

## SERIES 97

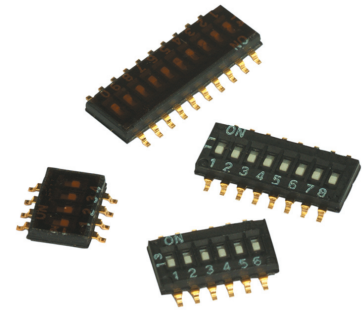
### Half-Pitch

#### FEATURES

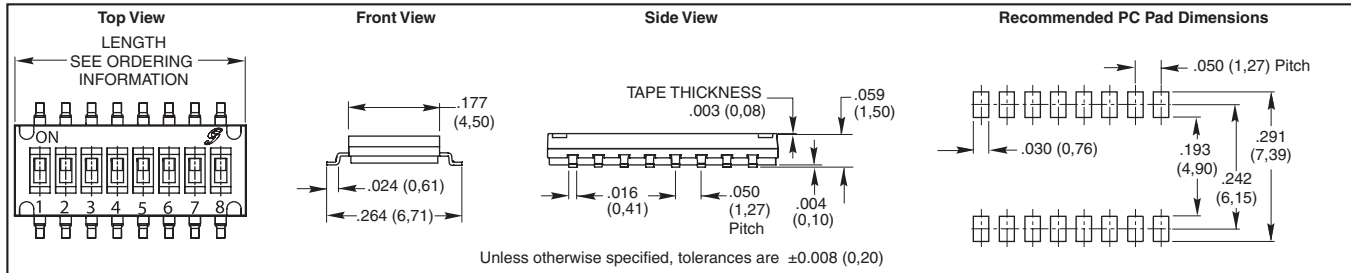
- Low Profile
- Half the Size of Standard DIP Switches
- 2, 4, 6, 8 & 10 Positions Available
- Less Mass for Easy Vacuum Pick & Place

#### APPLICATIONS

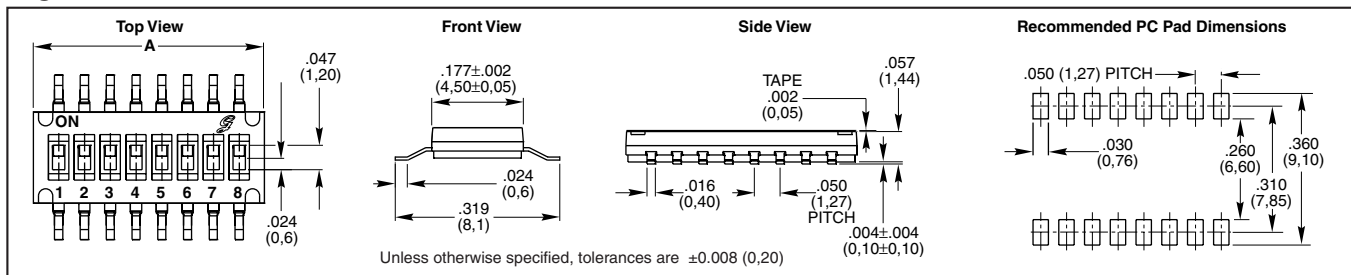
Used in any DIP application where space is at a premium such as notebook computers, hand-held radios, industrial control products, CD-ROM drives, cellular base stations and coin changers.



**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 m $\Omega$  max, initially  
**Insulation Resistance:** 100 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 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

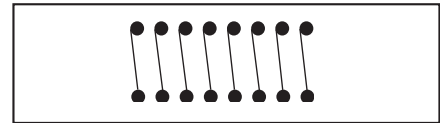
**Base and Cover:** UL94V-0 Nylon, black  
**Actuators:** UL94V-0 Nylon thermoplastic, white  
**Base Contacts:** Alloy copper with gold-plating over nickel  
**Terminals:** Brass with gold-plating  
**Tape Seal:** Kapton

##### 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 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 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).

DIP switches are shipped in the "ON" position.

#### ORDERING INFORMATION

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