



Features

- Surface mount
- Gauge pressure
- Improved linearity
- Digital I²C
- 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 _s)	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 μ A typical, 1.5 μ A 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 ² 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

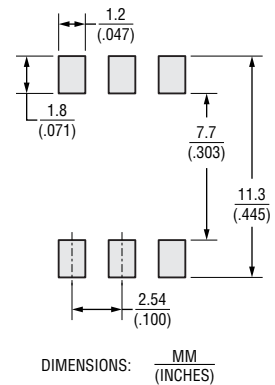
Media Compatibility	Harsh media (air and gas)
Moisture Sensitivity Level	3
ESD Classification (HBM)	2 kV
Marking	Partial model number, media compatibility, pressure type, pressure rating, lot code
Standard Packaging	600 pcs. / 13-inch reel
Weight	0.303 grams (0.0106 oz)

Additional Information

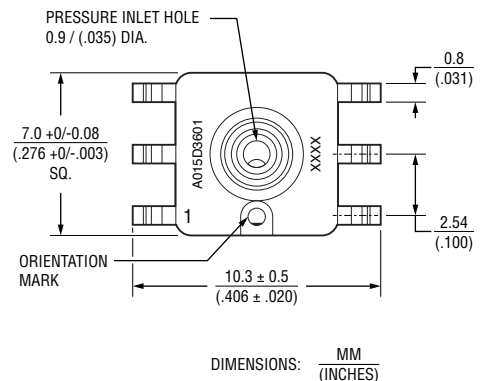
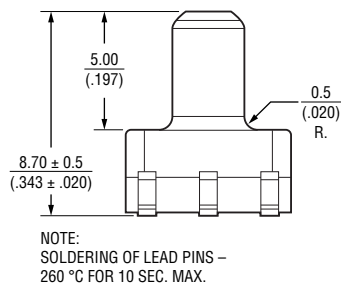
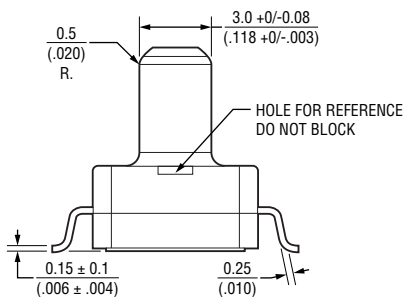
Click these links for more information:



Recommended Layout



Product Dimensions



**WARNING Cancer
and Reproductive Harm**
www.P65Warnings.ca.gov

*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

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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)

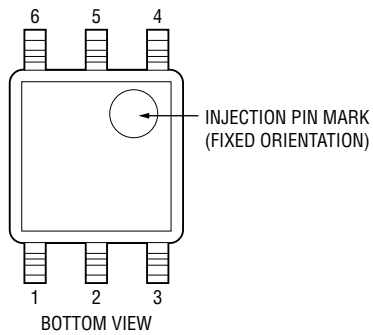
Pressure _____
 001B = 14.5 psi
 010B = 145 psi

Terminal Pins _____
 2 = Surface Mount Terminals

Port _____
 D = Single Vertical Port

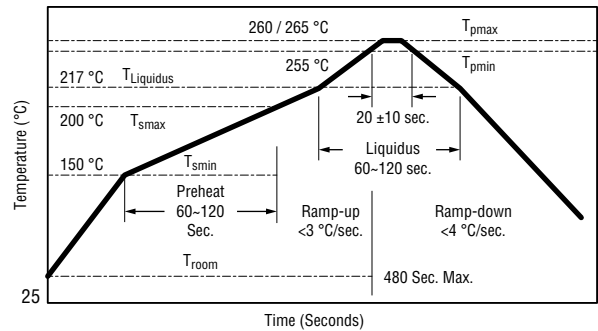
Packaging Designator _____
 G = 600 pcs. per 13-inch reel (standard)
 H = 100 pcs. per 7-inch reel

Pin Information



Pin #	Description
1	N.C.
2	SDA
3	SCL
4	V _{dd}
5	V _{SS}
6	N.C.

Solder Reflow Recommendations



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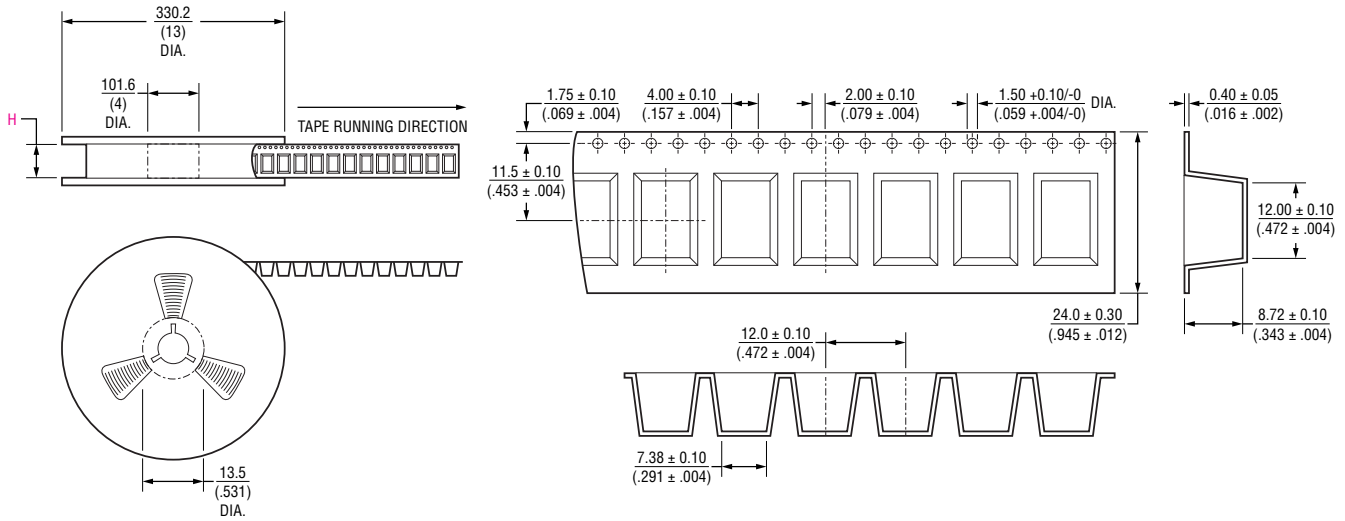
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BPS170 Series – 10 mm Digital Pressure Sensor

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Packaging Specifications



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

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