## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

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## SERIES 97

## Half-Pitch

## FEATURES

- Low Profile
- Half the Size of Standard DIP Switches
- 2, 4, 6, 8 \& 10 Positions Available
- 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, CD-ROM 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: 5 pF 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.

## ORDERING INFORMATION

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.

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

## CIRCUITRY


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.

Actuation: Switch slides should be actuated from a low angle in the intended direction of travel. The application of excess force from a high angle can cause permanent damage to the contact system. Tape seals must be removed to properly actuate the switches.

## Packaging Information

Tube: 125 pcs/tube ( 2 positions), $75 \mathrm{pcs} /$ tube ( 4 positions), $54 \mathrm{pcs} /$ tube ( 6 positions), $40 \mathrm{pcs} /$ tube ( 8 positions), $33 \mathrm{pcs} /$ tube ( 10 positions).
Tape and Reel: 97C: $4,000 \mathrm{pcs} / \mathrm{reel}$ (all positions). 97R: $2500 \mathrm{pcs} /$ reel (all positions).

DIP switches are shipped in the "ON" position.

