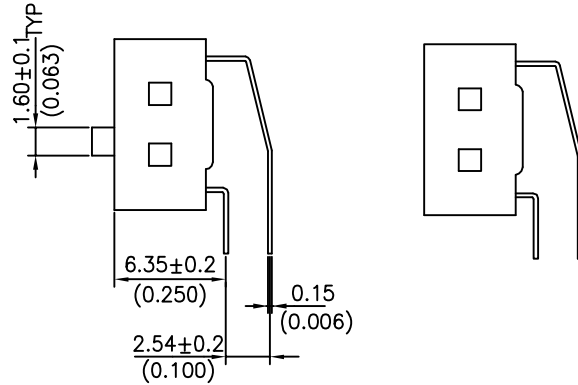
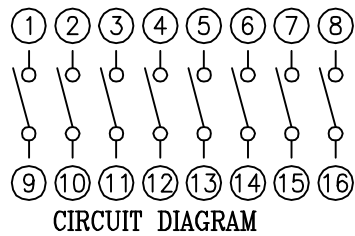
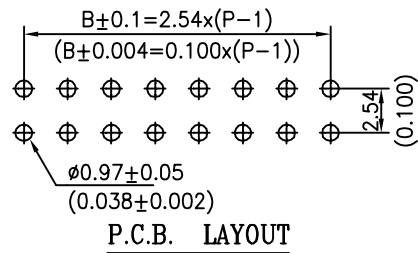
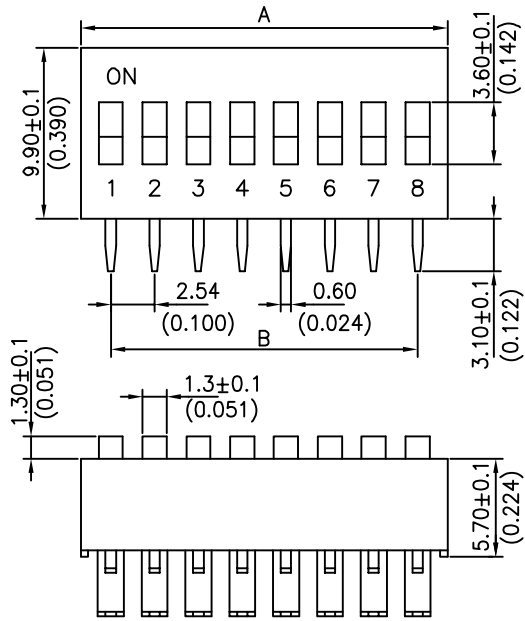
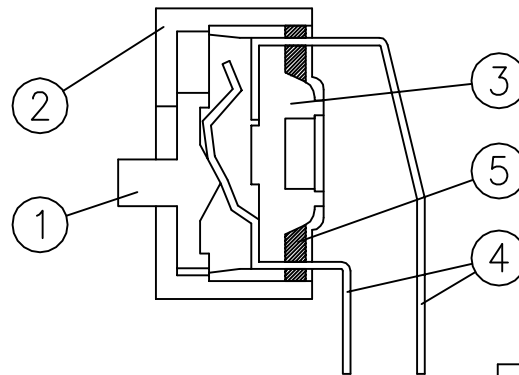


MODEL NO:RA series  
DIMENSION:(UNIT:mm/inches)



RA SERIES



RAR SERIES



CONSTRUCTION

| Prod No. | No.ofPOS | DIM.A        | DIM.B        |
|----------|----------|--------------|--------------|
| RA-01    | 01       | 3.84(0.151)  | ———          |
| RA-02    | 02       | 6.08(0.239)  | 2.54(0.100)  |
| RA-03    | 03       | 8.92(0.351)  | 5.08(0.200)  |
| RA-04    | 04       | 11.16(0.439) | 7.62(0.300)  |
| RA-05    | 05       | 13.70(0.539) | 10.16(0.400) |
| RA-06    | 06       | 16.24(0.639) | 12.70(0.500) |
| RA-07    | 07       | 19.08(0.751) | 15.24(0.600) |
| RA-08    | 08       | 21.32(0.839) | 17.78(0.700) |
| RA-09    | 09       | 24.16(0.951) | 20.32(0.800) |
| RA-10    | 10       | 26.40(1.039) | 22.86(0.900) |
| RA-12    | 12       | 31.48(1.239) | 27.94(1.100) |

