

FEATURES:

- Splay terminals allow for automatic insertion by IC insertion machine
- Straight terminals are available for manual insertion.
- Raised actuator and recessed actuator available for different puposes.
- Double are contacts offers high reliability.
- Vapor phase solderable, IR-Reflow solderable.
- **Terminal gold plated gives excellent result when soldering.

MATERIAL:

- Base & Cover: UL 94V-0 PPS High-Temp, Thermoplastic.
Color: Black
- Actuator: UL 94V-0 Nylon Thermoplastic(Standard).
UL 94V-0 Nylon High-Temp, Thermoplastic (V-Option only for SDS(R), SDB(R), SDA(R))
Color:White
- Contact: Alloy Copper with gold plated
- Terminal: Brass with gold plated
- Contact Plated: Gold plated over nickel
- Terminal Plated: Gold plated
- Tape: Kapton

Packing:

Part Number	Number Per Tube	Part Number	Number Per Reel	Part Number	Number Per Tube	Part Number	Number Per Reel
SDS(R)-01	130	SDSR-01-T/R	800	SDN-01(-T)	130	SDS-01-T/R	800
SDS(R)-02(-T)	76	SDSR-02-T-T/R	900	SDN-02(-T)	76	SDS-02-T/R	700
SDS(R)-03(-T)	55	SDSR-03-T-T/R	900	SDN-03(-T)	55	SDS-03-T/R	700
SDS(R)-04(-T)	42	SDSR-04-T-T/R	900	SDN-04(-T)	42	SDS-04-T/R	700
SDS(R)-05(-T)	35	SDSR-05-T-T/R	900	SDN-05(-T)	34	SDS-05-T/R	800
SDS(R)-06(-T)	28	SDSR-06-T-T/R	900	SDN-06(-T)	29	SDS-06-T/R	700
SDS(R)-07(-T)	25	SDSR-07-T-T/R	900	SDN-07(-T)	25	SDS-07-T/R	800
SDS(R)-08(-T)	22	SDSR-08-T-T/R	900	SDN-08(-T)	22	SDS-08-T/R	700
SDS(R)-09(-T)	20	SDSR-09-T-T/R	900	SDN-09(-T)	20	SDS-10-T/R	800
SDS(R)-10(-T)	18	SDSR-10-T-T/R	900	SDN-10(-T)	18	SDS-12-T/R	700
SDS(R)-12(-T)	15	SDSR-12-T-T/R	900	SDN-12(-T)	15		
						SDBR-XX-T-T/R	1000

SPECIFICATION

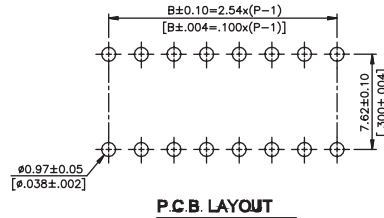
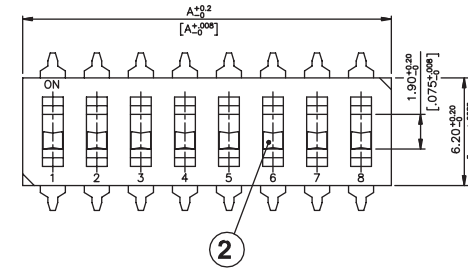
MECHANICAL

- Mechanical Life: 2000 operations per switch
- Operation Force: 1000 gf max
- Stroke:1.0mm
- Operation Temperature Range: -40°C to +85°C
- Storage Temperature Range: -40°C to +85°C
- Vibration Test: MIL-STFD-202F METHOD 201A.
Frequency: 10-55-10Hz/1 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: 50G (peak value), 11 msec
Direction and times: 6 sides and 3 times in each direction.
High reliability.

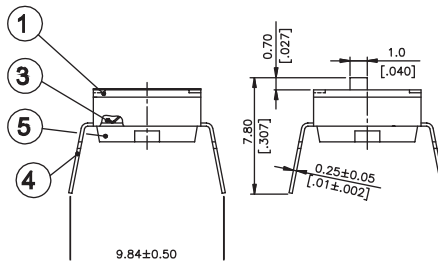
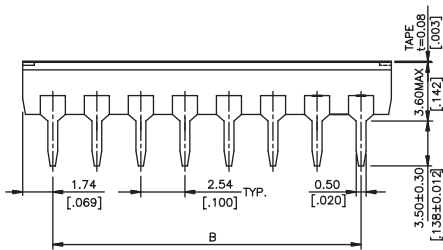
ELECTRICAL

- Electrical Life: 2000 operations per switch 24VDC, 25mA.
- Non-Switching Rating: 100mA, 50VDC
- Switching Rating: 25 mA, 24VDC
- Contact Resistance: (a)50mΩ max. at initial
(b)100m Ωmax. after life test
- Insulation Resistance: (at 500VDC) 100MΩ min.
- Dielectric Strenght: 500VAC/1 minute.
- Capacitance: 5pF max.
- Circuit: Single pole single throw.

