BPS340 Series - 9 mm Analog Medium Pressure Sensor

### Electrical Characteristics

- **Supply Voltage (V<sub>d</sub>):** 1.5 V minimum, 5 V typical, 15 V maximum
- **Supply Current @ 5 V:** 3 mA maximum
- **Output:** 75 ±15 mV
- **Impedance:** 5 ±1 kΩ

### Performance Characteristics

- **Operating Temperature:** -40 °C to +85 °C
- **Storage Temperature:** -55 °C to +100 °C
- **Pressure Range:** 15 to 500 psi
- **Offset:** 0 ±10 mV/V
- **Non-linearity:** ±0.2 % FS
- **Pressure Hysteresis:** ±0.1 % FS
- **Thermal Hysteresis:** ±0.2 % FS
- **Temperature Coefficient - Zero:** ±25 µV/V/°C
- **Temperature Coefficient - Resistance:** -2200 ±300 PPM/°C
- **Temperature Coefficient - Sensitivity:** -2000 ±700 PPM/°C
- **Burst Pressure:** 2X FS

<table>
<thead>
<tr>
<th>Pressure Range</th>
<th>Full Scale Output (@ 5 volts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 psi</td>
<td>75 ±15 mV</td>
</tr>
<tr>
<td>100 psi</td>
<td>150 ±30 mV</td>
</tr>
<tr>
<td>500 psi</td>
<td>175 ±35 mV</td>
</tr>
</tbody>
</table>

### 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)

### Additional Information

Click these links for more information:

- [PRODUCT](#)
- [TECHNICAL LIBRARY](#)
- [INVENTORY](#)
- [SAMPLES](#)
- [CONTACT](#)

### 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

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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**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value (mm)</th>
<th>Value (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width 1</td>
<td>2.2</td>
<td>0.087</td>
</tr>
<tr>
<td>Height 1</td>
<td>0.8</td>
<td>0.031</td>
</tr>
<tr>
<td>Width 2</td>
<td>1.4</td>
<td>0.055</td>
</tr>
<tr>
<td>Height 2</td>
<td>1.3</td>
<td>0.051</td>
</tr>
<tr>
<td>Width 3</td>
<td>3.9</td>
<td>0.153</td>
</tr>
<tr>
<td>Height 3</td>
<td>2.9</td>
<td>0.115</td>
</tr>
<tr>
<td>Body DIA.</td>
<td>0.6</td>
<td>0.024</td>
</tr>
<tr>
<td>Body SQ.</td>
<td>5.1</td>
<td>0.201</td>
</tr>
<tr>
<td>SQ. DIA.</td>
<td>1.5</td>
<td>0.059</td>
</tr>
<tr>
<td>DIA.</td>
<td>2.7</td>
<td>0.106</td>
</tr>
</tbody>
</table>

**Basic Circuit Schematic**

**How To Order**

Model Series: BPS340 - H A 015P - 4 S G

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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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: MM (INCHES)
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