



## Features

- Surface mount
- Gauge pressure
- Improved linearity
- Digital I<sup>2</sup>C
- RoHS compliant\*

## Applications

- Medical equipment\*\* (low to medium risk)
- White goods
- Industrial P/I
- Process control

# BPS170 Series – 10 mm Digital Pressure Sensor

### Electrical Characteristics

Supply Voltage (V <sub>s</sub> )	4.75 V minimum, 5 V typical, 5.25 V maximum
Supply Current @ 5 V	2.2 mA typical, 3.2 mA maximum
Stand-by Current	0.8 μA typical, 1.5 μA maximum

### Performance Characteristics

Operating Temperature	-20 °C to +100 °C (-4 °F to +212 °F)
Storage Temperature	-40 °C to +125 °C (-40 °F to +257 °F)
Output	Digital I <sup>2</sup> C
Accuracy at 20 °C to 40 °C	±1.8 % FS
Total Error Band	±2.5 % FS
Lifetime Drift	±0.5 % FS
Startup Time	2 mS max.
Sampling Range	1.2 kHz
Soldering Profile	260 °C, 10 sec.
Solder Reflow	J-STD-020 MSL3

### Product Characteristics

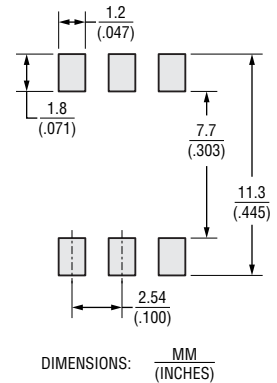
Media Compatibility	Harsh media (air and gas)
Moisture Sensitivity Level	3
ESD Classification (HBM)	2 kV
Marking	Partial model number, media compatibility, pressure type, pressure rating, lot code
Standard Packaging	600 pcs. / 13-inch reel
Weight	0.303 grams (0.0106 oz)

### Additional Information

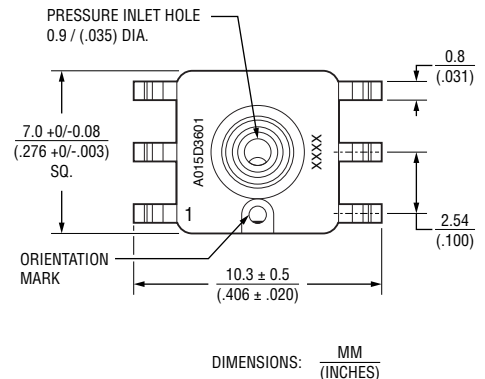
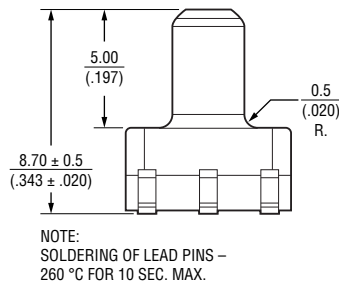
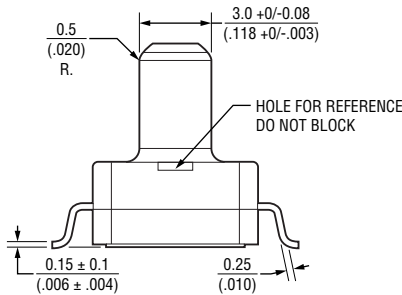
Click these links for more information:



### Recommended Layout



### Product Dimensions



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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Users should verify actual device performance in their specific applications.

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# BPS170 Series – 10 mm Digital Pressure Sensor

**BOURNS®**

## How to Order

**BPS170 - A G 001B - 2 D G**

Model Series \_\_\_\_\_  
 10 mm Digital Pressure Sensor

Media Compatibility \_\_\_\_\_  
 A = Air/Gas

Reference \_\_\_\_\_  
 G = Gauge  
 N = Negative (14.5 psi only)  
 P = Dual Polarity (14.5 psi only)

