

# DS, DP, DA Series



**RoHS  
Compliant**

## Specifications:

### Mechanical

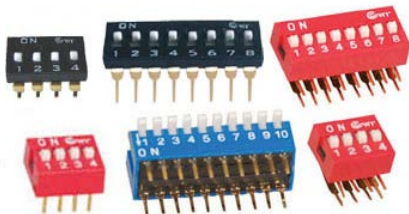
Mechanical Life	: 2,000 operations per switch.
Operation Force	: 400gf max. (DP Series) 1,000gf max. (DS & DA Series)
Stroke	: 2.0mm
Operation Temperature	: -20°C to +70°C
Storage Temperature	: -40°C to +85°C

### Electrical

Electrical Life	: 2,000 operations per switch 24V DC, 25mA
Non-Switching Rating	: 100mA , 50V DC
Switching Rating	: 25mA , 24VDC
Contact Resistance	: 50mΩ max. at initial
Insulation Resistance	: {at 500 VDC} 100MΩ min.
Dielectric Strength	: 500VAC / 1 minute
Circuit	: SPST

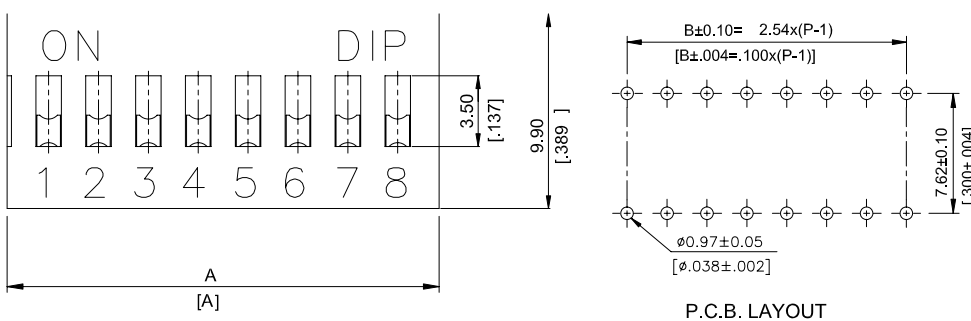
### Materials

Base	: Thermoplastic
Colour	: Black
Cover	: Thermoplastic
Colour	: Red, Black, Blue
Actuator	: High Thermoplastic
Colour	: White
Contact	: Phosphor bronze with gold plating over nickel
Top Seal	: Polyester Film
Potting Material	: Epoxy



## Dimensions:

### DS(R)



Dimensions : Millimetres (Inches)

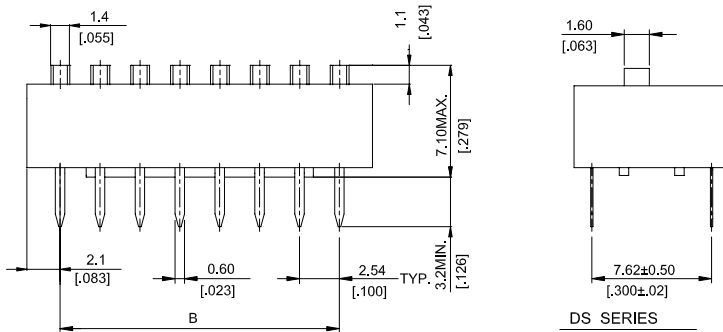
www.element14.com  
www.farnell.com  
www.newark.com



# DS, DP, DA Series



## DS(R)

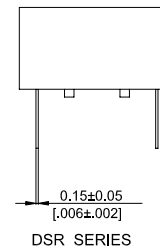


DS SERIES

PROD. NO.	NO. OF POS.	DIM. A	DIM. B
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]

SCHEMATIC(TYP.)

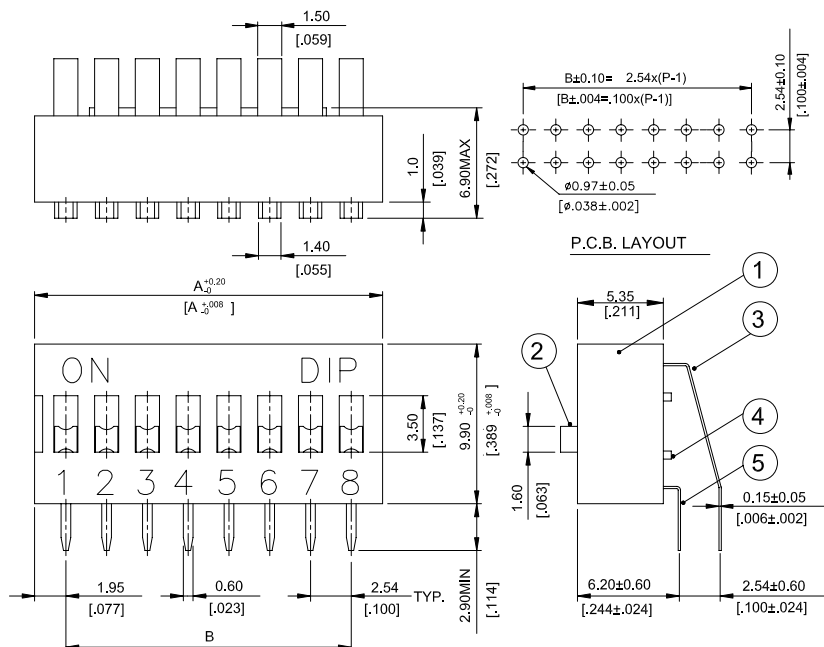
(2,3,4,5,6,7,8,9,10,12, POS AVAIL)



