

RoHS

# **MS4426**

## **SPECIFICATIONS**

- PC Board Mountable Pressure Sensor
- 0-100 mV Output
- Voltage Excitation
- Gage and Absolute
- Temperature Compensated

The MS4426 is a temperature compensated, piezoresistive silicon pressure sensor packaged in a dual-in- line configuration and 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. The pressure sensor is available in absolute or gage pressure ranges from 0-1 to 0-300 psi. The pressure ports are 1/8" barbed ports which mate with 3/32" ID tubing. The tube is vertically mounted to the printed circuit board. For a horizontally mounted tube in differential, gage and absolute pressure, refer to the MS4425.

# FEATURES

- Dual-in-Line Package
- 0°C to 50°C Compensated
- Temperature Range
- ±0.15% Pressure Non Linearity
- Solid State Reliability

## **APPLICATIONS**

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

## **STANDARD RANGES**

Range	psig	psia
0 to 1	•	
0 to 5	*	
0 to 15	*	•
0 to 30	*	*
0 to 50	*	*
0 to 100	*	*
0 to 150	*	*
0 to 300	•	•

# PERFORMANCE SPECIFICATIONS

### Supply Voltage: 12V Ambient Temperature: 25°C (unless otherwise specified) Pressure applied to Port 2

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Span (0-1 psi)	17.6	18	18.4	mV	1
Span (0-5 psi)	58	60	62	mV	1
Span (0-15 to 0-50 psi)	88	90	92	mV	1
Span (0-100 & 0-300 psi)	98	100	102	mV	1
Span (0-150 psi)	148	150	152	mV	1
Zero Pressure Output	-1	±0.2	1	mV	1
Pressure Non Linearity	-0.15		0.15	% Span	2
Pressure Hysteresis	-0.20	±0.05	0.20	% Span	
Input Resistance	5	15	25	ΚΩ	
Output Resistance	3500	5000	6500	Ω	
Temperature Error – Span	-1	0.3	1	% Span	3
Temperature Error – Zero	-0.75	±0.2	0.75	mV	3
Supply Voltage		12	20	V	
Long Term Stability (Offset & Span)		±0.1		mV	4
Pressure Overload			ЗX	Rated	5
Compensated Temperature	0		50	°C	
Operating Temperature	-25		85	°C	
Storage Temperature	-40		125	°C	
Humidity	0		85	% RH	
Weight			3	grams	
Solder Temperature	260ºC Max 5 Se	ec.			6
Media	Non-Corrosive E	Dry Gases Comp	atible with Silicon,	Pyrex,	

RTV, Ceramic & Gold

### Notes

1. Ratiometric to supply voltage.

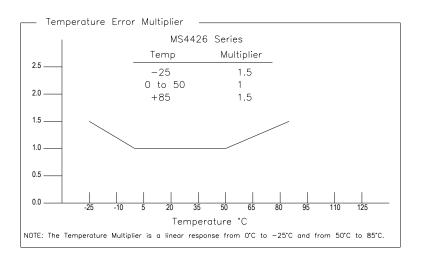
Best fit straight line. Non linearity for 5psi and 150psi devices is 0.25% 2.

Maximum temperature error between 0°C and 50°C with respect to 25°C. For errors beyond the compensated temperature, see 3. Temperature Error Multiplier Chart below. Long term stability over a one year period with constant voltage and temperature.

4.

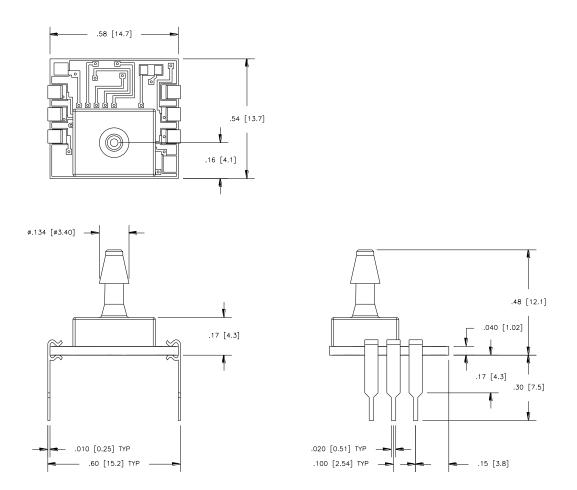
3X or 400 psi max, whichever is less. 5.

For more details refer to 4425/4426 Mounting Application Note. 6.



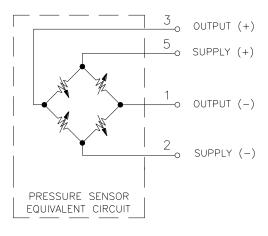
## DIMENSION

DIMENSIONS ARE IN INCHES [mm]



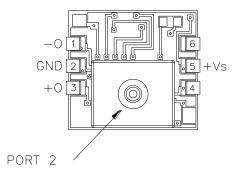
MS4426-XXXG/A

# CONNECTIONS



MS4426-XXXG/A

# PACKAGE STYLE, PINOUT, AND PORT DESIGNATION



MS4426-xxxA/Gy

## **ORDERING INFORMATION**

4426		—	015	Α	F
Model Name					
Pressure Range					
001	005		015		
030	050		100		
150	300				
Pressure Type					
A=Absolute			<b>G</b> =Gage		
Coating					
<b>F</b> =Gel Fill			'Blank'=No Fill		

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