

Features

- Uncompensated analog output
- Absolute and gauge types
- Direct media monitoring
- Compatible with certain harsh media (backside port only)
- Gold-plated Kovar™ port
- RoHS compliant*

BPS340 Series - 9 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 | 3 mA maximum |
| Output..... | mV |
| Impedance..... | 5 ±1 kΩ |

Additional Information

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Performance Characteristics

| | |
|--|------------------------|
| Operating Temperature..... | -40 °C to +85 °C |
| Storage Temperature..... | -55 °C to +100 °C |
| Pressure Range..... | 15 to 500 psi |
| Offset ¹ | 0 ±10 mV/V |
| Non-linearity ² | ±0.2 % FS |
| Pressure Hysteresis..... | ±0.1 % FS |
| Thermal Hysteresis ³ | ±0.2 % FS |
| Temperature Coefficient - Zero ⁴ | ±25 μV/V/°C |
| Temperature Coefficient - Resistance ⁴ | 2800 ±500 PPM/°C |
| Temperature Coefficient - Sensitivity ⁴ | -2200 +300/-700 PPM/°C |
| Burst Pressure..... | 2X FS |

Full Scale Output (@ 5 volts)

| | |
|--------------|------------|
| 15 psi..... | 75 ±15 mV |
| 100 psi..... | 150 ±30 mV |
| 500 psi..... | 175 ±35 mV |

Product Characteristics

| | |
|---------------------------------|--|
| Media Compatibility..... | Certain harsh media (air, liquid and gasses) |
| Moisture Sensitivity Level..... | 1 |
| ESD Classification (HBM)..... | 2 kV |
| Marking..... | Bourns "B", model number, pressure, date code |
| Standard Packaging..... | 500 pcs./13" reel or 50 pcs./tray |
| Weight..... | 0.325 grams (short port) / 0.450 grams (long port) |

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



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



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

"Kovar" is a trademark of CRS Holdings, Inc., Delaware

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

Specifications are subject to change without notice.

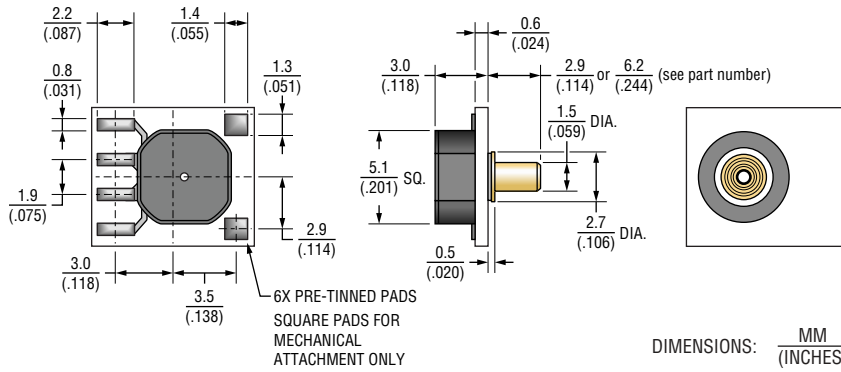
Users should verify actual device performance in their specific applications.

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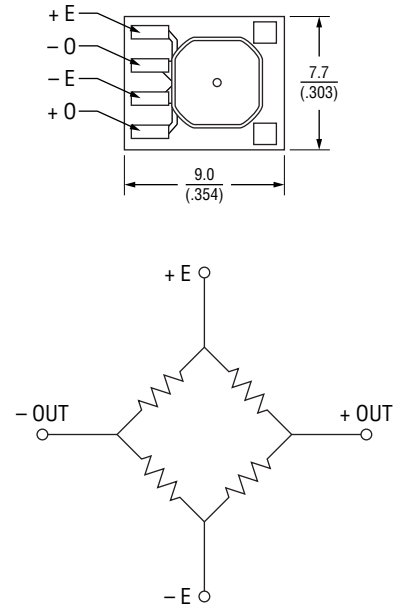
BPS340 Series – 9 mm Analog Medium Pressure Sensor



