

SPECIFICATION

MECHANICAL

- Mechanical Life: 10000 operations per switch
- Operation Force: 400 gf max(DP series)
1000gf max.(DS & DA series)
- Stroke:2.0mm
- 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: 10000 operations per switch 25VDC, 25mA.
- Non-Switching Rating: 100mA, 50VDC
- Switching Rating: 25 mA, 25VDC
- Contact Resistance: 50Ω max. at initial
- Insulation Resistance: (at 500VDC) 100MΩ min.
- Dielectric Strength: 500VAC/1 minute.
- Capacitance: 5pF max.
- Circuit: Single pole single throw.

FEATURES:

- Low Contact Resistance
- High reliability

MATERIAL:

- Base: UL 94V-0 PBT Thermoplastic
Color: Black
- Cover: UL 94V-0 PBT Thermoplastic
Color: Red,Blue
- Actuator: UL 94V-0 PBT Thermoplastic.
Color:White
- Contact: Phosphor bronze with gold plated over nickel.
- Top Seal: Polyester film.
- Packing: Tubes.

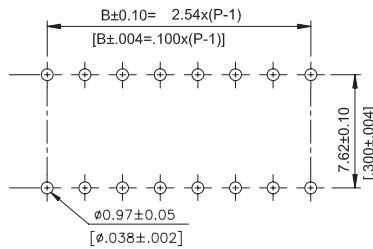
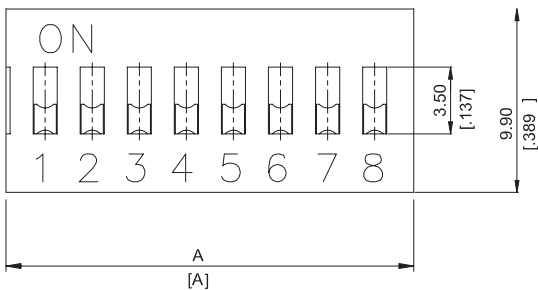
DS(R)

DS-12 DSR-12	12	31.84[1.254]	27.94[1.100]
DS-10 DSR-10	10	26.76[1.054]	22.86[.900]
DS-09 DSR-09	9	24,22[.954]	20,32[.800]
DS-08 DSR-08	8	21,68[.854]	17,78[.700]
DS-07 DSR-07	7	19,14[.754]	15,24[.600]
DS-06 DSR-06	6	16,60[.654]	12,70[.500]
DS-05 DSR-05	5	14,06[.554]	10,16[.400]
DS-04 DSR-04	4	11,52[.454]	7,62[.300]
DS-03 DSR-03	3	8,98[.354]	5,08[.200]
DS-02 DSR-02	2	6,44[.254]	2,54[.100]
DS-01 DSR-01	1	3,90[.153]	-
Prod. No.	No of Pos.	DIM.A	DIM.B

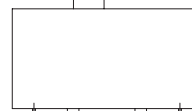
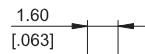
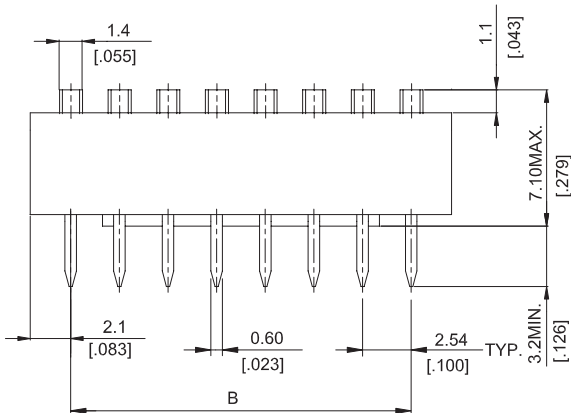
SCHEMATIC(TYP.)



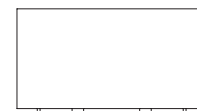
(2,3,4,5,6,7,8,9,10,12, POS AVAIL)



