

## 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 <sub>S</sub> ) .....	5 V typical, 15 V maximum
Supply Current @ 5 V .....	3.0 mA maximum
Output Current .....	mV
Impedance .....	5 ±1 kΩ

### Additional Information

Click these links for more information:



### Performance Characteristics

Operating Temperature .....	-40 °C to +85 °C
Storage Temperature .....	-55 °C to +160 °C
Pressure Range .....	15 to 500 psi
Offset .....	±10 mV/V
Non-linearity .....	±0.2 % FS
Pressure Hysteresis .....	±0.1 % FS
Thermal Hysteresis .....	±0.1 % FS
Temperature Coefficient - Zero .....	±25 μV/V/°C
Temperature Coefficient - Resistance .....	2800 ±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 ±15 mV
50 psi .....	125 ±25 mV
100 psi .....	150 ±30 mV
300 psi .....	150 ±30 mV
500 psi .....	175 ±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.

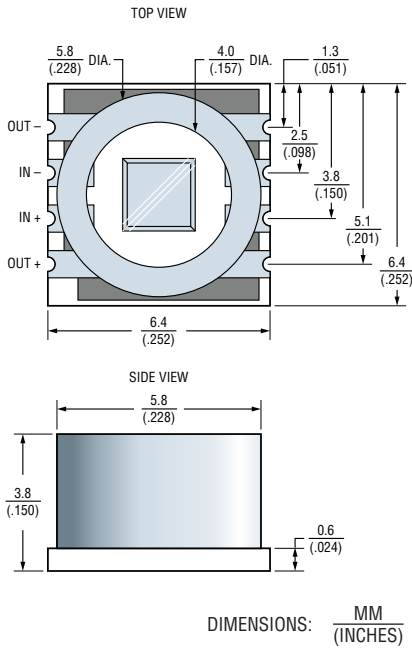
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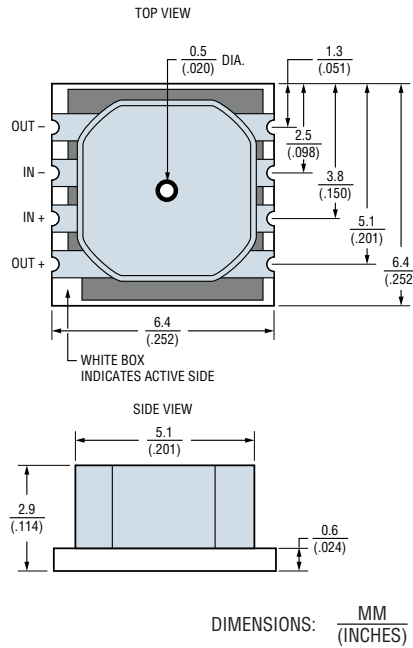
# BPS320 Series – 6 mm Analog Low Pressure Sensor



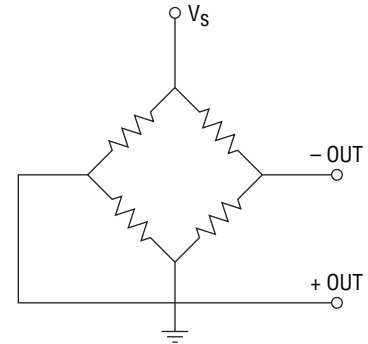
## Ceramic Chimney Dimensions



## 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

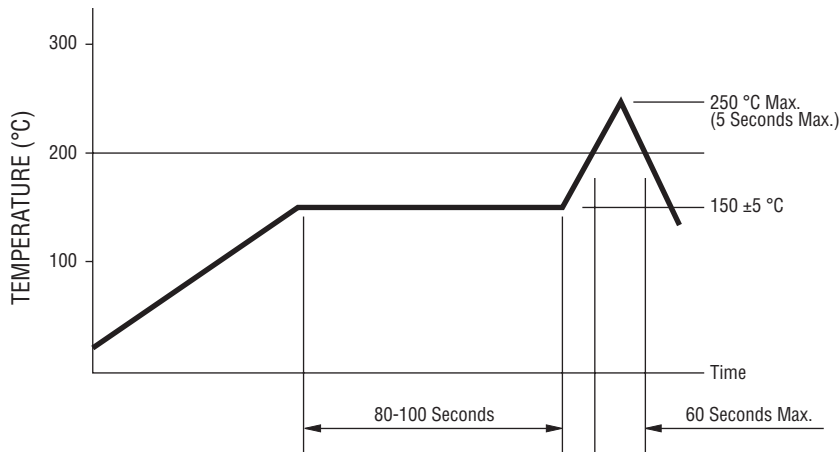
Terminal Pins \_\_\_\_\_  
 4 = Surface Mount, No Terminals

