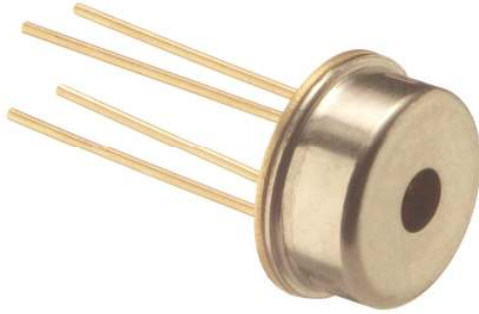


# Model 50



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

## DESCRIPTION

The Model 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	•

# Model 50

## PERFORMANCE SPECIFICATIONS

**Supply Voltage: 3 Vdc**

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

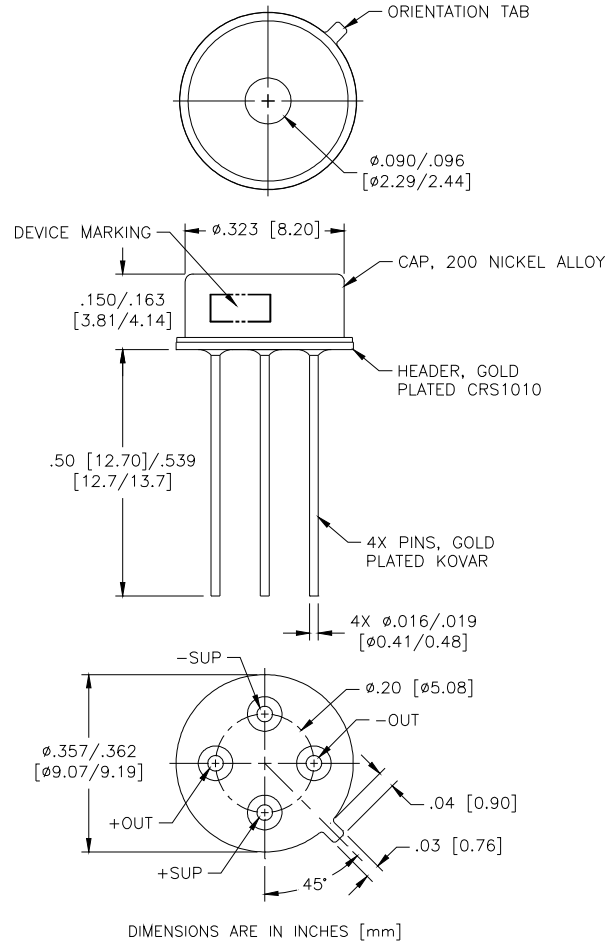
PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Span	30	60	120	mV	1
Zero Pressure Output	-25		25	mV	
Pressure Non Linearity	-0.25		0.25	%Span	2
Pressure Hysteresis	-0.1		0.1	%Span	
Input & Output Resistance	3500	5000	6000	Ω	
Temperature Coefficient – Span		-0.13		%/°C	3
Temperature Coefficient – Zero		0.05		%/°C	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

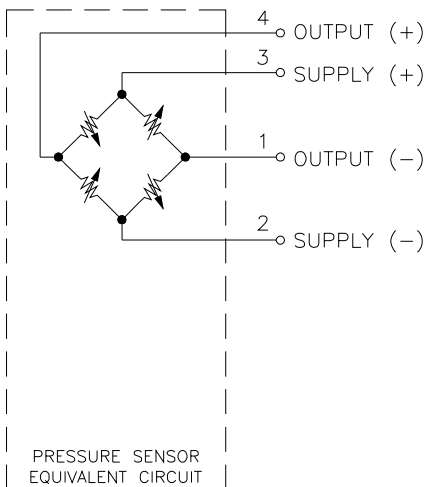
1. Ratiometric to supply voltage. For 250psi devices, the minimum span value is 25mV.
2. Best fit straight line.
3. Over the temperature range 0-50°C with respect to 25°C.
4. For a zero-to-full scale pressure step change.
5. Long term stability over a one year period with constant voltage and temperature.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

# Model 50

## DIMENSIONS



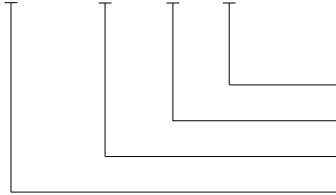
## CONNECTIONS



# Model 50

## ORDERING INFORMATION

50 - 015 A - F



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

Type (A = Absolute)

Pressure Range

Model

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