




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

 The SND Series is currently available, although not recommended for new designs.

- RoHS compliant*

SND Series DIP Switch (Machine Insertable Type)

Electrical Characteristics

Electrical Life2,000 operations min. per switch, 24 VDC, 25 mA
 Non-Switching Rating100 mA, 50 VDC
 Switching Rating25 mA, 24 VDC
 Contact Resistance50 milliohms max. at initial100 milliohms max. after life test
 Insulation Resistance.....100 megohms min.
 Dielectric Strength500 VAC/minute
 Capacitance5 pf max. between adjacent closed switch
 CircuitSingle pole single throw

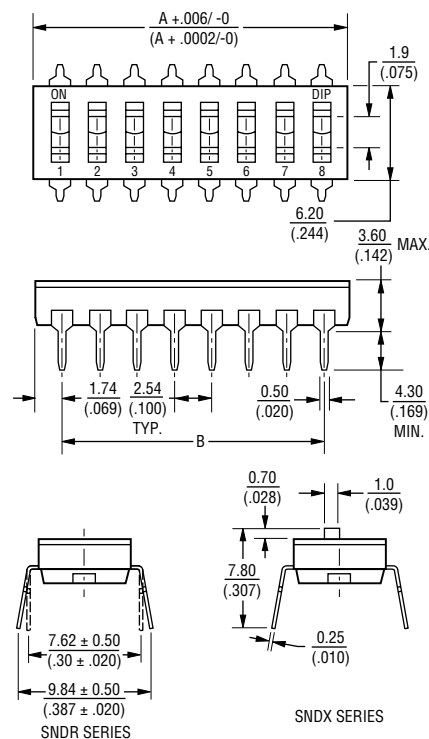
Environmental Characteristics

Mechanical Life ..2,000 operations per switch
 Operation Force1,000 g max.
 Stroke1.0 mm
 Operating Temp. Range.....-20 °C to +85 °C
 Storage Temperature-40 °C to +85 °C
 Vibration TestMIL-STD-202F, Method 201A
 Frequency10-55-10 Hz/minute
 DirectionsX,Y,Z, three mutually perpendicular directions
 Time2 hours each direction.
 Shock TestMIL-STD-202F, Method 213B, Condition A
 Gravity50 G (peak value), 11 msec
 Direction & Times.....6 sides and 3 times in each direction.
 High reliability

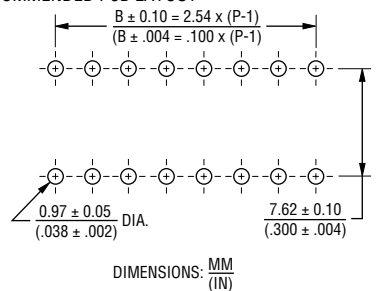
Physical Characteristics

Base and Cover MaterialsUL94V-0 high-temperature thermoplastic PPS
 ColorBlack
 Actuator MaterialsUL94V-0 nylon thermoplastic
 ColorWhite
 Contact MaterialsAlloy copper
 Terminal MaterialsBrass
 Contact Plating Materials3 micro inches gold plating over 40 micro inches nickel
 Terminal Plating MaterialsGold
 Wave 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 PackagingIC tubes/all poles in the "off" position

Product Dimensions



RECOMMENDED PCB LAYOUT



SCHEMATIC (TYP.) 1-12 POSITIONS AVAILABLE



SND Series Dimensions

MODEL NO.	POS.	DIM. A	DIM. B
SND-12	12	31.42 (1.237)	26.94 (1.100)
SND-10	10	26.34 (1.037)	22.86 (.900)
SND-9	9	23.80 (.937)	20.32 (.800)
SND-8	8	21.26 (.837)	17.78 (.700)
SND-7	7	18.72 (.737)	15.24 (.600)
SND-6	6	16.18 (.637)	12.70 (.500)
SND-5	5	13.64 (.537)	10.16 (.400)
SND-4	4	11.10 (.437)	7.62 (.300)
SND-3	3	8.56 (.337)	5.08 (.200)
SND-2	2	6.02 (.237)	2.54 (.100)
SND-1	1	3.48 (.137)	—

How to Order

Model **SND X - 1 S - X**

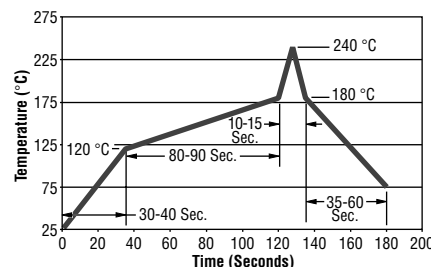
Actuator
 • X = Raised Actuator
 • R = Recessed Actuator

Number of Positions
 • 1 = 1 Position
 • 2 = 2 Positions
 • 3 = 3 Positions
 • 4 = 4 Positions
 • 5 = 5 Positions
 • 6 = 6 Positions
 • 7 = 7 Positions
 • 8 = 8 Positions
 • 9 = 9 Positions
 • 10 = 10 Positions
 • 12 = 12 Positions

Terminal Type
 • S = Splay (Machine Insertion Type)
 • H = Straight (Manual Insertion Type)

Seal
 • X = Standard (Not Sealed)
 • T = Top Tape Sealed
 ("R" actuator only, excluding 1 position)

Reflow Soldering Profile



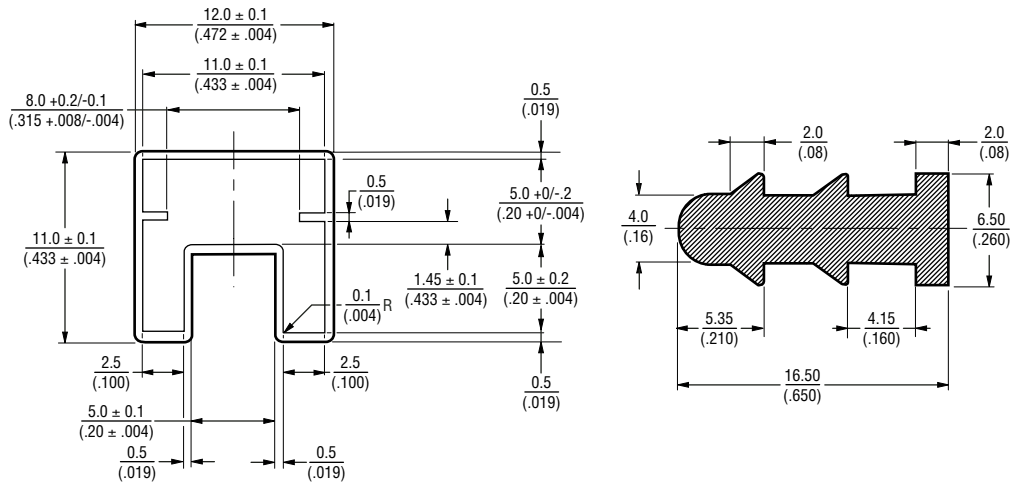
†For best results, keep all switch contacts in their "off" position for all operations.

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

SND Series DIP Switch (Machine Insertable Type)

BOURNS®

Packaging Specifications



REV. 02/06

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