| ITEM | DES      | MATERIALS                 | TREATMENT        |
|------|----------|---------------------------|------------------|
| 1    | ACTUATOR | UL94V-0 PBT THERMOPLASTIC | WHITE            |
| 2    | COVER    | UL94V-0 PBT THERMOPLASTIC | BLUE, RED, BLACK |
| 3    | BASE     | UL94V-0 PBT THERMOPLASTIC | BLACK            |
| 4    | TERMINAL | PHOSPHOR BRONZE           | GOLD PLATING     |
| 5    | POTTING  | EXPOXY                    | BLACK            |

| 一般公差  |       | PART NAME:   | PART NO: |   |
|-------|-------|--|----------|---|
| 尺寸範圍  | 容許值   | RIGHT ANGLE TYPE DIP SWITCH  | RA-□□    |   |
| 0-4   | ±0.05 |  瑞森實業有限公司<br>RUEY SHEN ELECTRONICS INC. | SCALE    |   |
| 4-16  | ±0.1  |  | UNIT     | mm(IN)  |
| 16-50 | ±0.15 |  | 3RD      |  |

## Models: RA/RAR SERIES DIP SWITCH

### 1. SPECIFICATIONS.

- 1-1. External appearance: Ref. Attached print.
- 1-2. Material & treatment of parts: Ref. Attached print.
- 1-3. All materials are UL 94V-0 grade fire retardant plastics.

### 2. FEATURES

- 2-1. This switch is slide switch of one body type that each pole is parallel and it is constituted by one moving contact and two terminals.
- 2.2 Terminal plating by gold give excellent results when soldering.
- 2-3. RA series (raised actuator).
- 2-4. Low contact resistance, and self-clean on contact area.
- 2-5. High reliability.

### 3. ELECTRICAL

- 3-1. Electrical Life: 2000 operation cycles per switch -24VDC, 25mA.
- 3-2. Non-switching Rating: 100mA, 50VDC.
- 3-3. Switching Rating: 25mA, 24VDC.
- 3-4. Contact Resistance: (a) 50m $\Omega$  max. at initial.  
(b) 100m $\Omega$  max. after life test.
- 3-5. Insulation Resistance: 100M $\Omega$  min. at 500VDC.
- 3-6. Dielectric Strength: 500VAC/1 minute.
- 3-7. Capacitance: 5pF max.
- 3-8. Circuit: Single pole single throw.

### 4. MECHANICAL

- 4-1. Mechanical life: 2000 operations per switch.
- 4-2. Operation Force: 800gf max.
- 4-3. Stroke: 2.0mm. Document No.3-E-05
- 4-4. Operation Temp: -25 $^{\circ}$ C to 70 $^{\circ}$ C
- 4-5. Storage Temp: -40 C to 85 C
- 4-6. Vibration Test: MIL-STD-202F METHOD 201A  
Frequency: 10-55-10 Hz/1 min  
Directions: X, Y, Z, three mutually perpendicular direction.  
Time: 2 hours each direction.  
High reliability.

- 4-7. Shock Test: MIL-STD-202F METHOD 213B CONDITION A.
- 4-8. Gravity: 50G (peak value), 11m/sec.
- 4-9. Direction and times: 6 sides and 3 times in each direction. High reliability.

## 5. SOLDERING PROCESSES.

- 5-1. Keep all switch contacts in their “OFF” position for all operation.
- 5-2. Wave soldering: Recommended solder temperature at 500F (260 C) max. 5 seconds.
- 5-3. Hand soldering: Use a soldering iron of 30 watts, controlled at 608 F(320 C), approximately 2 seconds while applying solder.

## 6. FLUX CLEANING :

- 6-1. Solvent: Fluorine or Alcohol type.
- 6-2. Cleaning shall be made when terminal temperature falls to 90 C or lower, or leave the switch at normal temperature for 5 minutes or longer, before cleaning.
- 6-3. Do not apply ultrasonic cleaning.
- 6-4. “LE” type are not washable.
- 6-5. Do not operate the switch during soldering and cleaning.

## 7. WEATHER-PROFF

- 7-1. Resistance Low Temperature:
  - (1) Temperature: - 40°C ± 3°C.
  - (2) Time: 96 hours.
- 7-2. Resistance High Temperature:
  - (1) Temperature: 85°C ±2°C
  - (2) Time: 96 hours.
- 7-3. Resistance Humidity:
  - (1) Temperature: 40°C ± 2 °C
  - (2) Relative Humidity: 90-95%
  - (3) Time: 96 hours.