10,11,12 Series — Standard Dip Switches

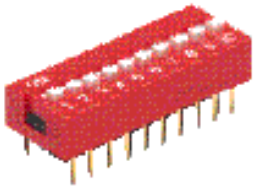
SPECIFICATIONS

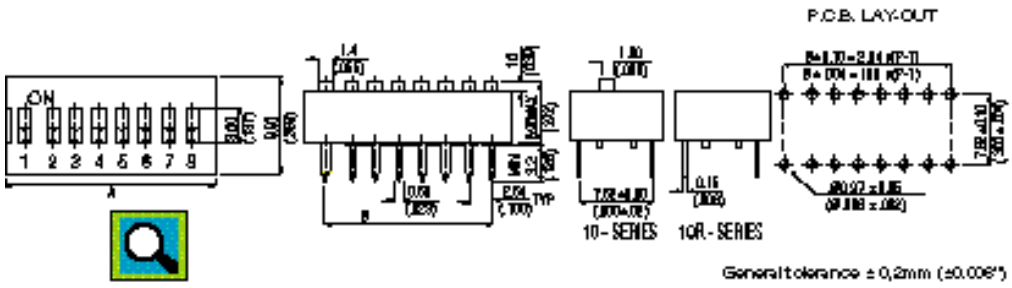
- LOW CONTACT RESISTANCE
- HIGH RELIABILITY
- SELF-CLEANING CONTACTS

MECHANICAL
Mechanical life: 2000 operations per switch.
Operation force: 400gf max. (12 series).
1000gf max. (10 & 11 series).
Stroke: 2.0mm.
Operation temp: -20 ºC to 70 ºC.
Storage temp: -40 ºC to 85 ºC.
Vibration test: MIL-STD-202F method 201A.
Frequency: 10-55-10Hz/1 min.
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 m/sec.
Direction and times: 6 sides and 3 times in each direction. High reliability.

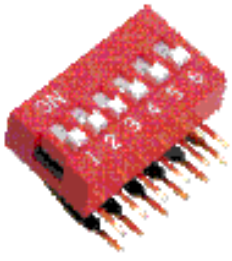
ELECTRICAL
Electrical life: 2000 operations per switch 24VDC, 25mA.
Non-switching rating: 100mA, 50VDC.
Switching rating: 25mA, 24VDC.
Contact resistance: 50mΩ max. at initial.
Insulation resistance: (at 500VDC) 100MΩ min.
Dielectric strength: 500VAC/1 minute.
Capacitance: 5pF max.
Circuit: single pole single throw.
Marking: special side or top marking optional.
MATERIALS
Base: UL94V-0 PBT thermoplastic, black.
Cover: UL94V-0 PBT thermoplastic, red, black, blue.
Actuators: UL94V-0 PBT thermoplastic, white.
Contact: phosphor bronze with gold plating over nickel.
Top seal: polyester film.
Potting material: epoxy.

