

ATP150

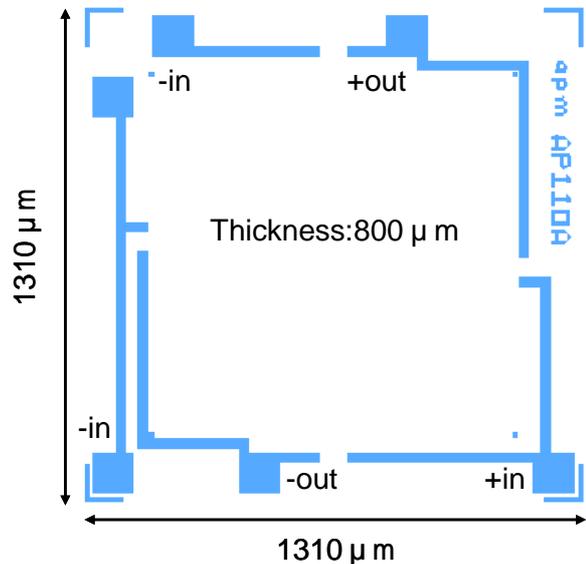
SO-8 Pressure Sensor



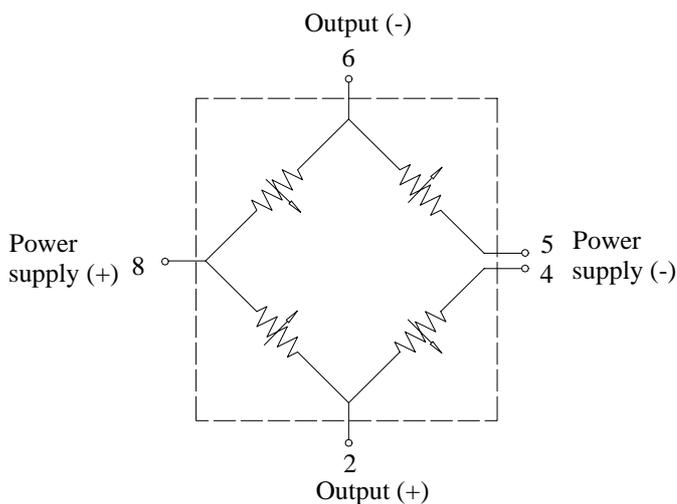
DESCRIPTION

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

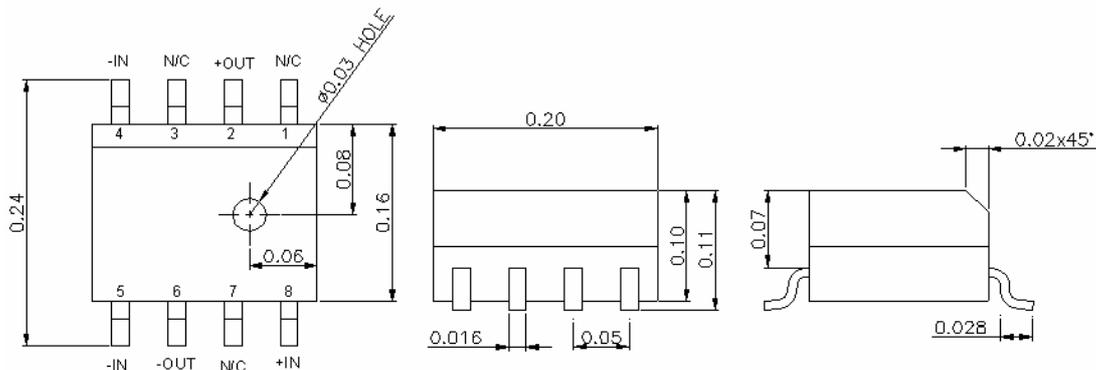
| | |
|----------------|----------------|
| Part Number: | Description: |
| ATP1500G5000-B | 150 Psia, die |
| ATP150PG5000-F | 150 Psia, SO-8 |



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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