SDN(R)



P.C.B. LAYOUT



SDNR - □ □ S

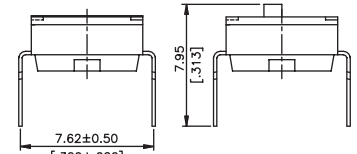
SDN - □ □ S

SDN-12(P) SDNR-12(P)	12	31.42[1.237]	27.94[1.100]
SDN-10(P) SDNR-10(P)	10	26.34[1.037]	22.86[.900]
SDN-09(P) SDNR-09(P)	9	23.80[.937]	20.32[.800]
SDN-08(P) SDNR-08(P)	8	21.26[.837]	17.78[.700]
SDN-07(P) SDNR-07(P)	7	18.72[.737]	15.24[.600]
SDN-06(P) SDNR-06(P)	6	16.18[.737]	12.70[.500]
SDN-05(P) SDNR-05(P)	5	13.64[.537]	10.16[.400]
SDN-04(P) SDNR-04(P)	4	11.10[.437]	7.62[.300]
SDN-03(P) SDNR-03(P)	3	8.56[.337]	5.08[.200]
SDN-02(P) SDNR-02(P)	2	6.02[.237]	2.54[.100]
SDN-01(P) SDNR-01(P)	1	3.48[.137]	-
Prod. No.	No. Of Pos.	Dim A	Dim B

SCHEMATIC(TYP.)



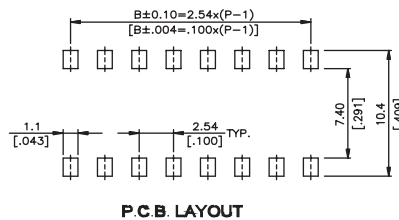
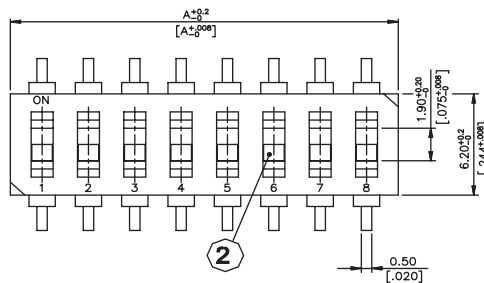
(1,2,3,4,5,6,7,8,9,10,12, POS AVAIL)



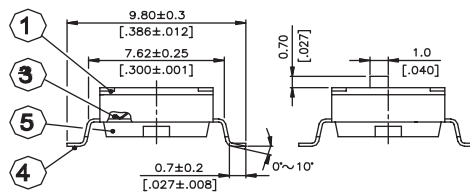
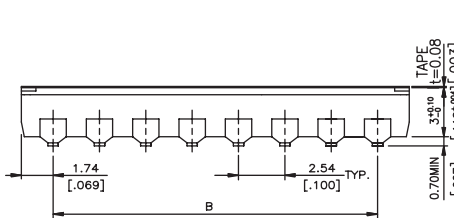
SDNR - □ □ H

SDN - □ □ H

SDS(R)



P.C.B. LAYOUT



SDSR

SDS

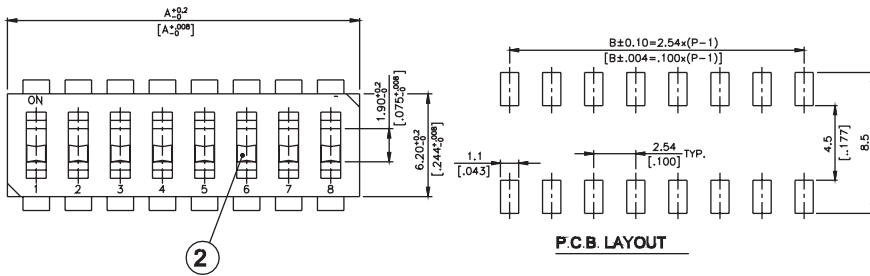
SDS-12(P) SDSR-12(P)	12	31.42[1.237]	27.94[1.100]
SDS-10(P) SDSR-10(P)	10	26.34[1.037]	22.86[.900]
SDS-09(P) SDSR-09(P)	9	23.80[.937]	20.32[.800]
SDS-08(P) SDSR-08(P)	8	21.26[.837]	17.78[.700]
SDS-07(P) SDSR-07(P)	7	18.72[.737]	15.24[.600]
SDS-06(P) SDSR-06(P)	6	16.18[.737]	12.70[.500]
SDS-05(P) SDSR-05(P)	5	13.64[.537]	10.16[.400]
SDS-04(P) SDSR-04(P)	4	11.10[.437]	7.62[.300]
SDS-03(P) SDSR-03(P)	3	8.56[.337]	5.08[.200]
SDS-02(P) SDSR-02(P)	2	6.02[.237]	2.54[.100]
-	-	-	-
Prod. No.	No. Of Pos.	Dim A	Dim B

