

## 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, CD-ROM drives, cellular base stations and coin changers.

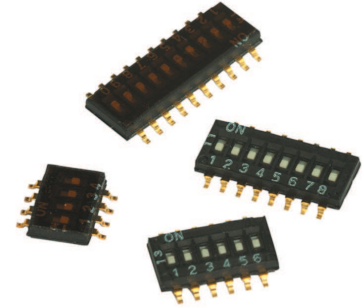


Fig. 1 Series 97C DIMENSIONS In inches (and millimeters)

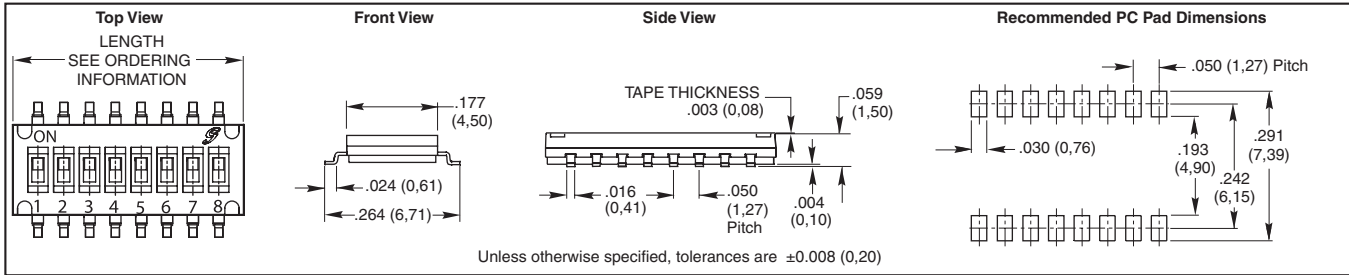
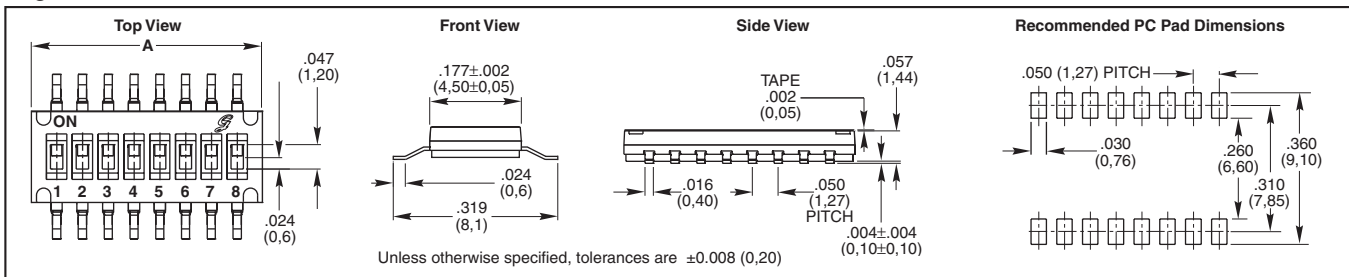


Fig. 2 Series 97R DIMENSIONS In inches (and millimeters)



#### SPECIFICATIONS

##### Electrical Ratings

- Contact Rating:** 25 mA at 24 Vdc switching; 100 mA at 50 Vdc non-switching
- Contact Resistance:** 100 mΩ max, initially
- Insulation Resistance:** 100 MΩ 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 m/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 10-55-10Hz/1 minute.

- Operating Temperature Range:** -40 to 85°C
- Storage Temperature Range:** -40 to 85°C

##### Materials

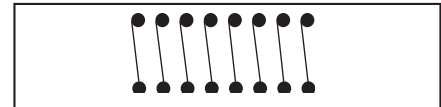
- Base and Cover:** UL94V-0 Nylon, black
- Actuators:** UL94V-0 Nylon thermoplastic, white
- Base Contacts:** Alloy copper with gold-plating over nickel
- Terminals:** Brass with gold-plating
- Tape Seal:** Kapton

##### Soldering Information

Vapor phase and IR-reflow soldering can be applied. With stands 255°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

#### CIRCUITRY



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 pcs/tube (2 positions), 75 pcs/tube (4 positions), 54 pcs/tube (6 positions), 40 pcs/tube (8 positions), 33 pcs/tube (10 positions).  
**Tape and Reel:** 97C: 4,000 pcs/reel (all positions). 97R: 2500 pcs/reel (all positions).

**Actuation Instructions:** 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 of the switch. Tape seals must be removed to properly actuate the switches as described above.

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

#### ORDERING INFORMATION

