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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!



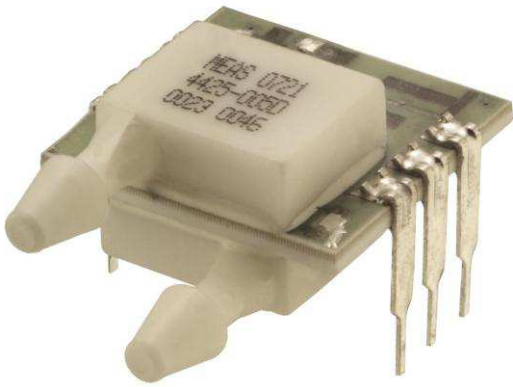
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✓RoHS

## MS4425

### SPECIFICATIONS

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

The MS4425 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, gage or differential pressure ranges from 0-1 to 0-300 psi. The pressure ports are 1/8" barbed ports which mate with 3/32" ID tubing. These tubes are parallel to the printed circuit board to allow other boards to be located above the sensor. For a vertical mounted tube in gage or absolute pressure, refer to the MS4426.

## 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 and Airspeed Measurements
- Process Control
- Factory Automation
- Leak Detection

## STANDARD RANGES

Range	psid	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

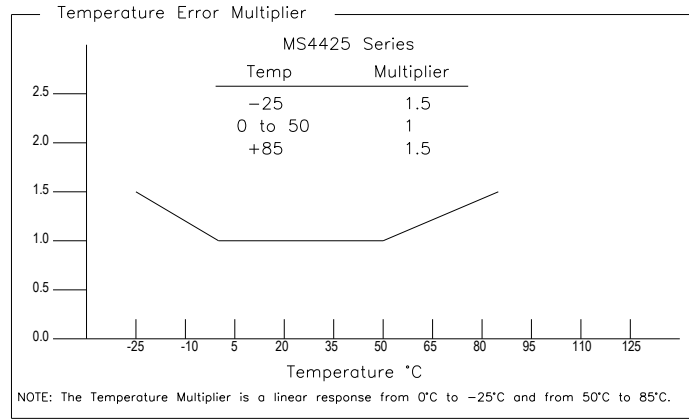
Ambient Temperature: 25°C (unless otherwise specified)

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 (Gage & Absolute)	-0.15		0.15	% Span	2
Pressure Non Linearity (Differential)	-0.25		0.25	% Span	2
Pressure Hysteresis	-0.20	±0.05	0.20	% Span	
Input Resistance	5	15	25	KΩ	
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 (Differential)			3X	Rated	5
Common Mode Pressure			400	psi	
Compensated Temperature	0		50	°C	
Operating Temperature	-25		85	°C	
Storage Temperature	-40		125	°C	
Humidity	0		85	% RH	
Weight			3	grams	
Solder Temperature	260°C Max 5 Sec.				6
Media	Non-Corrosive Dry Gases Compatible with Silicon, Pyrex, RTV, Ceramic & Gold				

