

NPP Surface Mount Pressure Sensor

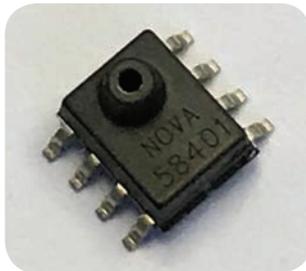
The NPP Series of Surface Mount Pressure Sensors features a miniature ultra-high stability SenStable[®] piezoresistive chip placed in a surface mount plastic package. The sensor monitors pressure in industrial and automotive applications by producing a voltage output that is linearly proportional to the input pressure. The user can add signal conditioning circuitry to amplify the output signal or to maximize OEM value added.

Features

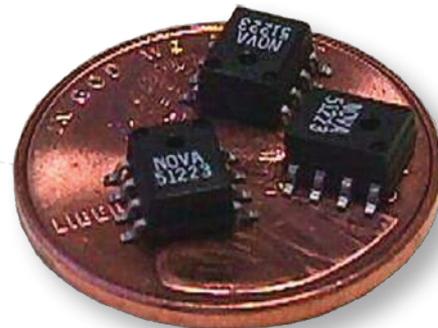
- Absolute Pressure Ranges: 100, 200, 700 kPa (15, 30, 100 psi)
- Ultra-small, ultra-high stability with Silicon Fusion Bonded MEMS chip
- Miniature Surface Mount Package: SOIC-8
- Low power requirement (3 VDC)
- Operating Temperature: -40°F to 257°F (-40°C to 125°C)
- Accuracy: <0.2% FSO
- Available in ported and non-ported versions
- Compatible with most non-corrosive gases and dry air

Applications

- Automotive Tire Pressure
- Industrial Process Control
- Consumer Appliances
- Altimeters and Barometers



NPP-301B
(ported)



Specifications

Parameter	Units	Min.	Type	Max.	Notes
Performance Parameters (Note 2)					
Offset	mV/V		±10		
Full Scale Output	mV		60 ±20		
Linearity	%FSO		±0.20		3
Hysteresis and Repeatability	%FSO		0.1		
Thermal Coefficient of Zero	%FSO/°C		0.04		4
Thermal Coefficient of Resistance	%/°C		0.3		4
Thermal Coefficient of Sensitivity	%FSO/°C		-0.2		4
Thermal Hysteresis of Zero	%FSO		0.1		5
Long-Term Stability of FSO	%FSO		0.2		6

1. Standard IC industry bake operations should be used prior to surface mount operations. Consult NovaSensor for further information.
2. Values measured at 3 VDC and 77°F (25°C), unless otherwise noted.
3. Best fit straight line.
4. Typical coefficients, between 32°F to 158°F (0° to 70°C).
5. 32°F to 158°F (0° to 70°C).
6. Typical value over one year.