

## INTRODUCTION

The Bourns® Model BPS170 Pressure Sensor offers a digital data collection solution that is ideal for demanding applications in the industrial, low to medium risk medical\* and consumer markets. Offering accurate gauge pressure measurement in a compact surface mount package, this new pressure sensor family delivers superior performance in ultra-low pressure sensing applications and increases digital system design flexibility. Bourns designed these environmental sensors to provide the highest quality, performance, and reliability.

# **FEATURES**

- · Compact Surface Mount Package
- Accurate Gauge Pressure Measurement
- Improved Linearity
- · Dual Horizontal Port
- RoHS Compliant\*

## **BENEFITS**

- Superior performance in ultra-low pressure sensing applications
- · Increases digital system design flexibility
- Compensated plug and play reduces development time
- Bourns' world-class technical support
- · Access to global supply chain

# **HOW TO ORDER**

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

#### MARKET SEGMENT OVERVIEW

Sensors have become critical components necessary for collecting important system information in a broad range of applications. Features such as self-diagnostics, network compatibility, small form factor and self-calibration are considered essential in best-inclass sensor solutions. "Real time" data analytics are driving the evolution of sensors and sensor networks. Dependable, high precision and ultra-low pressure range sensors that collect all types of pressure and environmental data are needed in a myriad of applications across multiple market segments.

## **APPLICATIONS**

- Medical Equipment (low to medium risk)\*\*
- · White Goods
- Industrial P/I
- Process Control

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

\*\*Bourns® products have not been designed for and are not intended for use in "lifesaving," "life-critical" or "life-sustaining" applications nor any other applications where failure or malfunction of the Bourns® product may result in personal injury or death. See Legal Disclaimer Notice: http://www.bourns.com/docs/legal/disclaimer.pdf.



# Bourns® Model BPS170 Pressure Sensors

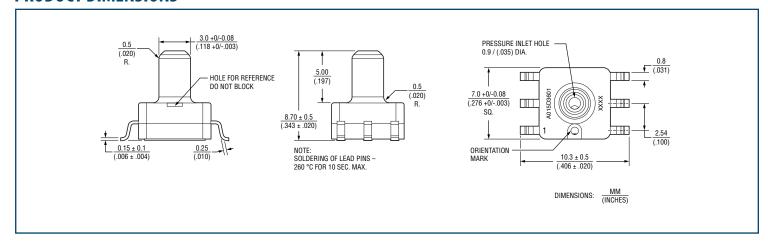


# **PRODUCT CHARACTERISTICS**

Series	Photo	Output	Pressure Type	DAC Resolution	Range	Supply Voltage VDC	Operating Temperature	Total Error Band	Accuracy	Lifetime Drift	Port Style	Terminal
BPS170		Digital I <sup>2</sup> C	Gauge, Differential	13 bit	-14.5 to 145 psi	4.75 to 5.5	-20 °C to +100 °C	±2.5 % FS	±0.2.5 % FS	±0.5 % FS	Single, Vertical	SMD

For full characteristics, see data sheet

# **PRODUCT DIMENSIONS**



www.bourns.com

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

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

BOURNS®

**Asia-Pacific:** Tel +886-2 256 241 17 Email asiacus@bourns.com

> Mexico: Tel +52 614 478 0400 Email mexicus@bourns.com