



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 Resistance
.....50 milliohms max. at initial
.....100 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

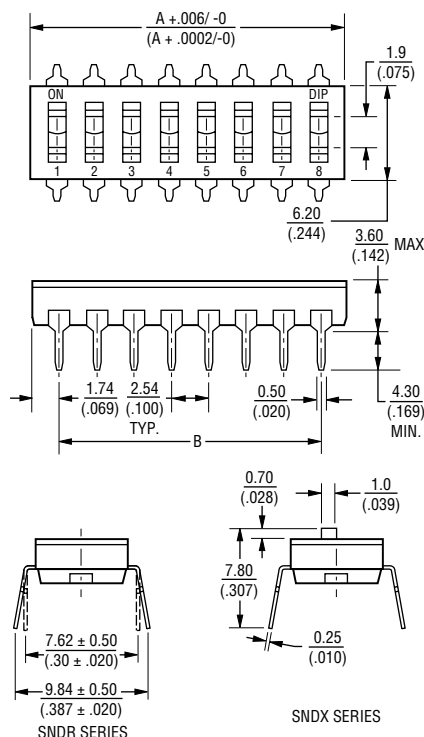
Environmental Characteristics

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.
High reliability
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

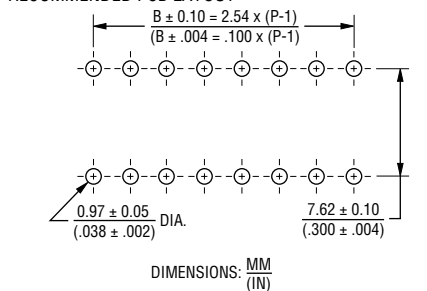
Physical Characteristics

Base and Cover Materials
.....UL94V-0 high-temperature
thermoplastic PPS
ColorBlack
Actuator MaterialsUL94V-0 nylon
thermoplastic
ColorWhite
Contact MaterialsAlloy copper
Terminal MaterialsBrass
Contact Plating Materials
.....3 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 Packaging
.....IC 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**

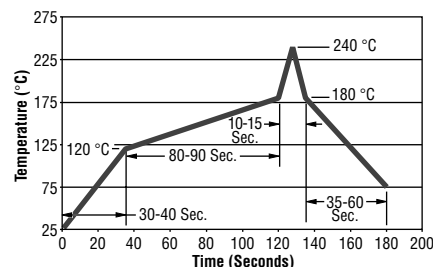
Actuator
 • X = Raised Actuator
 • R = Recessed Actuator

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

