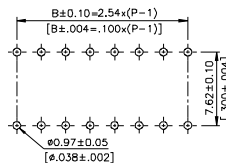
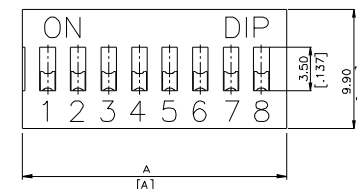


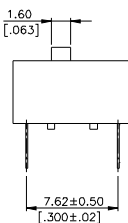
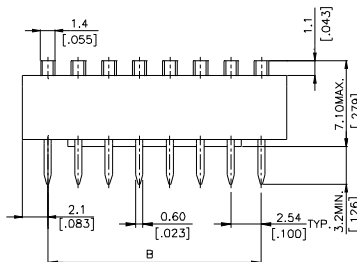
## DS, DP, DA SERIES

### DIMENSIONS

#### DS(R)

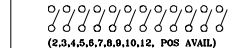


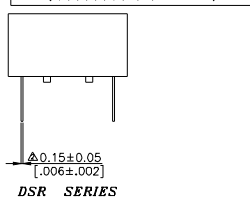
P.C.B. LAYOUT



DS SERIES

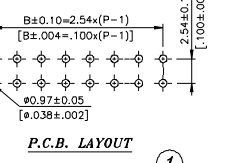
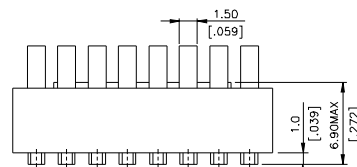
DS -12	12	31.84[1.254]	27.94[1.100]
DSR -12	12	31.84[1.254]	27.94[1.100]
DS -10	10	26.76[1.054]	22.86[.900]
DSR -10	10	26.76[1.054]	22.86[.900]
DS -09	9	24.22[.954]	20.32[.800]
DSR -09	9	24.22[.954]	20.32[.800]
DS -08	8	21.68[.854]	17.78[.700]
DSR -08	8	21.68[.854]	17.78[.700]
DS -07	7	19.14[.754]	15.24[.600]
DSR -07	7	19.14[.754]	15.24[.600]
DS -06	6	16.60[.654]	12.70[.500]
DSR -06	6	16.60[.654]	12.70[.500]
DS -05	5	14.06[.554]	10.16[.400]
DSR -05	5	14.06[.554]	10.16[.400]
DS -04	4	11.52[.454]	7.62[.300]
DSR -04	4	11.52[.454]	7.62[.300]
DS -03	3	8.98[.354]	5.08[.200]
DSR -03	3	8.98[.354]	5.08[.200]
DS -02	2	6.44[.254]	2.54[.100]
DSR -02	2	6.44[.254]	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)			

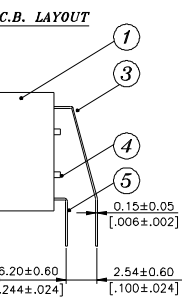
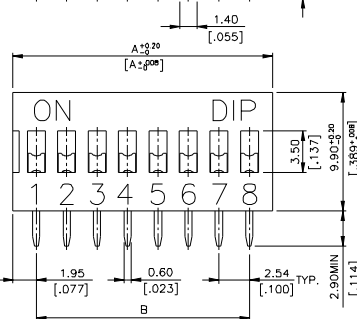


DSR SERIES

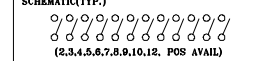
#### DA



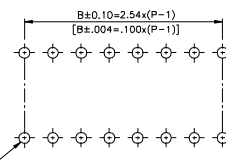
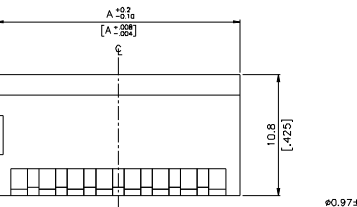
P.C.B. LAYOUT



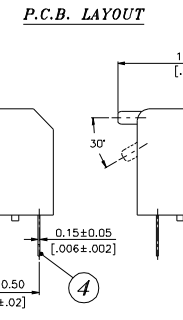
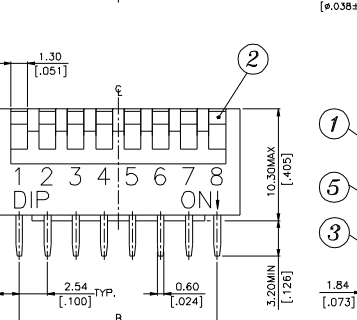
DA-12	12	31.84[1.254]	27.94[1.100]
DA-10	10	26.76[1.054]	22.86[.900]
DA-09	9	24.22[.954]	20.32[.800]
DA-08	8	21.68[.854]	17.78[.700]
DA-07	7	19.14[.754]	15.24[.600]
DA-06	6	16.60[.654]	12.70[.500]
DA-05	5	14.06[.554]	10.16[.400]
DA-04	4	11.52[.454]	7.62[.300]
DA-03	3	8.98[.354]	5.08[.200]
DA-02	2	6.44[.254]	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)			