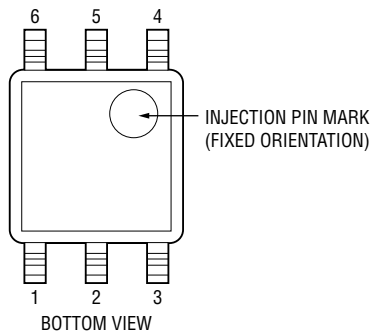
Pressure \_\_\_\_\_  
 001B = 14.5 psi  
 010B = 145 psi

Terminal Pins \_\_\_\_\_  
 2 = Surface Mount Terminals

Port \_\_\_\_\_  
 D = Single Vertical Port

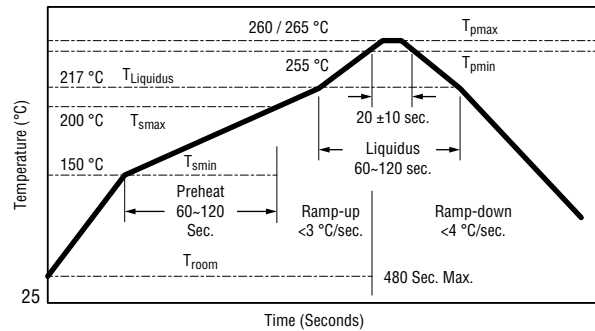
Packaging Designator \_\_\_\_\_  
 G = 600 pcs. per 13-inch reel (standard)  
 H = 100 pcs. per 7-inch reel

## Pin Information



Pin #	Description
1	N.C.
2	SDA
3	SCL
4	V <sub>dd</sub>
5	V <sub>SS</sub>
6	N.C.

## Solder Reflow Recommendations



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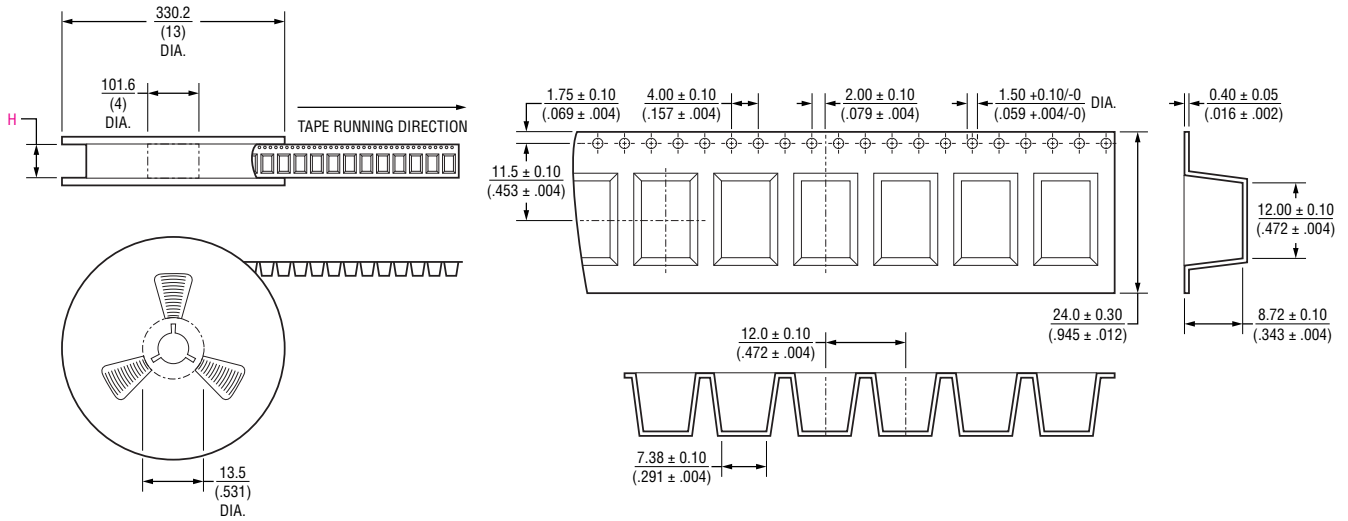
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# BPS170 Series – 10 mm Digital Pressure Sensor

# BOURNS®

## Packaging Specifications



DIMENSIONS:  $\frac{\text{MM}}{\text{INCHES}}$

# BOURNS®

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