

## DMP015A-1 Silicon Pressure Sensor

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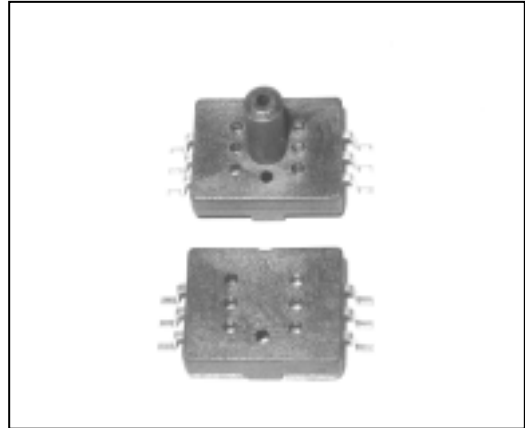
### Description

The DMP series is a silicon micro-machined piezoresistive pressure sensor that gives high sensitivity output and highest accuracy. DMP series is designed for low cost high performance consumer electronic applications.

### Features

- High Sensitivity Output 140mV @ EX+ 5.00V
- Constant Current Or Constant Voltage Drive
- Very Low Cost For High Volume Application
- Small Size SMD package
- Excellent Linearity
- Offset Trimming Possible
- Silicon Solid State Reliability

DMP Series Package



### Applications

- Barometer, Weather Station, Altitude Meter
- Pressure Control
- Vacuum Measure
- Pneumatic Gages
- Hand-held Meter
- Home Appliances

### Descriptions

This pressure sensor is intended for very high volume application such as consumer electronic devices.

DMP015A-1 is designed for barometer, weather station where the sensitivity, stability and cost are critical factors.

### P/N Format

DMP - 015 A - 1 - T

DMP Series

015 Pressure range PSI

A, G A = Absolute

G = Gauge

1 High sensitivity version

T Tube

Custom pressure range and specification available in high volume request.

## DMP015A-1 Silicon Pressure Sensor

### Characteristics

All parameters are measured at 5.000V DC supply at room temperature, unless otherwise specified

Parameters	Unit	Min.	Typ.	Max.	Notes
Pressure Range	PSIA		15		
Excitation Voltage	V	0.0	5.0	10.0	1
Excitation Current	mA	0.0	1.00	1.25	1
SPAN (FS Range)	mV	110.0	140.0	170.0	
DC Output	mV	75.0	140.0	210.0	
Offset	mV	-35.0	-0.0	+35.0	
TC SPAN	PPM / °C	-2500	-2100	-1700	2
TC Offset	PPM / °C	-800	0	+800	2
TC Resistance	PPM / °C		+600		2
Linearity	%FS	-0.3	-0.1	+0.3	3
Bridge Resistance	KΩ	4.0	5.0	6.0	
Hysteresis	%FS		±0.2		
Proof Pressure	Rated FS	3X			
Burst Pressure	Rated FS	5X			
Operating Temperature	°C	-40		+125	
Storage Temperature	°C	-40		+125	

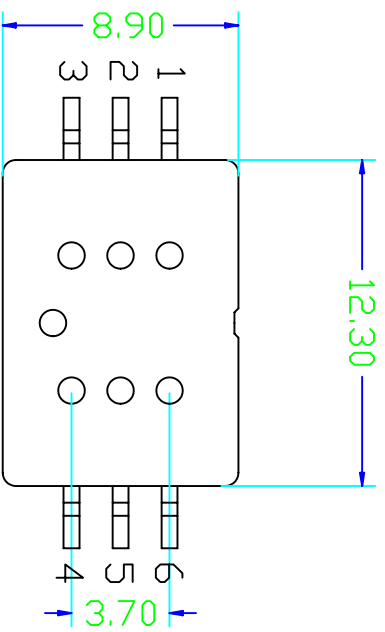
### Notes

1. Sensor may be driven with positive or negative excitation, positive output for positive pressure applied to circuit side of die when sensor is driven with positive voltage.
2. TCS, TCO, TCR are measured from 0°C to +50°C, not full test in production, but guaranteed by design.
3. Defined as best fit straight line (BFSL).

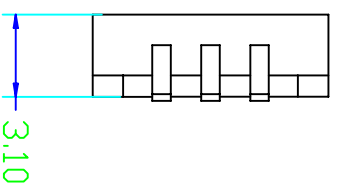
### Media compatibility

Clean, dry air and non-corrosive gases.

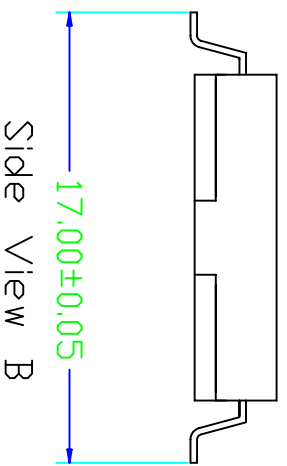
# DMP015A Silicon Pressure Sensor Package Outline Dimension



Top View



Side View A



Side View B

Pin	Signal
1	-EX
2	+□/P
3	+EX
4	+EX
5	-□/P
6	-EX