

RM \& RMR CONSTRUCTION


1. RM series (raised actuator) and RMR series (recessed actuator) available for different purposes.
2. Low contact resistance, and self-clean on contact area.
3. Gold plated electrical contact and terminal plating by gold give excellent results when soldering.
4. Double contacts offer high reliability.
5. 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 |

RM SERIES

P.C.B. LAYOUT


CIRCUIT DIAGRAM

## MODEL

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

## HOW TO ORDER



Number of positions:

| 0 | 1 | $=1$ position |
| :---: | :---: | :---: |
| 0 | 2 | =2 position |
| 0 | 3 | $=3$ position |
| 0 | 4 | -4 position |
| 0 | 5 | $=5$ position |
| 0 | 6 | $=6$ position |
| 0 | 7 | $=7$ position |
| 0 | 8 | -8 position |
| 0 | 9 | =9 position |
| 1 | 0 | $=10$ position |
| 1 | 2 | $=12$ position |

- Actuator Type:Raised Actuator
R Recessed Actuator (Top Tape Sealed Available Only)
$R \quad M=$ Surface Mounting Type Dip Switch
Example: RMR-08G-T is a surface mounting Type Dip Switch, Recessed Actuator 8 position, with, top tape sealed.


TERMINAL TYPE



Tape \& reel packing (Per EIA standards) For packing details, please refer to pages 13


## SPECIFICATION

## ELECTRICAL

Electrical life: 2000 operation cycles per switch $24 \mathrm{VDC}, 25 \mathrm{~mA}$.
Non-Switching Rating: 100mA, 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: $100 \mathrm{M} \Omega$ min. (at 500VDC)
Dielectric Strength: 500VAC/1 minute.
Capacitance: 5pF 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: $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$, three mutually perpendicular directions.
Time: 2 hours each direction.
High reliability.
Shock Test: MIL-STD-202F METHOD 213B.

## CONDITION A

GRAVITY: 50G (peak value), $11 \mathrm{~m} / \mathrm{sec}$.
Direction and times: 6 sides and three times in each direction. High reliability.

PACKING All DIP switches are shipped in standard IC tubes or Tape \& Reel Package with all poles in the "OFF" position.

## CARRIER TAPE PACKING



| PART NO. | NO. OF POS | A | B | C | Q'TY/REEL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RMR-02G-T-R | 02 | 6.50 | 5.5 | 16 | 800 pcs |
| RMR-03G-T-R | 03 | 9.00 | 7.5 | 16 | 800 pcs |
| RMR-04G-T-R | 04 | 11.50 | 11.5 | 24 | 800 pcs |
| RMR-05G-T-R | 05 | 14.10 | 11.5 | 24 | 800 pcs |
| RMR-06G-T-R | 06 | 16.60 | 14.2 | 32 | 800 pcs |
| RMR-07G-T-R | 07 | 19.10 | 14.2 | 32 | 800 pcs |
| RMR-08G-T-R | 08 | 21.70 | 14.2 | 32 | 800 pcs |
| RMR-09G-T-R | 09 | 24.20 | 20.2 | 44 | 800 pcs |
| RMR-10G-T-R | 10 | 26.70 | 20.2 | 44 | 800 pcs |
| RMR-12G-T-R | 12 | 31.90 | 20.2 | 44 | 800 pcs |

## SOLDERING AND CLEANING PROCESSES

For best results, please follow these recommendations: Keep all switch contacts in their "OFF" position for all operations. Soldering: vapor phase \& IR-reflow soldering can be applied. 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 $125 \mathrm{~F}\left(51^{\circ} \mathrm{C}\right)$.

Reflow Temperature Profile. (reference)
Temperature


## CARRIER TAPE PACKING



