



## **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			3X	Rated	5	
Compensated Temperature	0		50	ōC		
Operating Temperature	-25		85	ōC		
Storage Temperature	-40		125	ōC		
Humidity	0		85	% RH		
Weight			3	grams		
Solder Temperature	260ºC Max 5 Se	ec.			6	
Media	Non-Corrosive D	Non-Corrosive Dry Gases Compatible with Silicon, Pyrex,				

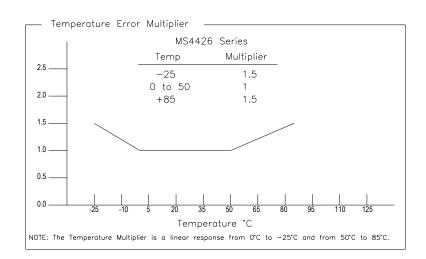
Notes

1. Ratiometric to supply voltage.

- 2. Best fit straight line. Non linearity for 5psi and 150psi devices is 0.25%
- 3. Maximum temperature error between 0°C and 50°C with respect to 25°C. For errors beyond the compensated temperature, see Temperature Error Multiplier Chart below.

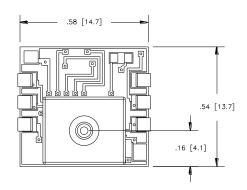
RTV, Ceramic & Gold

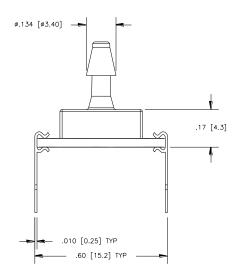
- 4. Long term stability over a one year period with constant voltage and temperature.
- 5. 3X or 400 psi max, whichever is less.
- 6. For more details refer to 4425/4426 Mounting Application Note.

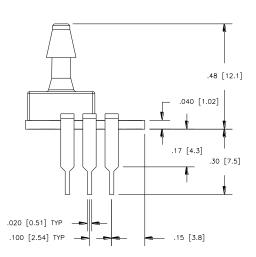


### **DIMENSION**

DIMENSIONS ARE IN INCHES [mm]

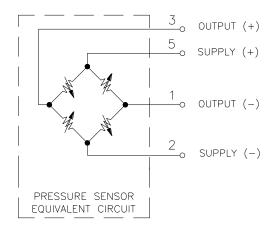






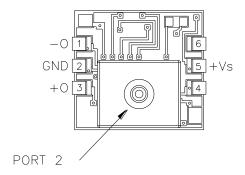
MS4426-XXXG/A

### **CONNECTIONS**

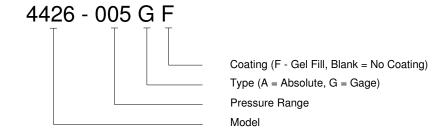


MS4426-XXXG/A

## PACKAGE STYLE, PINOUT, AND PORT DESIGNATION



#### **ORDERING INFORMATION**



# 联系方式



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