SCHEMATIC(TYP.)



(1,2,3,4,5,6,7,8,9,10,12, POS AVAIL)

SDB(R)

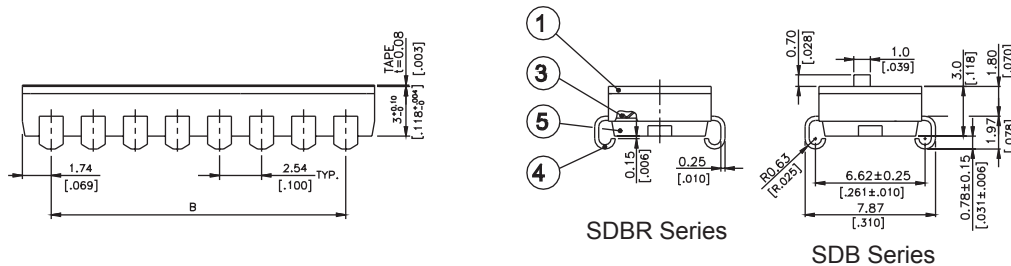


SDB-12 SDBR-12	12	31.42[1.237]	27.94[1.100]
SDB-10 SDBR-10	10	26.34[1.037]	22.86[.900]
SDB-09 SDBR-09	9	23.80[.937]	20.32[.800]
SDB-08 SDBR-08	8	21.26[.837]	17.78[.700]
SDB-07 SDBR-07	7	18.72[.737]	15.24[.600]
SDB-06 SDBR-06	6	16.18[.737]	12.70[.500]
SDB-05 SDBR-05	5	13.64[.537]	10.16[.400]
SDB-04 SDBR-04	4	11.10[.437]	7.62[.300]
SDB-03 SDBR-03	3	8.56[.337]	5.08[.200]
SDB-02 SDBR-02	2	6.02[.237]	2.54[.100]
Prod. No.	No. Of Pos.	Dim A	Dim B

SCHEMATIC(TYP.)



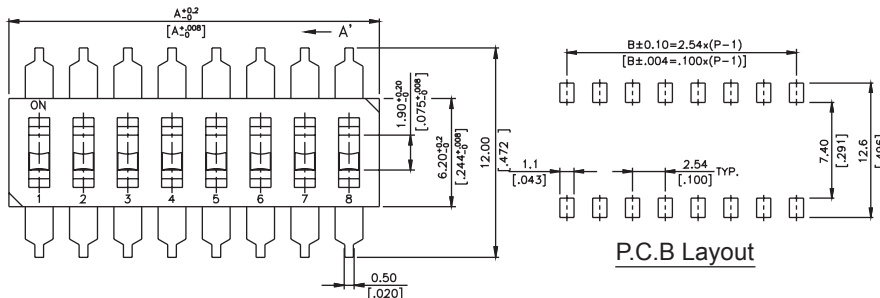
(1,2,3,4,5,6,7,8,9,10,12,POS AVAIL)



SDBR Series

SDB Series

SDA(R)

