## (981)

## DB LECTRO <br>  EIECTRONIC COMPONENTS



## RI \& RIR CONSTRUCTION



RIR series

1. RI series (raised actuator) and RIR series (recessed actuator) available for different purposes.
2. Splay terminals allow for automatic insertion by IC insertion machine.
3. Straight terminals are available for manual insertion.
4. Low contact resistance, and self-clean on contact area
5. Gold plated electrical contact and terminal plating by gold gives excellent results when soldering.
6. All materials are UL94V-0 grade fire retardant plastics.

| ITEM | Description | Materials | Treatment |
| :--- | :--- | :--- | :--- |
| 1 | Actuator | UL94V-0 Nylon | Molded white |
| 2 | Cover | UL94V-0 Nylon | Molded black |
| 3 | Base | UL94V-0 Nylon | Molded black |
| 4 | Contact | Beryllium Copper | Gold plated at contact area |
| 5 | Terminal | Brass | Gold plated at contact area <br> and gold plating at terminal |

RoHs RoHS Compliant
P.C.B. LAYOUT


CIRCUIT DIAGRAM


## DB LECTRO:

MODEL

| PROD NO. | NO. OF POS | DIM A |  |
| :--- | :--- | :--- | :--- |
| RI/RIR-01 | 01 | 3.48 | 0.137 |
| RI/RIR-02 | 02 | 6.02 | 0.237 |
| RI/RIR-03 | 03 | 8.56 | 0.337 |
| RI/RIR-04 | 04 | 11.1 | 0.437 |
| RI/RIR-05 | 05 | 13.64 | 0.537 |
| RI/RIR-06 | 06 | 16.18 | 0.637 |
| RI/RIR-07 | 07 | 18.72 | 0.737 |
| RI/RIR-08 | 08 | 21.26 | 0.837 |
| RI/RIR-09 | 09 | 23.8 | 0.937 |
| RI/RIR-10 | 10 | 26.34 | 1.037 |
| RI/RIR-12 | 12 | 31.42 | 1.237 |

## HOW TO ORDER



R I =Machine insertable Type Dip Switch
Example: RI-08G-S is a Machine Insertable Type Dip Switch, Raised Actuator 8 position, splay terminal. all poles in "OFF" position.

## TERMINAL TYPE



## SPECIFICATION

## ELECTRICAL

Electrical life: 2000 operation cycles per switch 24VDC, 25mA.
Non-Switching Rating: $100 \mathrm{~mA}, 50$ VDC
Switching Rating: 25mA, 24VCD.
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: 600gf max.
Stroke: 0.9 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: X, Y, 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 Use a soldering iron of 30 watts, controlled at
SOLDERING: $\quad 608 \mathrm{~F}\left(320^{\circ} \mathrm{C}\right)$ 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 $125 \mathrm{~F}\left(51^{\circ} \mathrm{C}\right)$.

