



Features

- Uncompensated analog output
- Absolute and gauge types
- For use in clean, dry air and non-corrosive gasses
- Tape and reel packaging
- RoHS compliant*

Applications

Industrial:

- HVAC systems
- Process monitoring
- Packaging automation

Medical Devices (low/medium risk)**:

- Diagnostic equipment
- Analysis equipment

BPS320 Series - 6 mm Analog Low Pressure Sensor

Electrical Characteristics

Supply Voltage (V_S)	5 V typical, 15 V maximum
Supply Current @ 5 V	3.0 mA maximum
Output Current	mV
Impedance	5 $\pm$ 1 k Ω

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Performance Characteristics

Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +160 °C
Pressure Range	15 to 500 psi
Offset	$\pm$ 10 mV/V
Non-linearity	$\pm$ 0.2 % FS
Pressure Hysteresis	$\pm$ 0.1 % FS
Thermal Hysteresis	$\pm$ 0.1 % FS
Temperature Coefficient - Zero	$\pm$ 25 μ V/V/°C
Temperature Coefficient - Resistance	2800 $\pm$ 500 PPM/°C
Temperature Coefficient - Sensitivity	-2200 +700 / -300 PPM/°C
Burst Pressure	2X full scale pressure

Full Scale Output (@ 5 volts)

15 psi	75 $\pm$ 15 mV
50 psi	125 $\pm$ 25 mV
100 psi	150 $\pm$ 30 mV
300 psi	150 $\pm$ 30 mV
500 psi	175 $\pm$ 35 mV

Product Characteristics

Media Compatibility	Non-corrosive dry gasses
Moisture Sensitivity Level	2
ESD Classification (HBM)	2 kV
Marking	Bourns "B", model number, pressure, date code
Standard Packaging	500 pcs./reel
Weight	0.232 grams

Consult factory for custom options such as supply voltage, temperature calibration range, output range, accuracy specification and update rate.

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*RoHS3 Directive 2015/863 Amendments of Annex II on Mar 31, 2015.

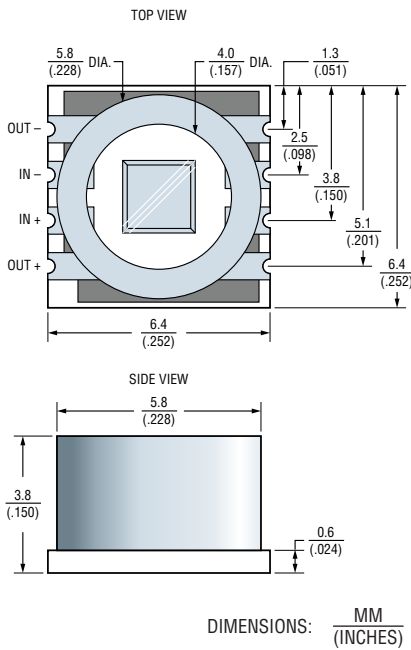
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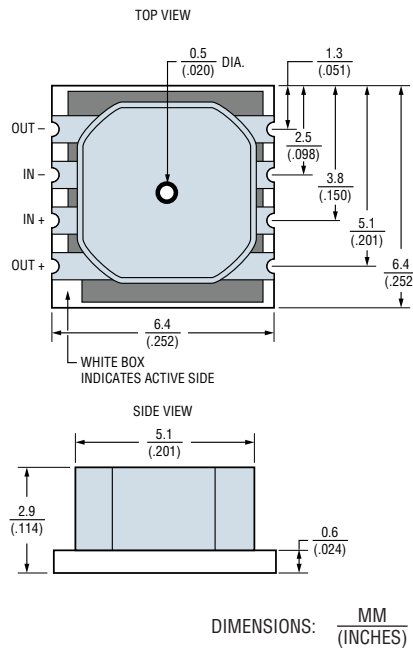
BPS320 Series – 6 mm Analog Low Pressure Sensor

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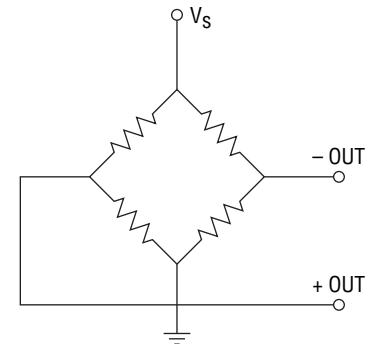
Ceramic Chimney Dimensions



Manifold Mount Dimensions



Basic Circuit Schematic



How To Order

BPS320 - A A 015P - 4 M G

Model Series _____
 Uncompensated, mV Output

Media Compatibility _____
 A = Air/Gas

Pressure Type _____
 G = Gauge
 A = Absolute

Pressure (psi) _____
 015P = 15 psi
 050P = 50 psi
 100P = 100 psi
 500P = 500 psi

Terminal Pins _____
 4 = Surface Mount, No Terminals

Port Style _____
 C = Ceramic Chimney
 K = Ceramic Chimney with Gel (Gel not available for 500 psi)
 M = Manifold Mount

Packaging Designator _____
 G = 500 pcs. per 13-inch Reel

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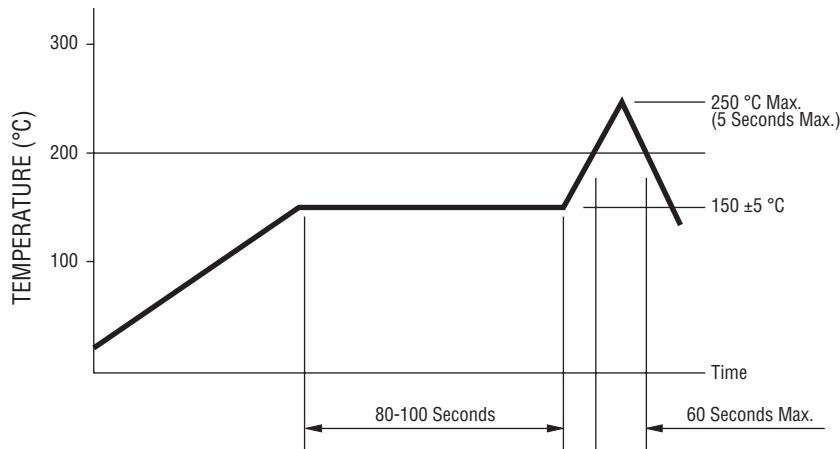
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BPS320 Series – 6 mm Analog Low Pressure Sensor

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Solder Profile



Processing Method: Reflow soldering with infrared heat or forced air convection (only once).

Notes:

1. No clean solder paste is recommended.
2. Aqueous wash is not recommended.
3. Use of water soluble soldering flux should be avoided due to possible corrosion.
4. Multiple passes through the soldering process is not recommended.
5. Other SMD processes and profiles should be verified by the customer.

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