#### DP(L)



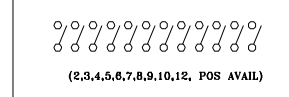
P.C.B. LAYOUT



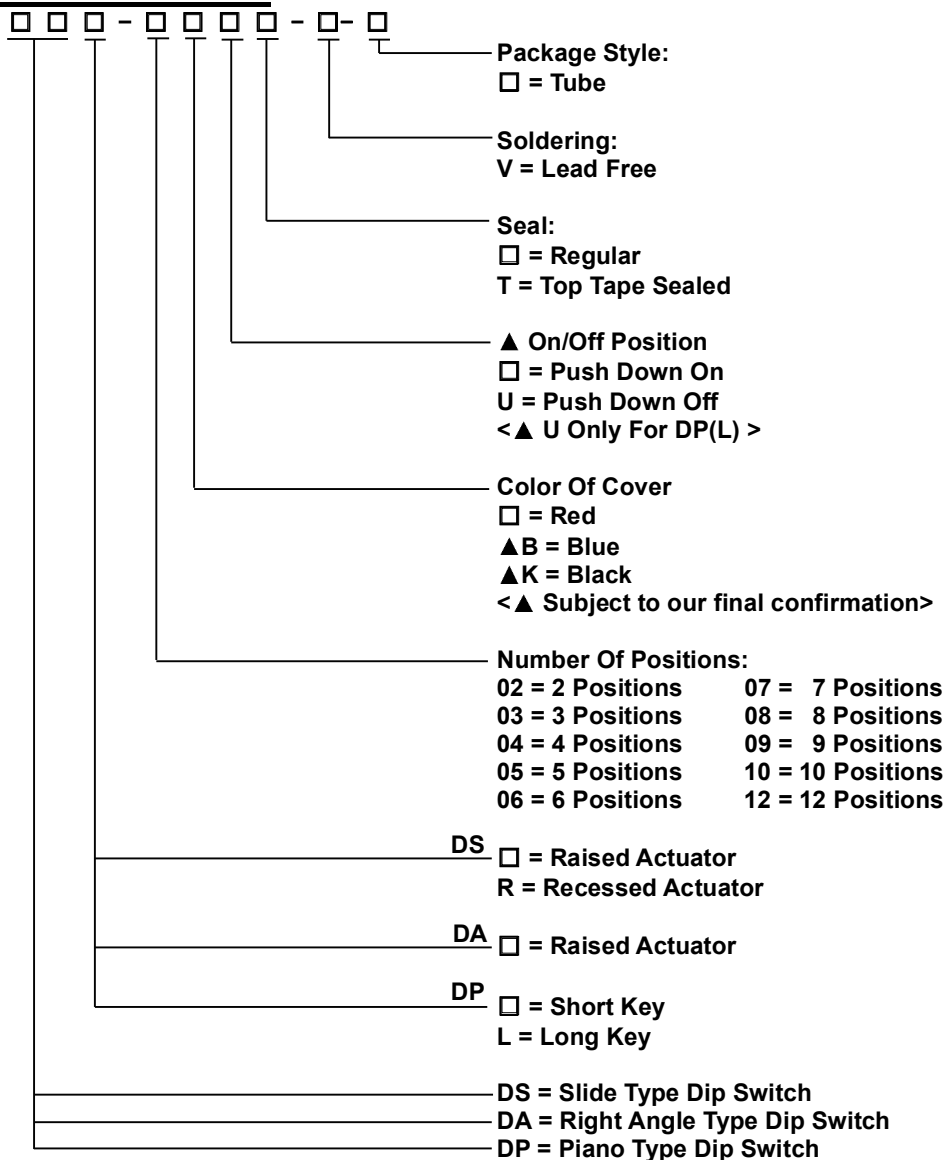
DP SERIES

DPL SERIES

DP -12	12	32.04[1.261]	27.94[1.100]
DPL -12	12	32.04[1.261]	27.94[1.100]
DP -10	10	26.96[1.061]	22.86[.900]
DPL -10	10	26.96[1.061]	22.86[.900]
DP -09	9	24.42[.961]	20.32[.800]
DPL -09	9	24.42[.961]	20.32[.800]
DP -08	8	21.88[.861]	17.78[.700]
DPL -08	8	21.88[.861]	17.78[.700]
DP -07	7	19.34[.761]	15.24[.600]
DPL -07	7	19.34[.761]	15.24[.600]
DP -06	6	16.80[.661]	12.70[.500]
DPL -06	6	16.80[.661]	12.70[.500]
DP -05	5	14.26[.561]	10.16[.400]
DPL -05	5	14.26[.561]	10.16[.400]
DP -04	4	11.72[.461]	7.62[.300]
DPL -04	4	11.72[.461]	7.62[.300]
DP -03	3	9.18[.361]	5.08[.200]
DPL -03	3	9.18[.361]	5.08[.200]
DP -02	2	6.64[.261]	2.54[.100]
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



## SPECIFICATION

### △MECHANICAL

Mechanical Life: 2,000 operations per switch.