DSR SERIES

Dimensions : Millimetres (Inches)

## DA



P.C.B. LAYOUT

PROD. NO.	NO. OF POS.	DIM. A	DIM. B
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]

SCHEMATIC(TYP.)

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

Dimensions : Millimetres (Inches)

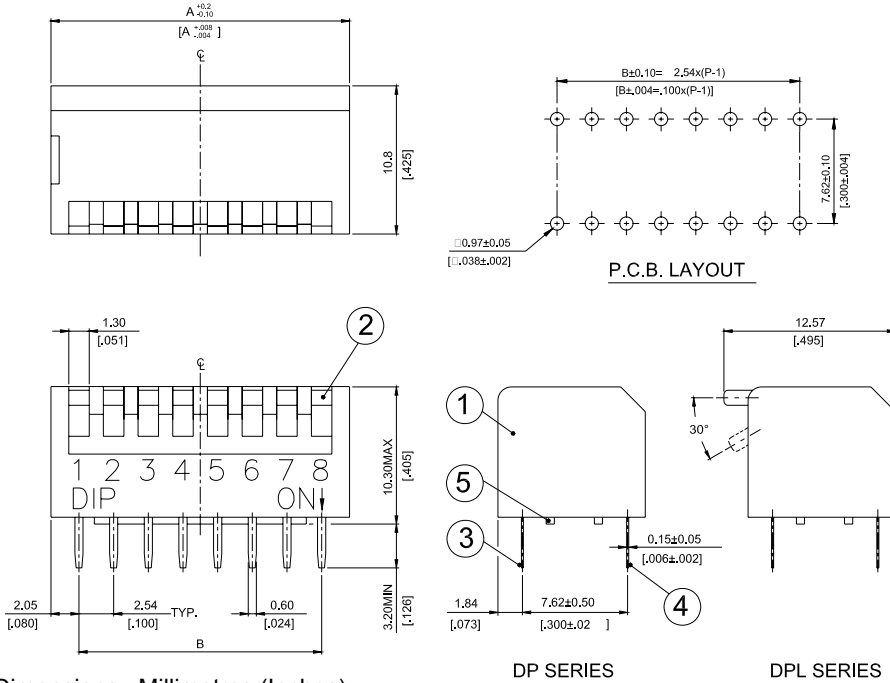
www.element14.com  
www.farnell.com  
www.newark.com



# DS, DP, DA Series

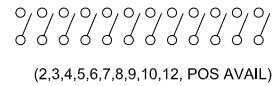


## DP(L)



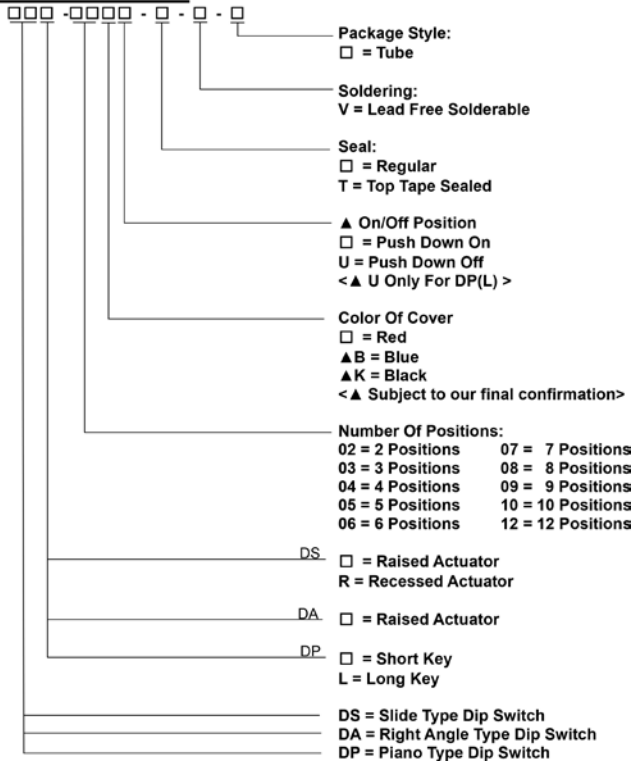
PROD. NO.	NO. OF POS.	DIM. A	DIM. B
DP -12 DPL-12	12	32.04[1.261]	27.94[1.100]
DP -10 DPL-10	10	26.96[1.061]	22.86[.900]
DP -09 DPL-09	9	24.42[.961]	20.32[.800]
DP -08 DPL-08	8	21.88[.861]	17.78[.700]
DP -07 DPL-07	7	19.34[.761]	15.24[.600]
DP -06 DPL-06	6	16.80[.661]	12.70[.500]
DP -05 DPL-05	5	14.26[.561]	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]