P.C.B. LAYOUT



DS SERIES



DSR SERIES

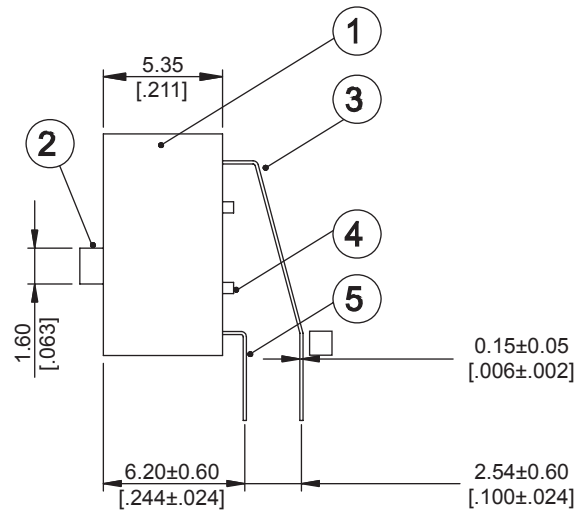
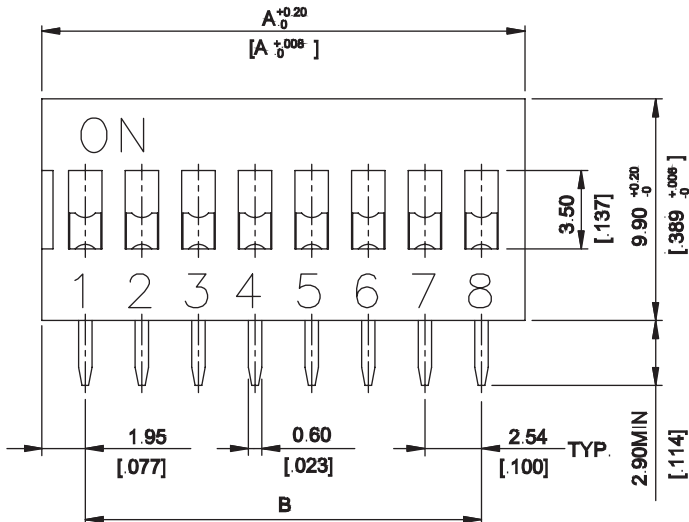
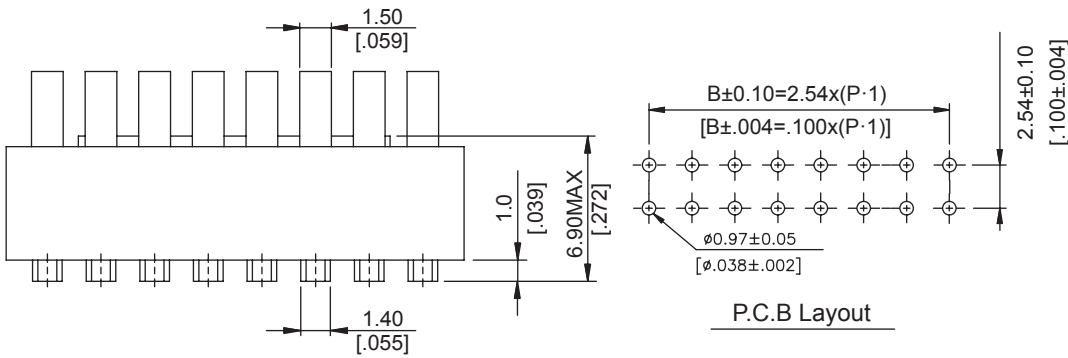
DA

DA-12	12	31,84[1.254]	27,97[1.100]
DA-10	10	26,76[1.054]	22,86[.900]
DA-09	9	24,22[.954]	20,32[.800]
DA-08	8	21,68[.854]	17,78[.800]
DA-07	7	19,14[.754]	15,24[.600]
DA-06	6	16,60[.654]	12,70[.500]
DA-05	5	14,06[.554]	10,16[.400]
DA-04	4	11,52[.454]	7,62[.30]
DA-03	3	8,98[.354]	5,08[.200]
DA-02	2	6,44[.254]	2,54[.100]
PROD. NO.	NO. OF PROD.	DIM A	DIM B

SCHEMATIC(TYP.)



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



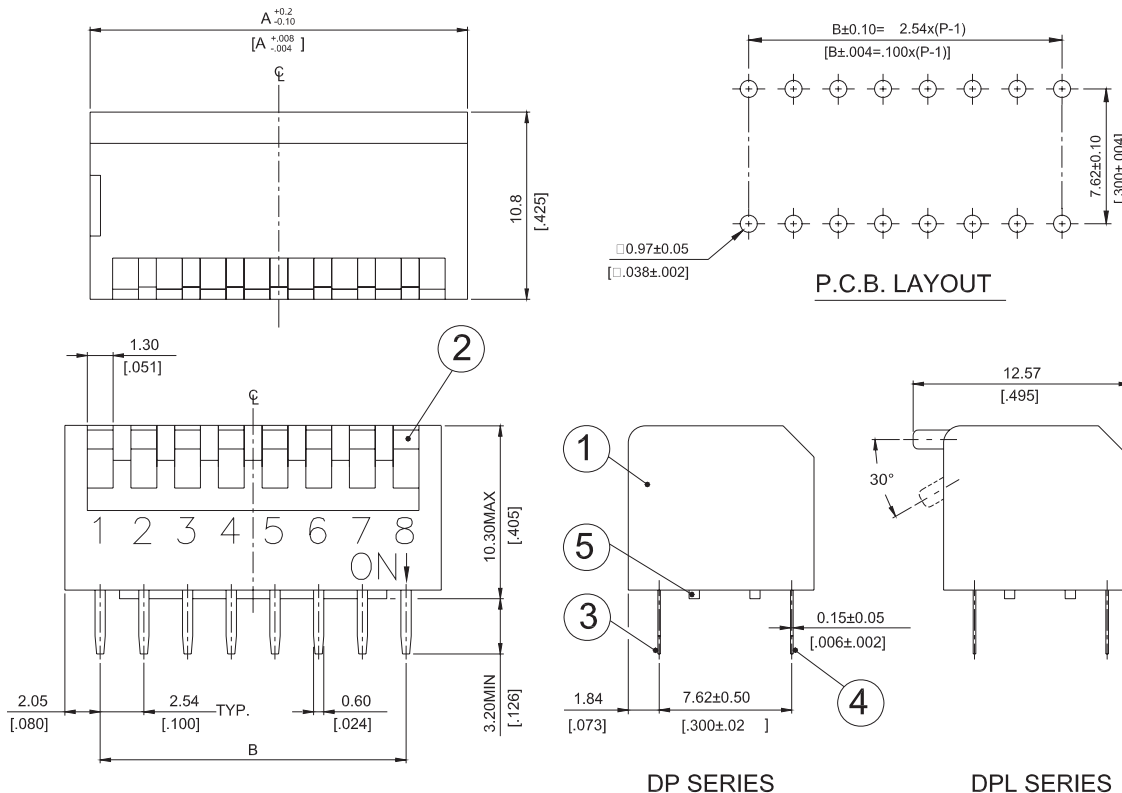
DP(L)