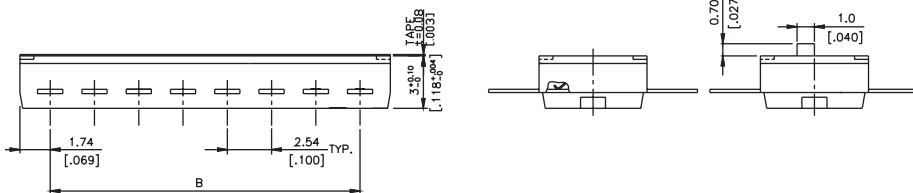


SDA-12 SDAR-12	12	31.42[1.237]	27.94[1.100]
SDA-10 SDAR-10	10	26.34[1.037]	22.86[.900]
SDA-09 SDAR-09	9	23.80[.937]	20.32[.800]
SDA-08 SDAR-08	8	21.26[.837]	17.78[.700]
SDA-07 SDAR-07	7	18.72[.737]	15.24[.600]
SDA-06 SDAR-06	6	16.18[.737]	12.70[.500]
SDA-05 SDAR-05	5	13.64[.537]	10.16[.400]
SDA-04 SDAR-04	4	11.10[.437]	7.62[.300]
SDA-03 SDAR-03	3	8.56[.337]	5.08[.200]
SDA-02 SDAR-02	2	6.02[.237]	
Prod. No.	No. Of Pos.	Dim A	Dim B

SCHEMATIC(TYP.)



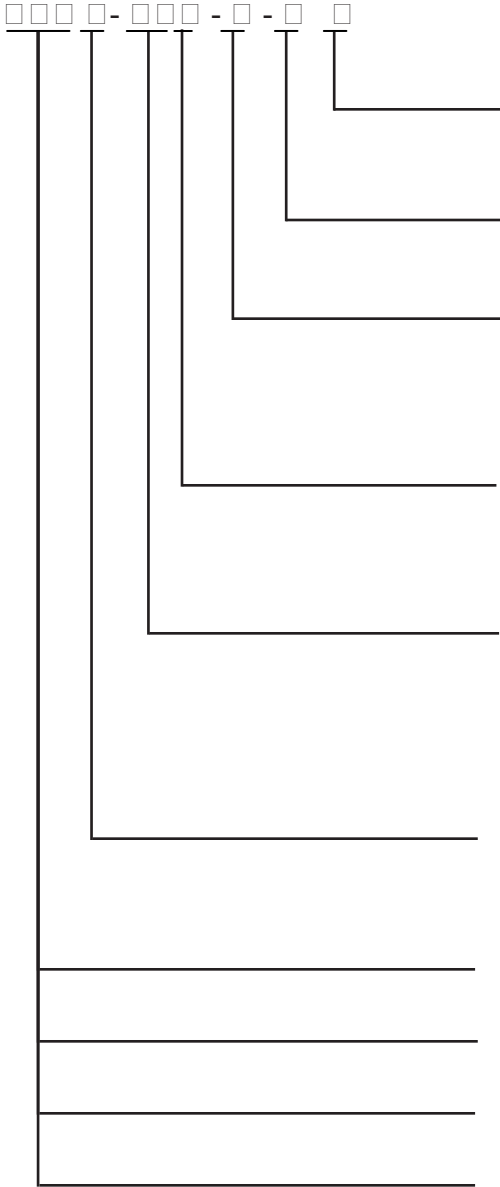
(1,2,3,4,5,6,7,8,9,10,12,POS AVAIL)



SDAR Series

SDA Series

HOW TO ORDER:



Package Style:

B = Tube
T/R = Tape & Reel

Soldering:
R = Lead Free Solderable

Seal:
□ = Regular
T = Top Tape Sealed

Shape of Terminal:
□ = Regular
S = Splay Terminal
H = Straight Terminal] Only for SDN(R)

Number of Positions:
02 = 2 Positions 07 = 7 Positions
03 = 3 Positions 08 = 8 Positions
04 = 4 Positions 09 = 9 Positions
05 = 5 Positions 10 = 10 Positions
06 = 6 Positions 12 = 12 Positions

Actuator Type:
□ = Raised Actuator
R = Recessed Actuator

SDN = Through Hole Type Dip Switch 9.8mm Pitch

SDS = S.M.D. Type Gull Wing Terminal 7.62 & 9.84mm Pitch

SDB = S.M.D. Type J Bend Terminal 7.87mm Pitch

SDA = Flat Terminal S.M.D. 12.00mm Width

Soldering Process

- ▲ Keep all switch contacts in their "OFF" position for all operations.
- ▲ Hand Soldering : Use a soldering iron of 30 watts, controlled at 350°C approx. 5 seconds.
- ▲ Wave Soldering : Recommended temperature at 500°F(260°C) max 5 seconds for through hole type.
- ▲ Make sure switch is in "OFF" position during soldering process, or it will decrease the operating force and meanwhile increase the contact resistance
- ▲ Any flux enters the switch may fail the conductivity
- ▲ Do not wash the switch body except top tape sealed type, which suitable for spray cleaning method from top of the s/w

Temperature Profile:

