Features
- Double contacts offer high reliability
- Low contact resistance
- Self-clean on contact area
- Splay terminals allow for automatic insertion by IC insertion machine
- Straight terminals are available for manual insertion
- RoHS compliant*

SND Series DIP Switch (Machine Insertable Type)

Electrical Characteristics
- Electrical Life: 2,000 operations min. per switch, 24 VDC, 25 mA
- Non-Switching Rating: 100 mA, 50 VDC
- Switching Rating: 25 mA, 24 VDC
- Contact Resistance: 50 microhms max. at initial 100 microhms max. after life test
- Insulation Resistance: 100 megohms min.
- Dielectric Strength: 500 VAC/minute
- Capacitance: 5 pF max. between adjacent closed switch circuit
- Single pole single throw

Environmental Characteristics
- Mechanical Life: 2,000 operations per switch
- Operation Force: 1,000 g max.
- Stroke: 1.0 mm
- Operating Temp. Range: -20 °C to +85 °C
- Storage Temperature: -40 °C to +85 °C
- Vibration Test: MIL-STD-202F, Method 219A
- Frequency: 10-55-10 Hz/minute
- Directions: X, Y, Z, three mutually perpendicular directions
- Time: 2 hours each direction, High reliability
- Shock Test: MIL-STD-202F, Method 213B, Condition A
- Gravity: 50 G (peak value), 11 msec
- Direction & Times: 6 sides and 3 times in each direction, High reliability

Physical Characteristics
- Base and Cover Materials: UL94V-0 high-temperature thermoplastic PPS
- Color: Black
- Actuator Materials: UL94V-0 nylon thermoplastic
- Color: White
- Contact Materials: Alloy copper
- Terminal Materials: Brass
- Contact Plating Materials: 3 microns gold plating over 40 microns nickel
- Terminal Plating Materials: Gold
- Soldering Process: Recommended solder temp. at 260 °C (500 °F) max., 5 sec.
- Hand Soldering Process: Use a soldering iron of 30 watts or less, controlled at 320 °C (608 °F) for approx. 2 sec. while applying solder
- Standard Packaging: IC tubes/all poles in the “off” position

SND Series Dimensions

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>POS.</th>
<th>DIM. A</th>
<th>DIM. B</th>
</tr>
</thead>
<tbody>
<tr>
<td>SND-12</td>
<td>12</td>
<td>31.42(1.237)</td>
<td>26.94(1.040)</td>
</tr>
<tr>
<td>SND-10</td>
<td>10</td>
<td>26.34(1.037)</td>
<td>22.86(0.890)</td>
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<tr>
<td>SND-9</td>
<td>9</td>
<td>23.80(0.937)</td>
<td>20.32(0.800)</td>
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<tr>
<td>SND-8</td>
<td>8</td>
<td>21.26(0.837)</td>
<td>17.78(0.700)</td>
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<td>SND-7</td>
<td>7</td>
<td>18.72(0.737)</td>
<td>15.24(0.600)</td>
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<td>SND-6</td>
<td>6</td>
<td>16.18(0.637)</td>
<td>12.70(0.500)</td>
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<tr>
<td>SND-5</td>
<td>5</td>
<td>13.64(0.537)</td>
<td>10.16(0.400)</td>
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<tr>
<td>SND-4</td>
<td>4</td>
<td>11.10(0.437)</td>
<td>7.62(0.300)</td>
</tr>
<tr>
<td>SND-3</td>
<td>3</td>
<td>8.56(0.337)</td>
<td>5.08(0.200)</td>
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<tr>
<td>SND-2</td>
<td>2</td>
<td>6.02(0.237)</td>
<td>2.54(0.100)</td>
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<tr>
<td>SND-1</td>
<td>1</td>
<td>3.48(0.137)</td>
<td>—</td>
</tr>
</tbody>
</table>

How to Order

Model: X-1 S-X
- *X*: Raised Actuator
- *R*: Recessed Actuator
- Number of Positions:
  - 1 Position: 7 Positions
  - 2 Positions: 6 Positions
  - 3 Positions: 9 Positions
  - 4 Positions: 10 Positions
  - 5 Positions: 12 Positions
  - 6 Positions: 12 Positions
- Terminal Type:
  - S: Splay (Machine Insertable Type)
  - H: Straight (Manual Insertion Type)
- Seal:
  - X: Standard (Not Sealed)
  - T: Top Sealed ("T" actuator only, excluding 1 position)

Reflow Soldering Profile

- Temperature vs. Time (Seconds)
- 275 °C to 240 °C
- 15-sec. time period
- 30-40 sec.
- 35-60 sec.
SND Series DIP Switch (Machine Insertable Type)  BOURNS®

Packaging Specifications

REV. 02/06
Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.