SCHEMATIC(TYP.)



Dimensions : Millimetres (Inches)

## HOW TO ORDER



www.element14.com  
 www.farnell.com  
 www.newark.com



# DS, DP, DA Series



## 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 max 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.

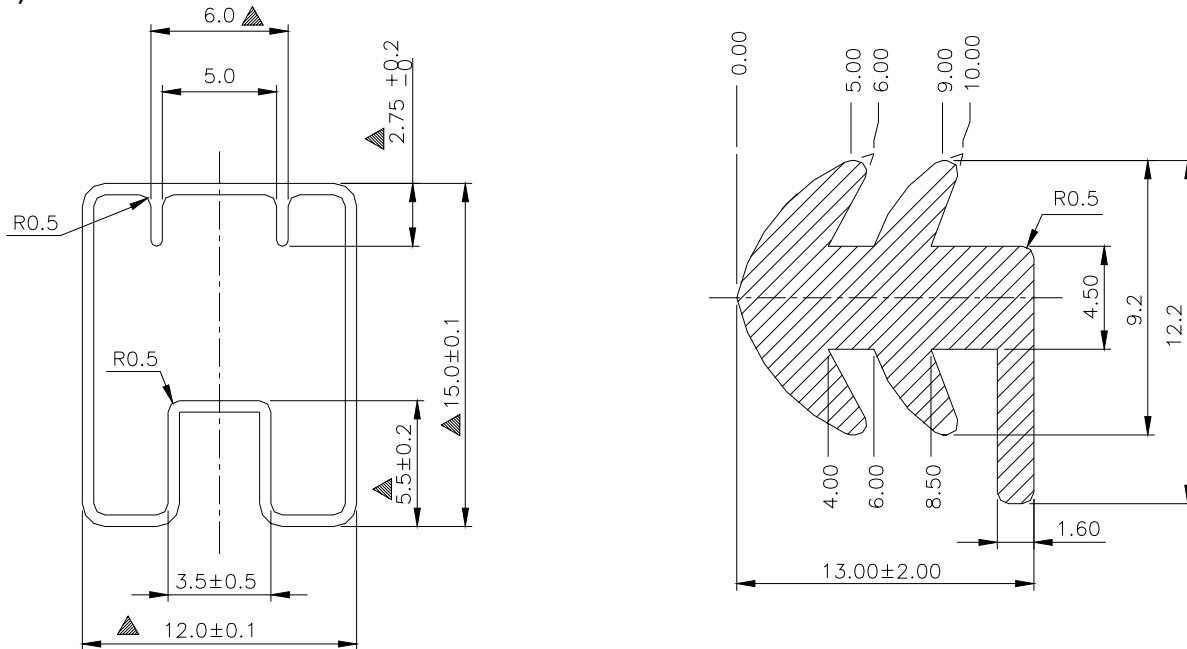
Do not wash the switch body except top tape sealed type, which suitable for spray cleaning method from top of the s/w

## Packing

Part Number	Number Per Tube	Part Number	Number Per Tube
DS(R)-02	72	DS(R)-02-T	70
DS(R)-03	51	DS(R)-03-T	50
DS(R)-04	40	DS(R)-04-T	39
DS(R)-05	32	DS(R)-05-T	32
DS(R)-06	27	DS(R)-06-T	28
DS(R)-07	24	DS(R)-07-T	24
DS(R)-08	21	DS(R)-08-T	21
DS(R)-09	19	DS(R)-09-T	19
DS(R)-10	17	DS(R)-10-T	17
DS(R)-12	14	DS(R)-12-T	14
DP(L)-02	70	DP(L)-02-T	65
DP(L)-03	50	DP(L)-03-T	49
DP(L)-04	39	DP(L)-04-T	39
DP(L)-05	32	DP(L)-05-T	32
DP(L)-06	27	DP(L)-06-T	27
DP(L)-07	24	DP(L)-07-T	24
DP(L)-08	21	DP(L)-08-T	21
DP(L)-09	19	DP(L)-09-T	19
DP(L)-10	17	DP(L)-10-T	17
DP(L)-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

