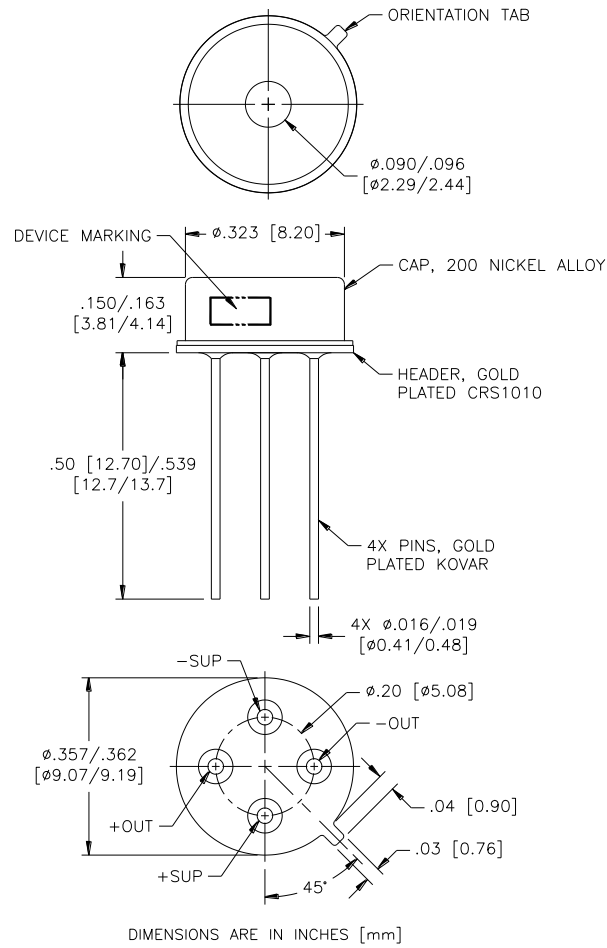
**Ambient Temperature: 25°C (unless otherwise specified)**

| PARAMETERS                           | MIN   | TYP   | MAX  | UNITS  | NOTES |
|--------------------------------------|---|-------|------|--------|-------|
| Span                                 | 30  | 60    | 120  | mV     | 1     |
| Zero Pressure Output                 | -25   |       | 25   | mV     |       |
| Pressure Non Linearity               | -0.25   |       | 0.25 | %Span  | 2     |
| Pressure Hysteresis                  | -0.1  |       | 0.1  | %Span  |       |
| Input & Output Resistance            | 3500  | 5000  | 6000 | Ω      |       |
| Temperature Coefficient – Span       |   | -0.13 |      | %/°C   | 3     |
| Temperature Coefficient – Zero       |   | 0.05  |      | %/°C   | 3     |
| Temperature Coefficient – Resistance |   | 0.15  |      | %/°C   | 3     |
| Thermal Hysteresis – Zero            | -0.2  |       | 0.2  | %Span  | 3     |
| Supply Voltage                       |   | 3.0   | 12.0 | Vdc    |       |
| Response Time (10% to 90%)           |   | 1.0   |      | mS     | 4     |
| Output Noise (10Hz to 1kHz)          |   | 1.0   |      | μV p-p |       |
| Long Term Stability (Offset & Span)  |   | 0.5   |      | %Span  | 5     |
| Pressure Overload                    |   |       | 3X   | Rated  | 6     |
| Operating Temperature                | -40   |       | +125 | °C     |       |
| Storage Temperature                  | -50   |       | +150 | °C     |       |
| Weight                               |   |       | 1    | grams  |       |
| Soldering Temperature                | 250°C Max 5 Sec.  |       |      |        |       |
| Media                                | Non-Corrosive Dry Gases Compatible with Silicon, Pyrex, RTV, Gold, Nickel, and Aluminum |       |      |        |       |

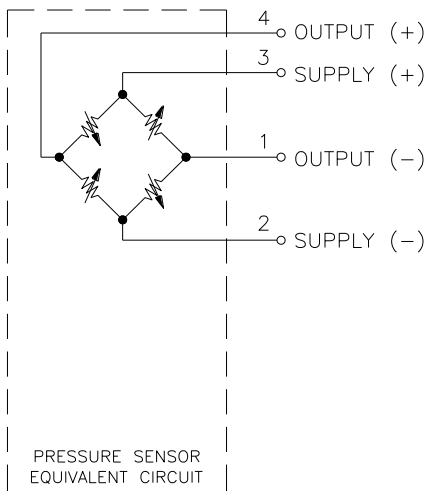
### Notes

1. Ratiometric to supply voltage. For 250psi devices, the minimum span value is 25mV.
2. Best fit straight line.
3. Over the temperature range 0-50°C with respect to 25°C.
4. For a zero-to-full scale pressure step change.
5. Long term stability over a one year period with constant voltage and temperature.
6. 3X or 500 psi max.

## DIMENSIONS

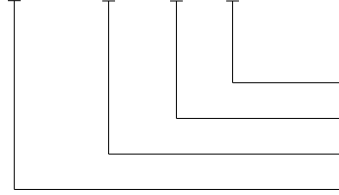


## CONNECTIONS



## ORDERING INFORMATION

50 - 015 A - F



Coating (F = Gel Fill, Blank = No Coating)

Type (A = Absolute)

Pressure Range

Model

## 联系方式



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