DB LECTRO


RPL.RP Series
Piano Type Dip Switch


RPL \& RP CONSTRUCTION


1. Terminal plating by gold gives excellent results when soldering
2. RPL series (raised actuator) and RP series (recessed actuator)
3. Low contact resistance, and self-clean on contact area.
4. Double contacts offer high reliability.
5. All materials are UL94V-0 grade fire retardant plastics.

| ITEM | Description | Materials | Treatment |
| :--- | :--- | :--- | :--- |
| 1 | Actuator | UL94V-0 PBT | White |
| 2 | Cover | UL94V-0 PBT | Blue, Red, Black |
| 3 | Base | UL94V-0 PBT | Black |
| 4 | Terminal | Phosphor bronze | Gold Plating |
| 5 | Potting | Epoxy | Black |

P.C.B. LAYOUT


## MODEL

| PROD NO. | NO. OF POS | DIM A |  |
| :--- | :--- | :--- | :--- |
| RPL/RP-02 | 02 | 6.26 | 0.246 |
| RPL/RP-03 | 03 | 9.06 | 0.357 |
| RPL/RP-04 | 04 | 11.34 | 0.446 |
| RPL/RP-05 | 05 | 13.88 | 0.546 |
| RPL/RP-06 | 06 | 16.42 | 0.646 |
| RPL/RP-08 | 08 | 21.5 | 0.846 |
| RPL/RP-10 | 10 | 26.58 | 1.046 |
| RPL/RP-12 | 12 | 31.60 | 1.244 |

## HOW TO ORDER



B =Blue
R $=$ Red
$\mathrm{K}=$ Black

Number of positions:

| 0 | 2 | $=2$ position |
| :---: | :---: | :---: |
| 0 | 3 | $=3$ position |
| 0 | 4 | $=4$ position |
| 0 | 5 | $=5$ position |
| 0 | 6 | $=6$ position |
| 0 | 8 | $=8$ position |
| 1 | 0 | $=10$ position |

Example: RPL-08-B-T is a Piano Type Dip Switch, Long key, 8 position with top tape sealed.

PACKING All Dip Switches are shipped in standard IC tubes with all poles in "OFF" position.

## CIRCUIT DIAGRAM



## TERMINAL TYPE



## SPECIFICATION

## ELECTRICAL

Electrical life: 2000 operation cycles per switch $24 \mathrm{VDC}, 25 \mathrm{~mA}$.
Non-Switching Rating: 100mA, 50 VDC
Switching Rating: $25 \mathrm{~mA}, 24 \mathrm{VCD}$.
Contact resistance: (a) $50 \mathrm{~m} \Omega$ max. at initial
(b) $100 \mathrm{~m} \Omega$ max. after life test.

Insulation resistance: $100 \mathrm{M} \Omega \mathrm{min}$. (at 500VDC)
Dielectric Strength: 500VAC/1 minute.
Capacitance: 5 pF max.
Circuit: Single pole single throw.
MECHANICAL
Mechanical life: 2000 operations per cycle switch
Operation Force: 400gf max.
Stroke: 2.0 mm
Operation Temp: $-25^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$
Storage Temp: $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
Vibration Test: MIL-STD-202F METHOD 201A
Frequency: $10-55-10 \mathrm{~Hz} / 1 \mathrm{~min}$ Directions: $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$, three mutually perpendicular directions.
Time: 2 hours each direction.
High reliability.
Shock Test: MIL-STD-202F METHOD 213B.
CONDITION A
GRAVITY: 50 G (peak value), $11 \mathrm{~m} / \mathrm{sec}$.
Direction and times: 6 sides and three times in each direction. High reliability.

## 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 ( $260^{\circ} \mathrm{C}$ ) max. 5 seconds.
HAND SOLDERING: Use a soldering iron of 30 watts, controlled at $608 \mathrm{~F}\left(320^{\circ} \mathrm{C}\right)$ 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 temperatures above $125 \mathrm{~F}\left(51^{\circ} \mathrm{C}\right)$.