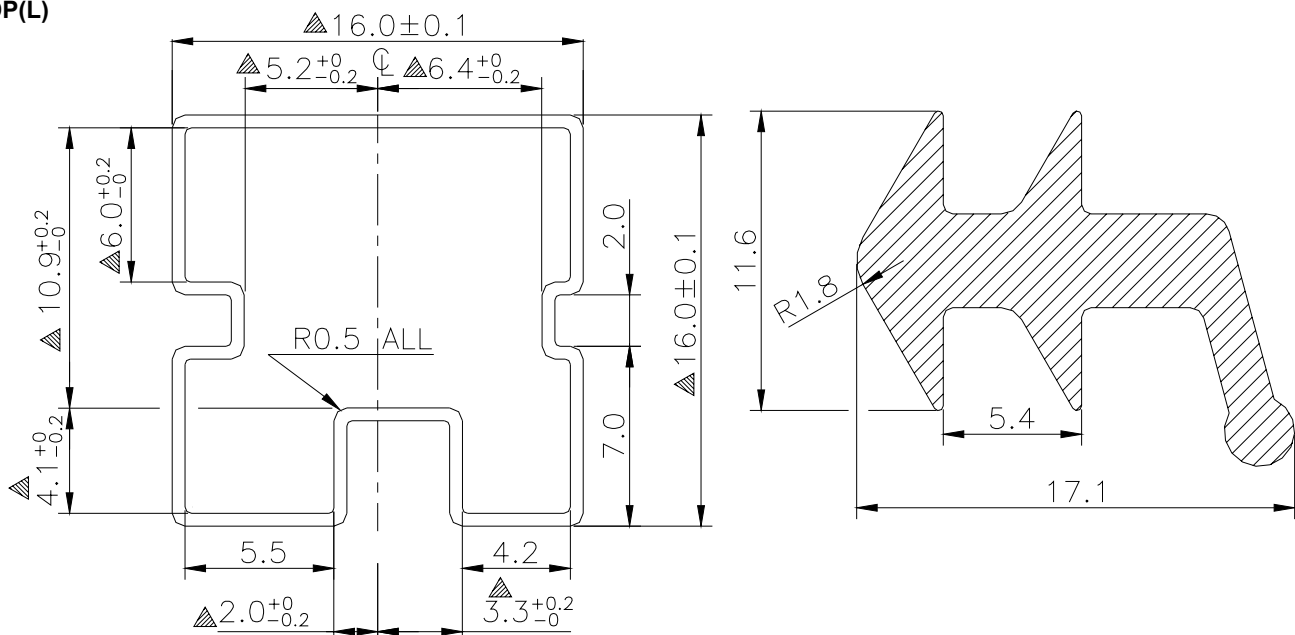
# DS, DP, DA Series

## DS(R)



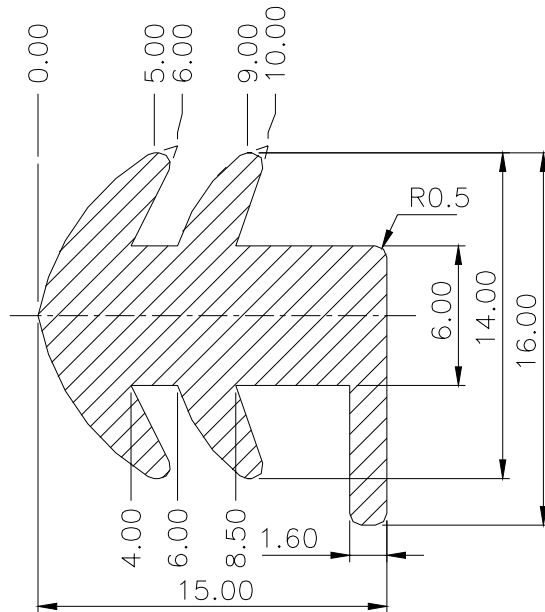
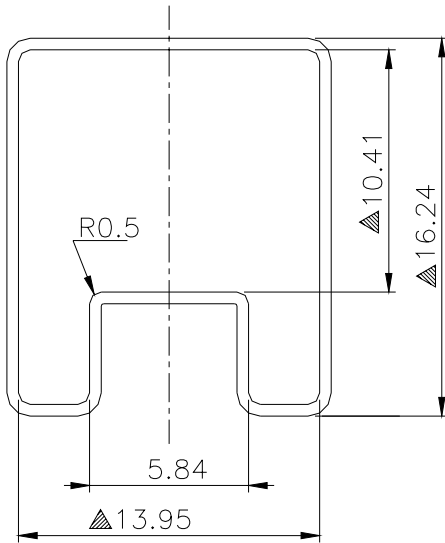
Dimensions : Millimetres

## DP(L)



Dimensions : Millimetres

## DA



Dimensions : Millimetres

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.