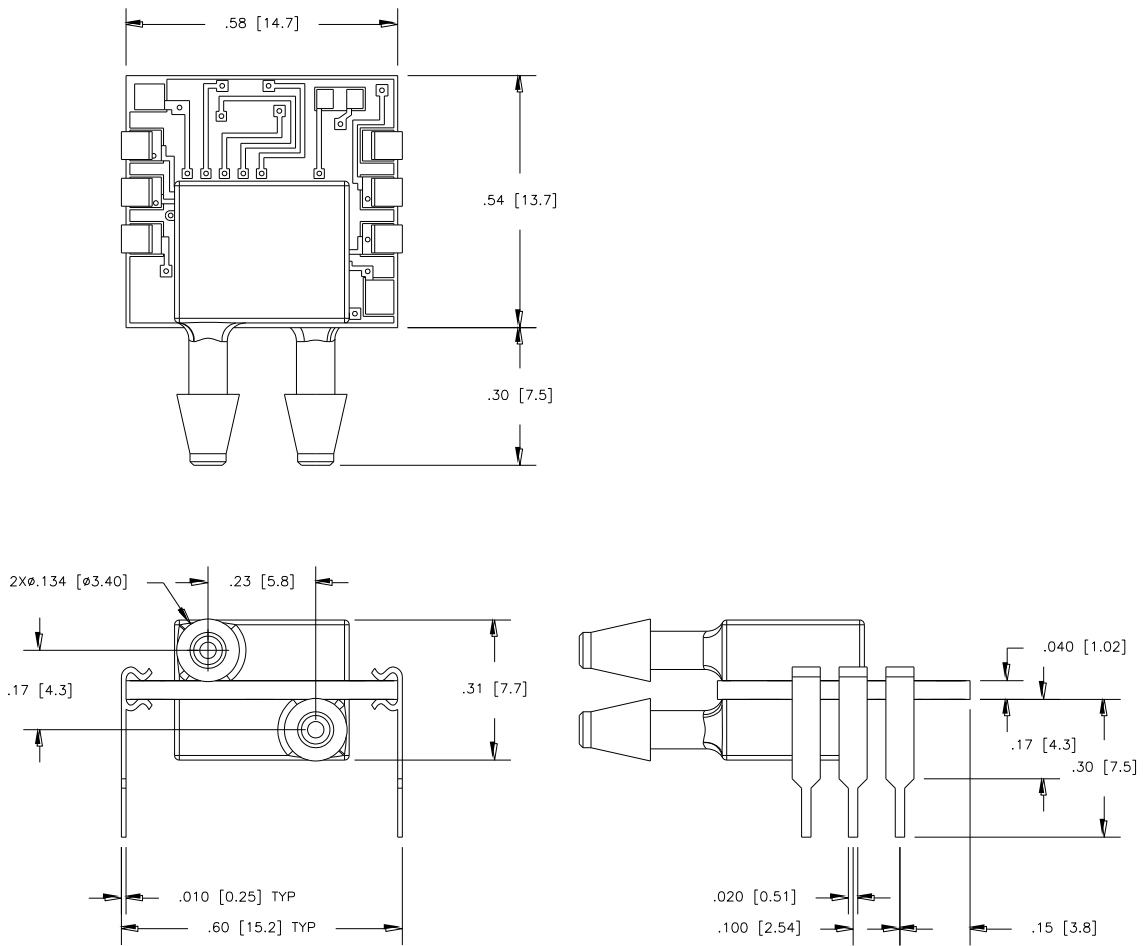
## Notes

1. Ratiometric to supply voltage.
2. Best fit straight line. Non linearity for 5 psi Differential devices is 0.75%.
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.
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.



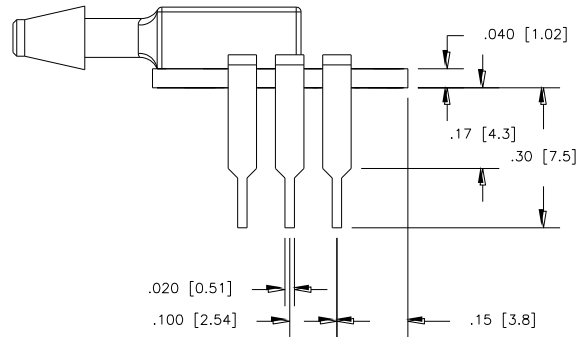
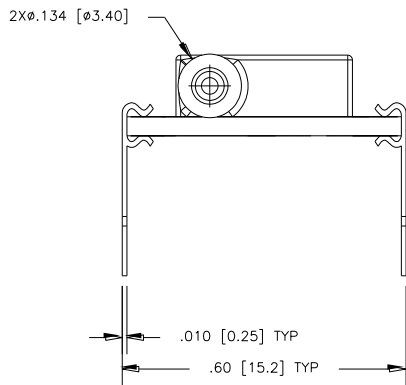
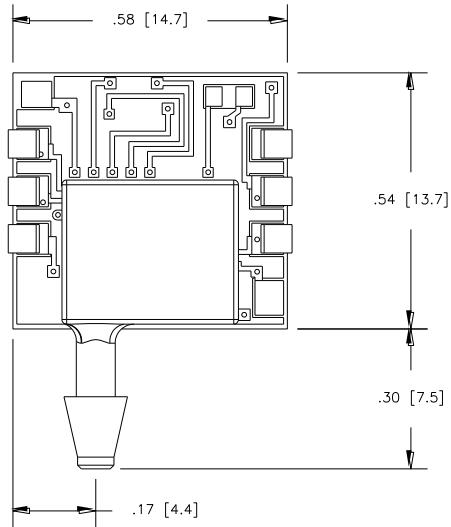
DIMENSION

