

Features

- Uncompensated analog output
- Absolute and gauge types
- For use in clean, dry air and non-corrosive gasses
- Tray packaging
- Optional ceramic chimney
- Optional gel coating for condensing applications
- RoHS compliant*

BPS330 Series - 8 mm Analog Medium Pressure Sensor

Electrical Characteristics

Supply Voltage (V _S)	1.5 V minimum, 5 V typical, 15 V maximum
Supply Current @ 5 V	1.25 mA maximum
Output	mV
Impedance	5 ±1 kΩ

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Performance Characteristics

Operating Temperature	-40 °C to +125 °C
Storage Temperature	-55 °C to +125 °C
Pressure Range	5 to 60 psi
Offset ¹	0 ±10 mV/V
Non-linearity ² (Standard)	±0.25 % FS
Non-linearity ² (50 psi)	±0.15 % FS
Pressure Hysteresis	±0.1 % FS
Thermal Hysteresis ³	±0.1 % FS
Temperature Coefficient - Zero ⁴	±25 μV/V/°C
Temperature Coefficient - Resistance ⁴	3100 +400/-600 PPM/°C
Temperature Coefficient - Sensitivity ⁴	-2000 ±500 PPM/°C
Burst Pressure	245 psi

Full Scale Output (@ 5 volts)

5 psi	133 +27/-26 mV
15 psi	150 ±30 mV
30 psi	160 ±32 mV
50 psi	133 +27/-26 mV
60 psi	160 ±32 mV

Product Characteristics

Media Compatibility	Non-corrosive dry gasses
Moisture Sensitivity Level	1
ESD Classification (HBM)	2 kV
Marking	Bourns "B", model number, pressure, date code
Standard Packaging	100 pcs./tray
Weight	0.474 grams

Notes:

¹ Zero pressure, gauge only, at 25 °C

² Best fit straight line at 25 °C

³ Zero pressure

⁴ -40 °C to +85 °C

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

Specifications are subject to change without notice.

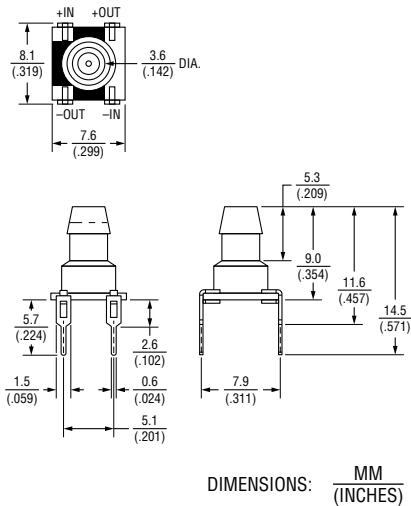
Users should verify actual device performance in their specific applications.

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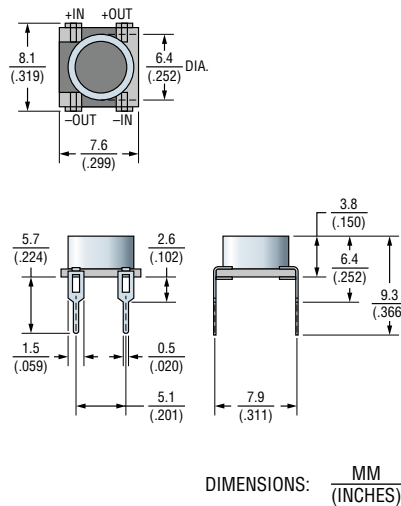
BPS330 Series – 8 mm Analog Medium Pressure Sensor

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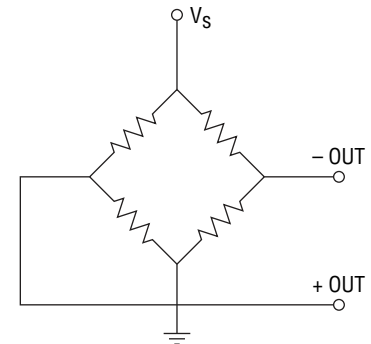
Aluminum Barb Dimensions



Ceramic Chimney Dimensions



Basic Circuit Schematic



Transfer Function Formula

$$V_{out} = (26.7 * P) + \text{Offset} \pm \text{Error}$$

Where

Offset	= 0 mV
Error	= 0 mV
V_s	= 5.0 V
TEMP	= 25 °C

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

How To Order

BPS330 - A A 015P - 3 S

Model Series _____
Uncompensated, mV Output

Media Compatibility _____
A = Air/Gas

Pressure Type _____
G = Gauge
A = Absolute

Pressure _____
005P = 5 psi
015P = 15 psi
030P = 30 psi
050P = 50 psi
060P = 60 psi

Terminal Pins _____
3 = Vertical Terminal Pins

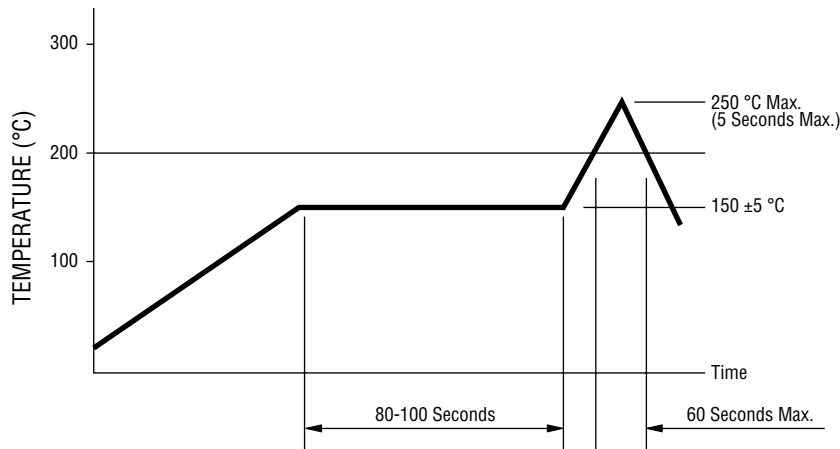
Port Style _____
C = Ceramic Chimney
K = Ceramic Chimney with Gel
S = Single Port
T = Single Port with Gel

Packaging Designator _____
(blank) = 100 pcs. per Tray

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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.

BOURNS®

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

www.bourns.com

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