Operation Force: 400gf max. (DP Series)

1,000gf max. (DS & DA Series)

Stroke: 2.0mm

Operation Temperature: -20℃ to +70℃

Storage Temperature: -40℃ to +85℃

### △ELECTRICAL

Electrical Life: 2,000 operations per switch 24VDC, 25mA

Non-Switching Rating: 100mA, 50VDC

Switching Rating: 25mA, 24VDC

Contact Resistance: 50mΩ max. at initial

Insulation Resistance: {at 500 VDC} 100MΩ min.

Dielectric Strength: 500VAC / 1 minute

Circuit: SPST

## MATERIALS

△BASE: UL94V-0 PBT Thermoplastic

Color: Black

△COVER UL94V-0 PBT Thermoplastic

Color: Red, Black, Blue

△ACTUATOR: UL94V-0 PBT High Thermoplastic

Color: White

△CONTACT: Phosphor bronze with gold plating over nickel

△TOP SEAL: Polyester Film

△POTTING MATERIAL: Epoxy

## SOLDERING PROCESS

△Keep all switch contacts in their “OFF” position for all operations.

△WAVE SOLDERING: Recommended temperature at 500°F (260°C) max. 5 seconds for through hole type.

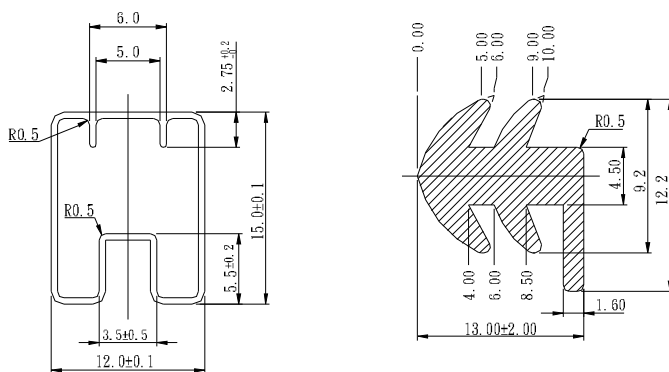
△HAND SOLDERING: Use a soldering iron of 30 watts, controlled at 350°C approximately 5 seconds.

△Make sure switch is in “OFF” position during soldering process, or it will decrease the operating force and meanwhile increase the contact resistance.

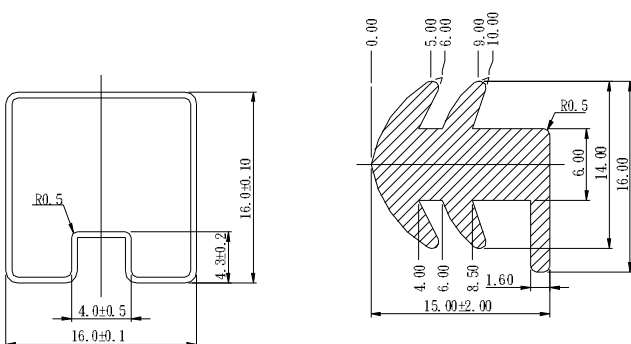
△Do not wash the switch body except top tape sealed type, which suitable for spray cleaning method from top of the s/w.

## PACKING

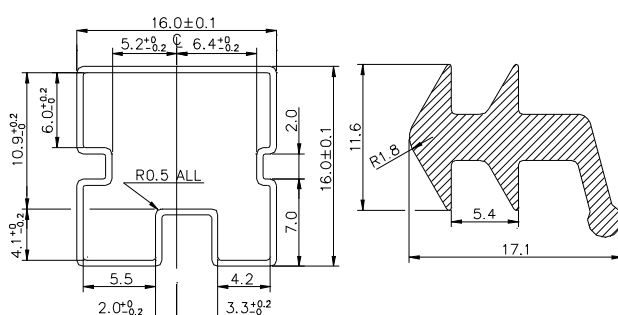
### DS(R)



### DP(L)



### DA



Part Number	Number Per Tube	Part Number	Number Per Tube
DS-02	72	DS-02-T	70
DS-03	51	DS-03-T	50
DS-04	40	DS-04-T	39
DS-05	32	DS-05-T	32
DS-06	27	DS-06-T	27
DS-07	24	DS-07-T	24
DS-08	21	DS-08-T	21
DS-09	19	DS-09-T	19
DS-10	17	DS-10-T	17
DS-12	14	DS-12-T	14
DP-02	70	DP(L)-02-T	70/65
DP-03	50	DP(L)-03-T	48
DP-04	39	DP(L)-04-T	39
DP-05	32	DP(L)-05-T	32
DP-06	27	DP(L)-06-T	27
DP-07	24	DP(L)-07-T	24
DP-08	21	DP(L)-08-T	21
DP-09	19	DP(L)-09-T	19
DP-10	17	DP(L)-10-T	17
DP-12	14	DP(L)-12-T	14
DA-02	73	DA-02-T	70
DA-03	52	DA-03-T	50
DA-04	40	DA-04-T	39
DA-05	33	DA-05-T	32
DA-06	28	DA-06-T	28
DA-07	24	DA-07-T	24
DA-08	21	DA-08-T	21
DA-09	19	DA-09-T	19
DA-10	17	DA-10-T	17
DA-12	14	DA-12-T	14