

Document No.3-E-03 Edition No. A Page: 1/2

Models: RI/RIR 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. RI series (raised actuator) and RIR series (recessed actuator) available for different purposes.
 - 2-3. Splay terminals allow for automatic insertion by IC insertion machine.
 - 2-4. Straight terminals are available for manual insertion.
 - 2-5. Low contact resistance, self-clean on contact area.
 - 2-6 Gold plated contact to ensure low contact resistance and tin plated terminal to prevent contamination during soldering.
 - 2-7. Double contacts offers 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: 600gf max.
- 4-3. Stroke: 0.9mm.
- 4-4. Operation Temp: -25°C to 70°C
- 4-5. Storage Temp: 40° C to 85° C

Document No.3-E-03 Edition No. A Page: 2/2

4-6. Vibration Test: MIL-STD-202F METHOD 201A Frequency: 10-55-10 Hz/1 min Directions: X, Y, Z, three mutually perpendicular directions. Time: 2 hours each direction. High reliability.

4-7. Shock Test: MIL-STD-202F METHOD 213B CONDITION A.

- 4-8. Gravity: 50G (peak value), 11msec.
- 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 $500^{\circ}F$

 $(260^{\circ}C)$ max. 5 seconds.

5-3. Hand soldering: Use a soldering iron of 30 watts or less, 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 $\pm 2^{\circ}$ C
 - (2)Time: 96 hours.
- 7-3. Resistance Humidity:
 - (1)Temperature: $40^{\circ}C \pm 2^{\circ}C$
 - (2)Relative Humidity: 90-95%
 - (3)Time: 96 hours.