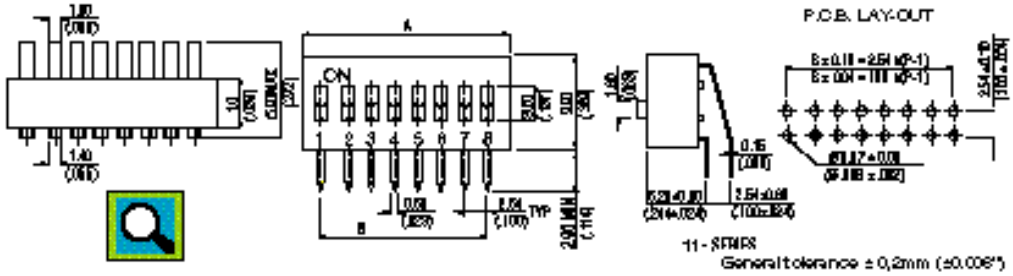
MODEL 10



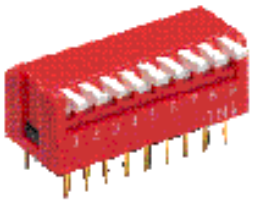


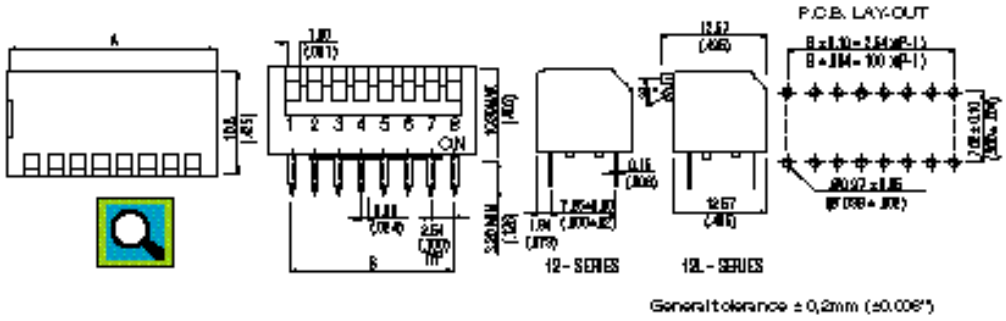
MODEL 11





MODEL 12





SWITCHES

10,11,12 Series — Standard Dip Switches

SOLDERING AND CLEANING PROCESSES

For best results, please follow these recommendations:
Keep all switch contacts in their“OFF” position for all operations.
Wave soldering: recommended solder temperature at 500 F (260 ºC) max. 5 seconds.
Hand soldering: use a soldering iron of 30 Watts or less, controlled at 608 ºF (320 ºC) approximately 2 seconds while applying solder.
Cleaning process: flux clean using force rinse, high agitation or triple bath cleaning method. Freon TF or TE give excellent results. When vapor methods are used, do not subject the switch to solvents at temperature above 125 ºF (51 ºC).

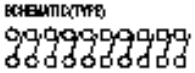
Care should be exercised so that flux from the upper part of the printed circuit board does not adhere to the switch.

Do not clean the switch body except with top tape sealed type, which can only spray of cleaning method from top s/w.

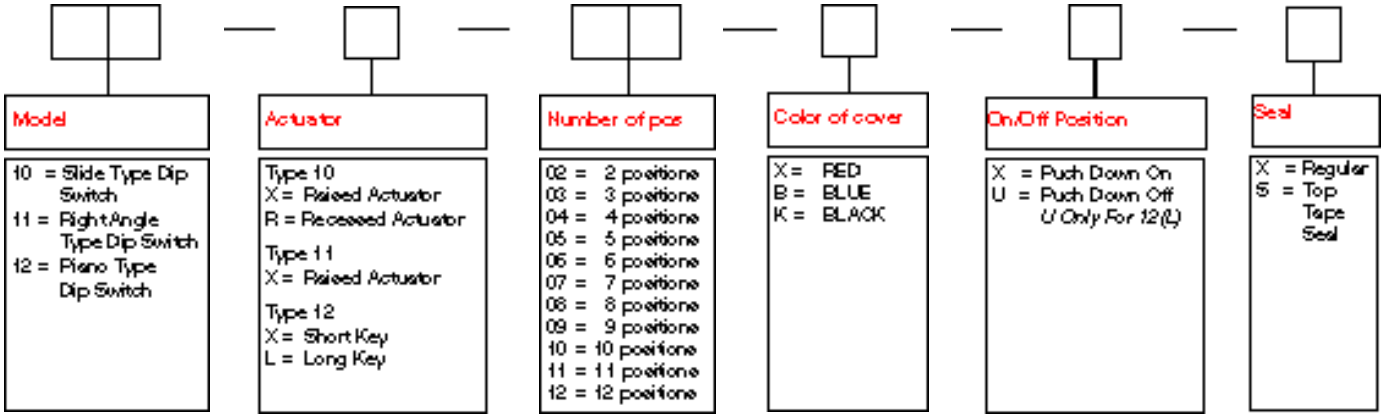
DIMENSIONS

MODEL			NO. OF POS.	DIM.A 12, 12L	DIM.A 10, 10R, 11
10 -12 10R-12	11-12	12 -12 12L-12	12	32.04 (1.261)	31.84 (1.254)
10 -10 10R-10	11-10	12 -10 12L-10	10	25.96 (1.061)	25.76 (1.054)
10 -09 10R-09	11-09	12 -09 12L-09	9	24.42 (.961)	24.22 (.954)
10 -08 10R-08	11-08	12 -08 12L-08	8	21.88 (.861)	21.68 (.854)
10 -07 10R-07	11-07	12 -07 12L-07	7	19.34 (.761)	19.14 (.754)
10 -06 10R-06	11-06	12 -06 12L-06	6	16.80 (.661)	16.60 (.654)
10 -05 10R-05	11-05	12 -05 12L-05	5	14.26 (.561)	14.06 (.554)
10 -04 10R-04	11-04	12 -04 12L-04	4	11.72 (.461)	11.52 (.454)
10 -03 10R-03	11-03	12 -03 12L-03	3	9.18 (.361)	8.98 (.354)
10 -02 10R-02	11-02	12 -02 12L-02	2	6.64 (.261)	6.44 (.254)

SCHEMATIC (TYPE)



HOW TO ORDER



Specifications are subject to change without notice