Dimensions



Basic Circuit Schematic



How To Order

BPS340 - H A 015P - 4 S G

Model Series _____
 Uncompensated, mV Output

Media Compatibility _____
 H = Certain Harsh Media

Pressure Type _____
 G = Gauge
 A = Absolute

Pressure _____
 015P = 15 psi
 100P = 100 psi
 500P = 500 psi

Terminal Pins _____
 4 = Surface Mount, No Terminals

Port Style _____
 S = Single Port, Short (2.9 mm)
 L = Single Port, Long (6.2 mm, tray packaging only)

Packaging Designator _____
 (blank) = 50 pcs. per Tray
 G = 500 pcs. per 13-inch reel

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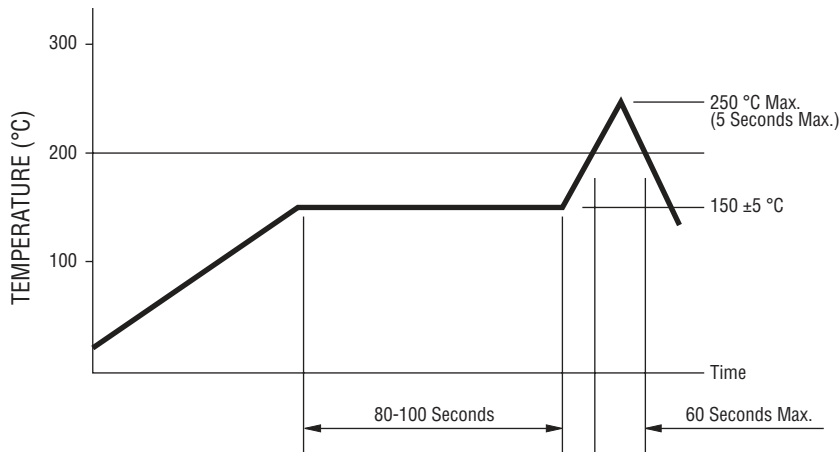
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BOURNS®

Solder Profile

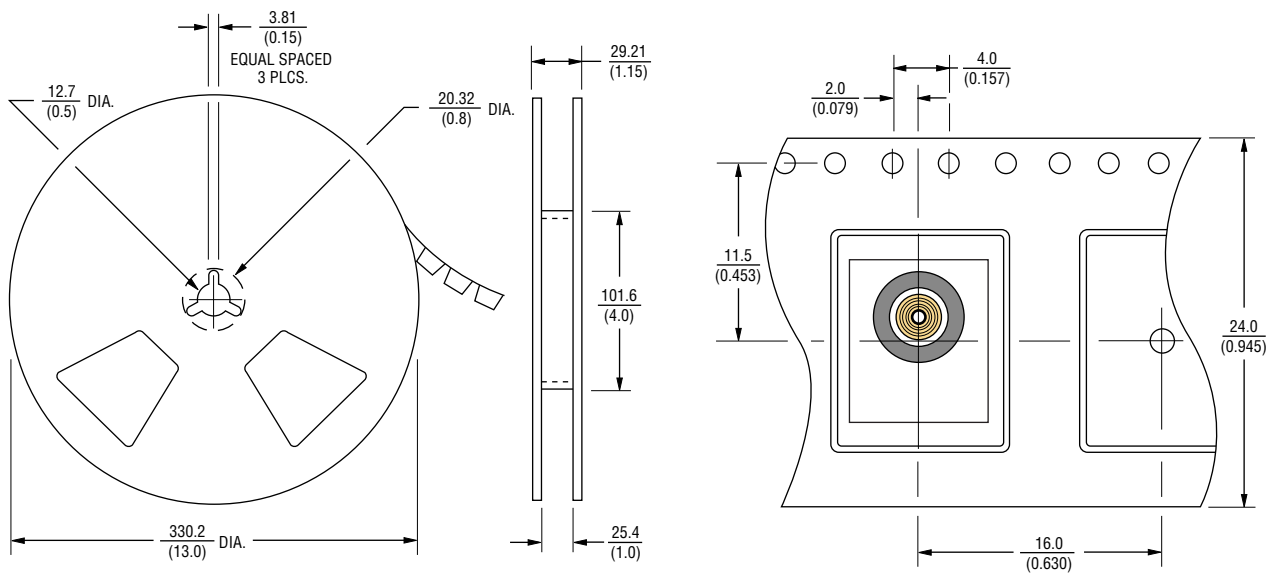


Processing Method: Reflow soldering with infrared heat or forced air convection (only once).

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.

Packaging Specifications



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

REV. 02/23

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