NIDA

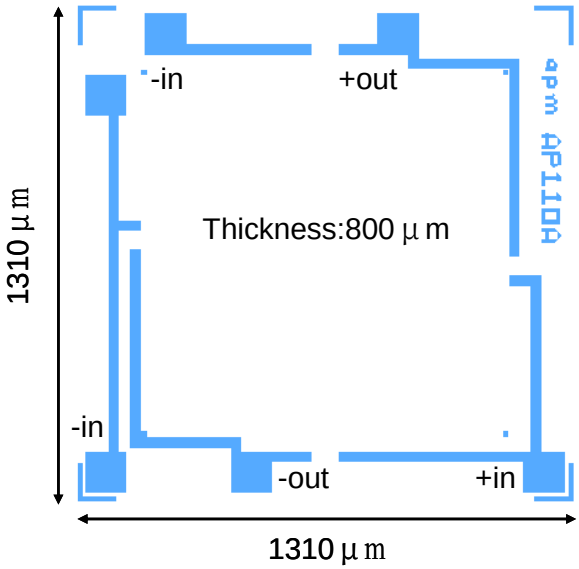
ATP150

SO-8 Pressure Sensor

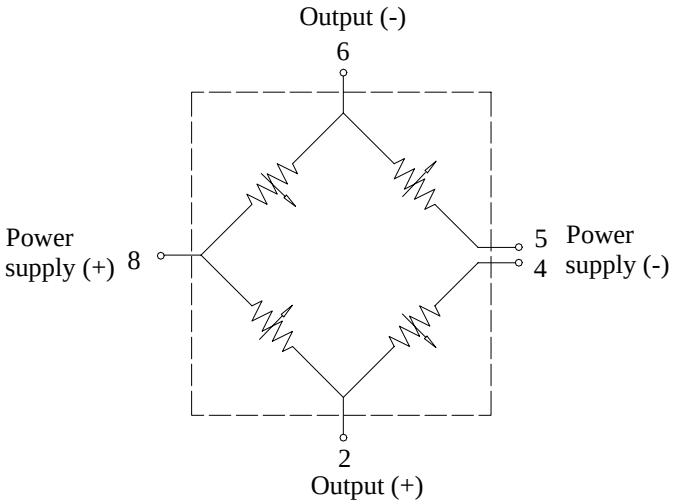
DESCRIPTION

The ATP150 pressure sensor features a micromachined silicon solid-state sensor. All parts in this series are uncompensated high-performance die mounted on a SO-8 package. Pins are designed for surface mount assembly. The ATP150 is ideal for applications requiring low hysteresis, high reliability and stability.

With constant voltage excitation or constant current excitation, the ATP150 produces a voltage output that is linearly proportional to the input pressure. The user can add on external signal conditioning circuitry to amplify the output signal and maximize its performance. The ATP150 is compatible with most noncorrosive gases and dry air.



SCHEMATIC DIAGRAM



FEATURES

- Surface Mount Package
- Low Cost
- Wide operating temperature range: -40℃ to +125℃
- Solid-state reliability
- Easy to use

APPLICATIONS

- Automotive Tire Pressure
- Digital Pressure Gauges
- Consumer & Sports
- Pressure Switches and Controllers

HOW TO ORDER

Part Number:	Description:
ATP1500G5000-B	150 Psia, die
ATP150PG5000-F	150 Psia, SO-8

深圳市联合利德电子有限公司
电话：86-755-8883 6646 传真：86-755-8884 0500
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ATP150 Specifications

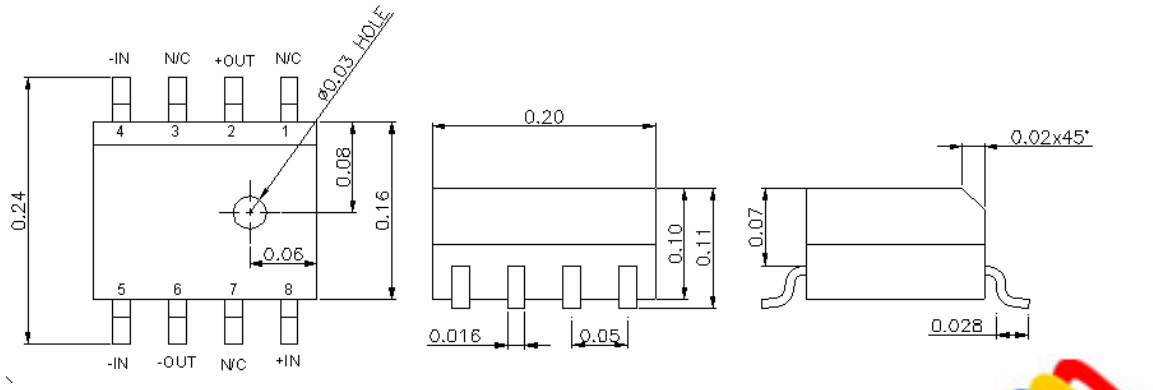
Parameter	Value		Units	Notes
General				
Pressure Range	100	150	PSI	absolute pressure
Maximum Overpressure	2X			rated pressure
Electrical @25°C (77°F) unless otherwise specified				
Excitation	3		VDC	
Input Impedance	4~6		kΩ	
Output Impedance	4~6		kΩ	
Environmental				
Operating Temperature Range	-40~+125		℃	-40 °F ~+257°F
Storage Temperature Range	-40~+125		℃	-40 °F ~+257 °F
Mechanical				
Weight	<1.0		Grams	
Footprint	SO-8			
Media Compatibility	Clean, dry air & noncorrosive gases			
Performance(1)				
Zero Offset	±30		mV	
Span	125±30	175±35	mV	
Bridge Resistance	4~6		kΩ	
Linearity	±0.3		% Span	2
Hysteresis	±0.3		% Span	
Temperature Coefficient of Zero Offset	-0.08~+0.08		% Span/ ℃	3
Temperature Coefficient of Span	-0.1~-0.3		%Span/ ℃	3

Notes: 1. All values are Minimum/Maximum and are measured at 3 VDC and 25 ℃ unless otherwise specified.

2. Best fit straight line.

3. Between -20 ℃ and 100 ℃. Temperature coefficients are typical values.

PACKAGE DIAGRAM



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