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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## Solder Profile



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

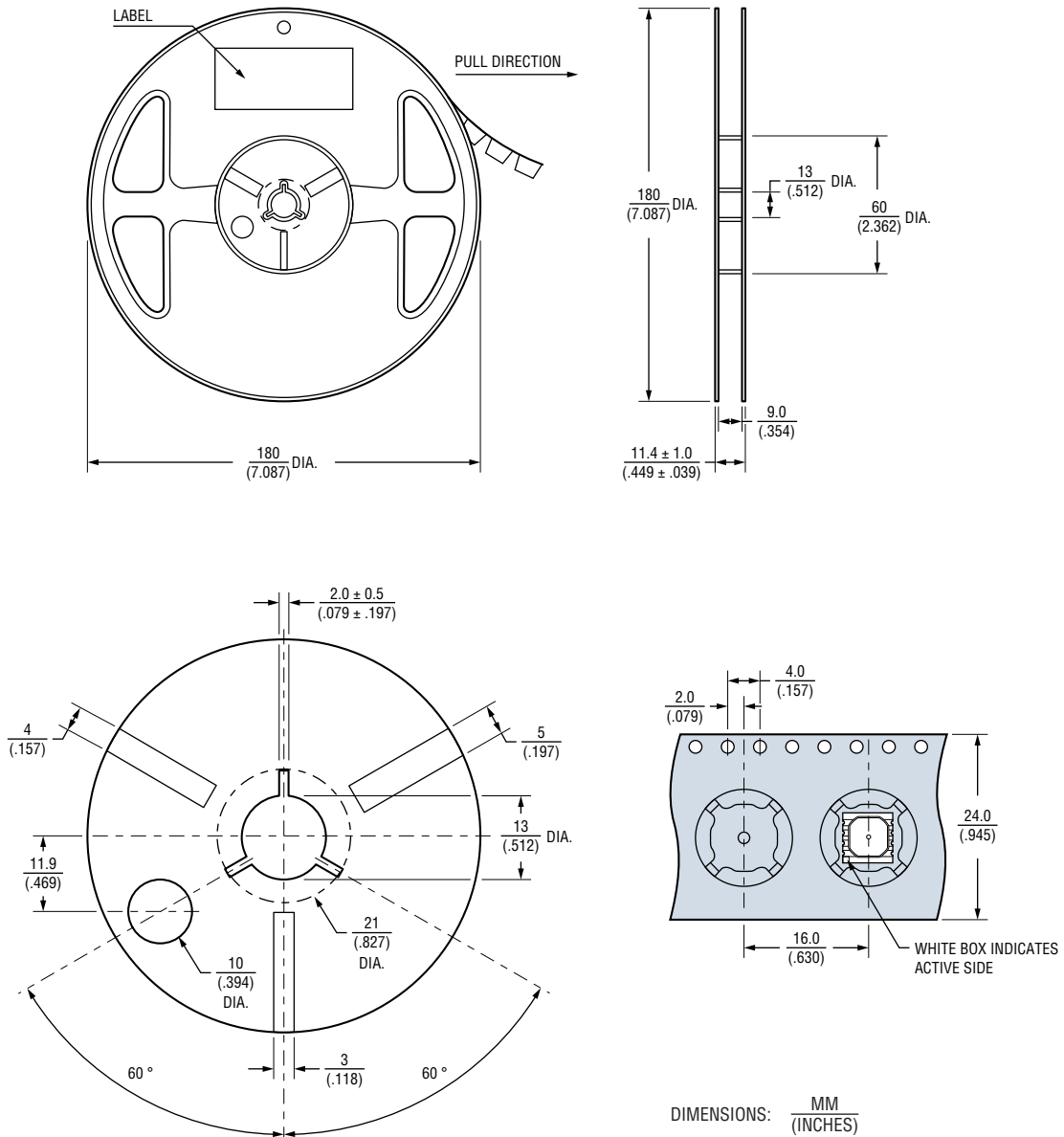
### Notes:

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.

# BPS320 Series – 6 mm Analog Low Pressure Sensor

**BOURNS®**

## Packaging Specification



REV. 08/21

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