DP-12 DPL-12	12	32,04[1.261]	27.94[1.100]
DP-10 DPL-10	10	26,96[1.061]	22.86[.900]
DP-09 DPL-09	9	24,42[.961]	20.32[.800]
DP-08 DPL-08	8	21,88[.861]	17.78[.700]
DP-07 DPL-07	7	19,34[.761]	15.24[.600]
DP-06 DPL-06	6	16,80[.661]	12.70[.500]
DP-05 DPL-05	5	14,26[.561]	10.16[.400]
DP-04 DPL-04	4	11,72[.461]	7.62[.300]
DP-03 DPL-03	3	9,18[.361]	5.08[.200]
DP-02 DPL-02	2	6,64[.261]	2,54[.100]
PROD. NO.	NO. OF. POS	DIM. A	DIM. B

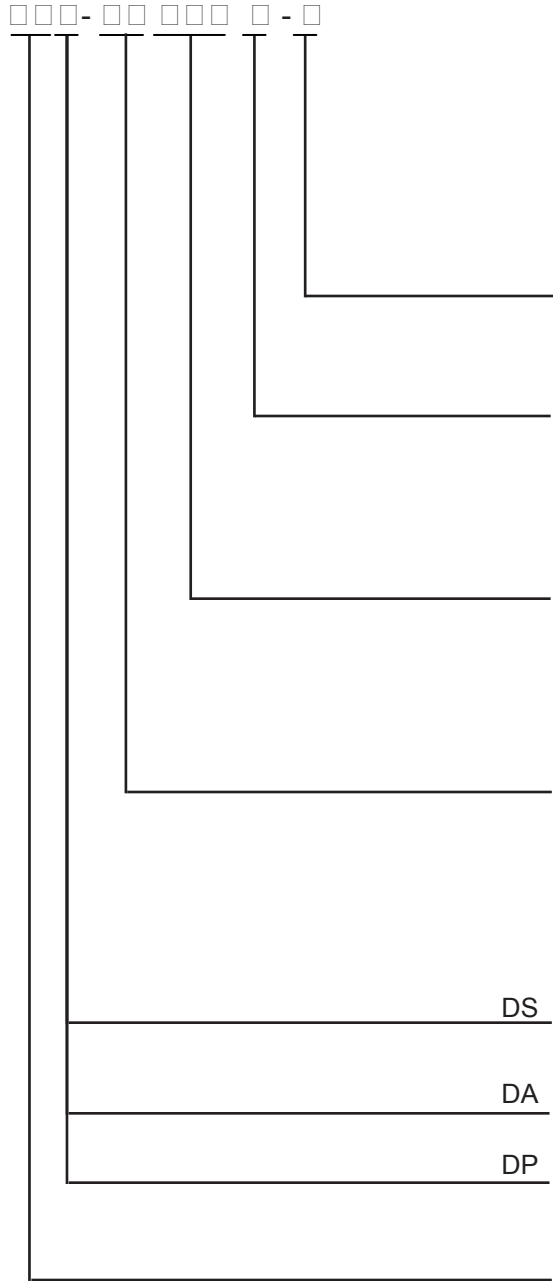
SCHEMATIC(TYP.)



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



HOW TO ORDER:



Seal:

- = Regular
- T = Top Tape Sealed

***On/Off Position**

- = Push Down On
- U = Push Down Off
- <*U only for DP(L)>

Color of Cover:

- B = Blue
- RED = Red

Number of Positions:

- 01 = 1 Position
- 02 = 2 Positions
- 03 = 3 Positions
- 04 = 4 Positions
- 05 = 5 Positions
- 06 = 6 Positions
- 07 = 7 Positions
- 08 = 8 Positions
- 09 = 9 Positions
- 10 = 10 Positions
- 12 = 12 Positions

- = Raised Actuator
- R = Recessed Actuator

- = Raised Actuator

- = Short Key
- L = Long Key

- DS = Slide Type Dip Switch
- DA = Right Angle Type Dip Switch
- DP = Piano Type Dip Switch

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
- ▲ Do not wash the switch body except top tape sealed type, which suitable for spray cleaning method from top of the s/w