DIMENSIONS ARE IN INCHES [mm]



MS4425-xxxDy

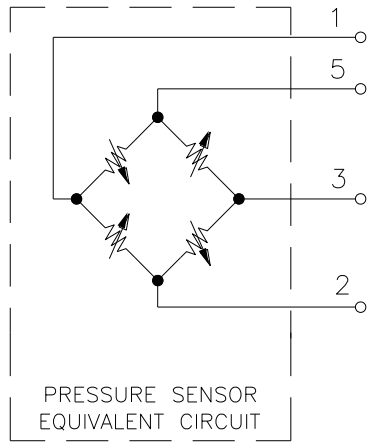
DIMENSIONS ARE IN INCHES [mm]



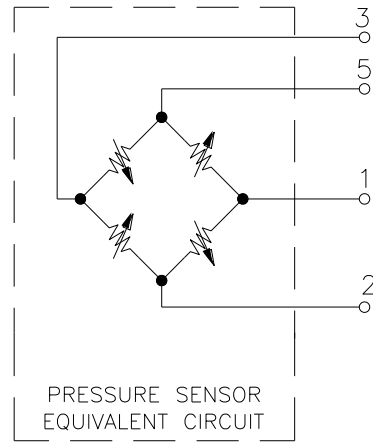
MS4425-xxxA/Gy



CONNECTIONS

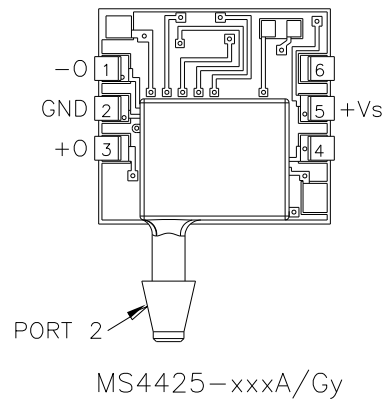
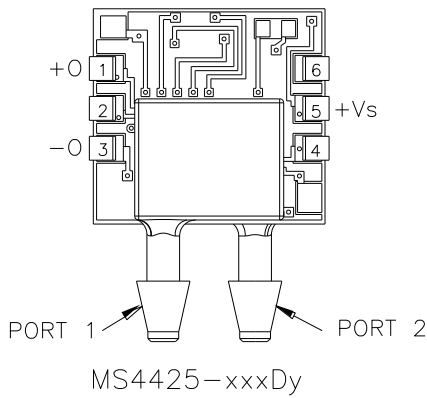


MS4425-XXXD



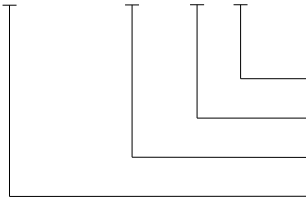
MS4425-XXXA/G

PACKAGE STYLE, PINOUT, AND PORT DESIGNATION



ORDERING INFORMATION

4425 - 005 D F



Coating (F - Gel Fill, Blank = No Coating)  
Type (D = Differential, A = Absolute, G = Gage)  
Pressure Range  
Model

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