## SERIES 97

## Half-Pitch

## FEATURES

- Half the Size of Standard DIP Switches
- Available in 2, 4, 6, 8, and 10 Positions
- Low Profile
- Less Mass for Easy Vacuum Pick \& Place


## APPLICATIONS

Used in any DIP application where space is at a premium such as notebook computers, hand-held radios, industrial control products, CDROM drives, cellular base stations and coin changers.


Fig. 1 Series 97C DIMENSIONS In inches (and millimeters)


Fig. 2 Series 97R DIMENSIONS In inches (and millimeters)


## SPECIFICATIONS

## Electrical Ratings

Contact Rating: 25 mA at 24 Vdc switching;
100 mA at 50 Vdc non-switching
Contact Resistance: $100 \mathrm{~m} \Omega$ max, initially
Insulation Resistance: $100 \mathrm{M} \Omega$ minimum at 100 Vdc
Dielectric Strength: 300 Vac for one minute Switch Capacitance: 5pF maximum
Contact Arrangement: SPST

## Mechanical Ratings

Life: 1,000 cycles minimum
Operation Force: 500 gF
Mechanical Shock: MIL-STD-202F, Method, 213B, Test Condition A. Gravity: 50G's (peak value), $11 \mathrm{~m} / \mathrm{sec}$. Direction and times: 6 sides and 3 times in each direction.
Vibration: MIL-STD-202F, Method 201A. Passed 6 hours (2 hours in each) of three
perpendicular planes at a cycle of $10-55-10 \mathrm{~Hz} / 1$ minute.
Operating Temperature Range: -40 to $85^{\circ} \mathrm{C}$
Storage Temperature Range: -40 to $85^{\circ} \mathrm{C}$

## Materials

Base and Cover: UL94V-0 Nylon, black
Actuators: UL94V-0 Nylon thermoplastic, white Base Contacts: Alloy copper with gold-plating over nickel
Terminals: Brass with gold-plating
Tape Seal: Kapton

## Soldering Information

Vapor phase and IR-reflow soldering can be applied. With stands $255^{\circ} \mathrm{C}$ peak temperature.

All DIP switches are shipped in the "ON" position.

## ORDERING INFORMATION

|  | Series: 97C see fig. 1, 97R see fig. 2 <br> Positions: $02=.148(3,76), 04=.248(6,30), 06=.348(8,84)$, $08=.448(11,38), 10=.548(13,92)$ |
| :---: | :---: |
|  | T= RoHS compliant <br> Packaging: Blank = Tube, R = Tape and Reel (see pkg note) <br> Seal: Blank = Unsealed, S = Top Tape Seal |

## CIRCUITRY



Cleaning: Tape sealed versions are capable of withstanding washing processes using alcohol-based solvents only. Water or other water-based solvent washing processes are not recommended. Care should be taken to avoid flux adhering to the switch body from the circuit board soldering process. The switch should be allowed to cool for at least 3 minutes between the end of the solder process and the beginning of the wash process. The solvent stage of the cleaning process is not to exceed 1 minute and the whole wash process is not to exceed 3 minutes. Ultrasonic or pressure wash cleaning is not recommended.

## Packaging Information

Tube: $130 \mathrm{pcs} /$ tube (2 positions), $75 \mathrm{pcs} /$ tube ( 4 positions), $54 \mathrm{pcs} /$ tube ( 6 positions), $40 \mathrm{pcs} /$ tube (8 positions), 33 pcs/tube ( 10 positions). Tape and Reel: 97C: 4,000 pcs/reel (all positions). 97R: $2500 \mathrm{pcs} /$ reel (all positions).

