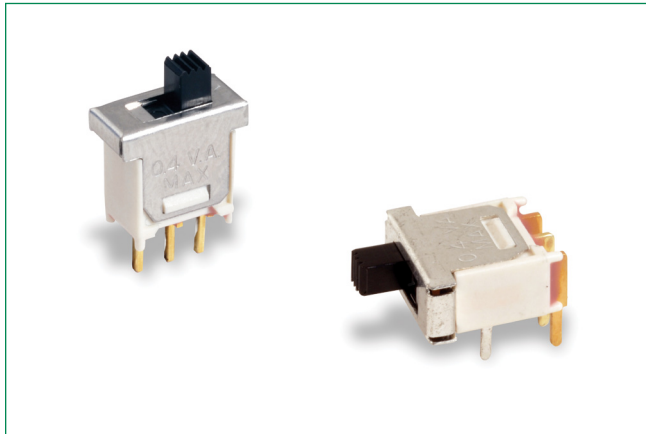


# TS Series

## Tiny Slide Switches



### Description

The TS series tiny slide switches feature reliable contact design, which ensures a long electrical life. With ratings up to 3 A, the TS series are epoxy terminal-seal compatible with bottom wash cleaning capabilities. TS switches are found in test & measurement equipment, computers & peripherals and telecommunications & networking equipment.

### Features & Benefits

- Reliable contact design ensures long electrical life
- Ratings up to 3 AMPS
- Epoxy terminal-seal compatible with bottom wash cleaning
- RoHS compliant

### Applications

- Test & measurement equipment
- Computers & peripherals
- Telecommunications & networking equipment

### Agency Approvals

Agency	Agency File Number
	E42363

### Specifications

<b>Contact Rating</b>	B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material (TS01 model): 3 amps @ 120 V AC or 28 V DC; (TS02, TS03 models): 1 amp @ 120 V AC or 28 V DC. See page 3 for additional ratings.
<b>Electrical Life</b>	TS01 models: 60,000 make-and-break cycles at full load. TS02, TS03 models: 30,000 cycles.
<b>Contact Resistance</b>	Below 20 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.
<b>Insulation Resistance</b>	10 <sup>9</sup> Ω min.
<b>Dielectric Strength</b>	1,000 Vrms min. @ sea level.
<b>Operating Temperature</b>	-30°C to 85°C
<b>Solderability</b>	Per MIL-STD-202G method 208H

### Materials

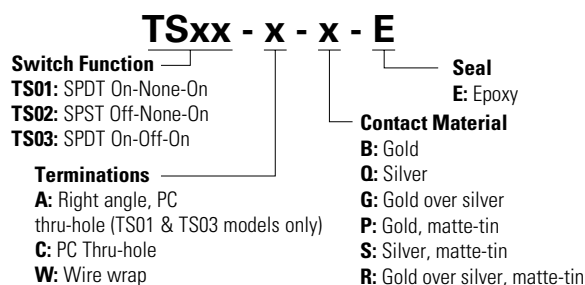
<b>Case</b>	Glass filled nylon 4/6, flame retardant, heat stabilized.
<b>Actuator</b>	Nylon, black standard.
<b>Housing</b>	Stainless steel or stainless steel, nickel plated.
<b>End Contacts</b>	B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page 3 for additional contact materials.
<b>Center Contacts &amp; All Terminals</b>	B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copperalloy, silver plated. See page 3 for additional contact materials.
<b>Terminal Seal</b>	Epoxy. Refer to Soldering and Cleaning in Technical Data chapter.

**Notes:**

Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

### Ordering Number

To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.



# TS Series

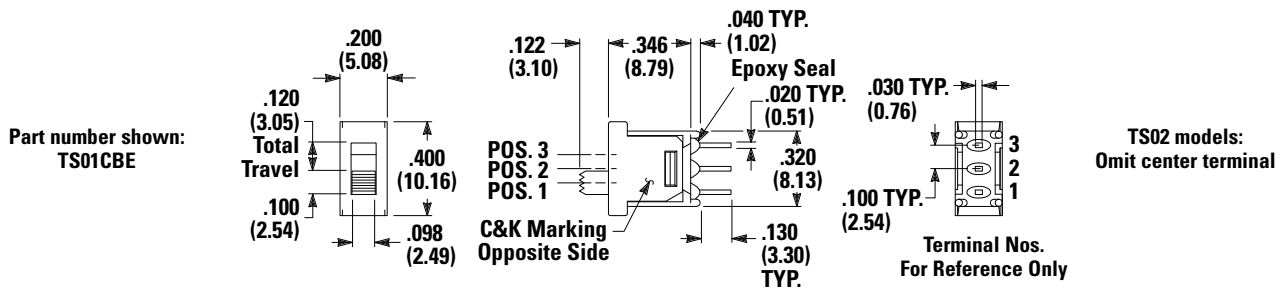
## Tiny Slide Switches



### Switch Function

No. Poles	Model No.	Switch Function			Connected Terminals			Schematic
		POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
		C&K Marking on Opposite Side						
SP	TS01	ON	NONE	ON	1-2	OPEN	2-3	
	TS03	OFF	OFF	ON	1-2	OPEN	2-3	
	TS02	OFF	NONE	ON	OPEN	N/A	3-1	

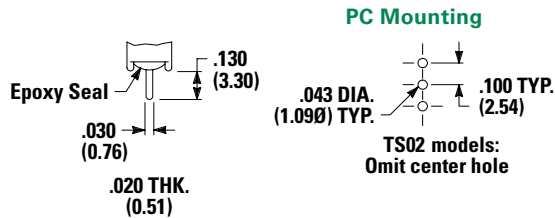
### SPDT



Notes: All models C & K US with all options when ordered with G, Q, R or S contact material. TS02 model not available with A terminations.

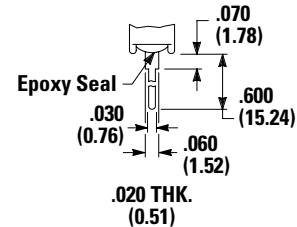
### Terminations

#### C PC Thru-hole



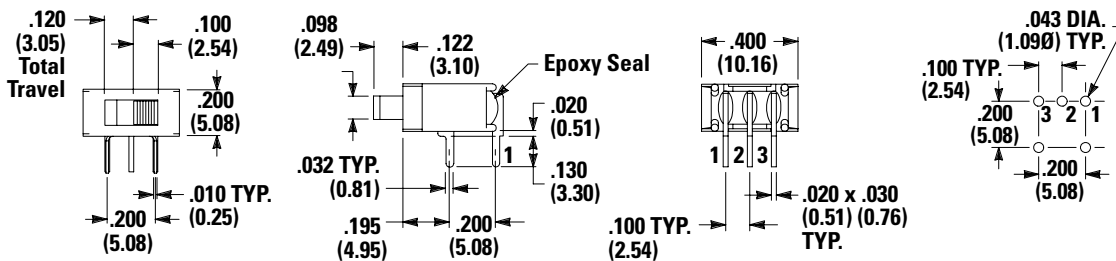
SPDT and SPST

#### W Wire Wrap



SPDT and SPST

#### A Right Angle, PC Thru-hole TS01ABE Horizontal Actuation SPDT



Actuator Shown in pos. 1

Notes: Not available with TS02 model.

# TS Series

## Tiny Slide Switches



### Contact Material

Option Code	Contact Material	Terminal Plating	Ratings	
B	Gold <sup>1</sup>	Gold <sup>1</sup>	Low Level / Dry Circuit	0.4 VA max. @ 20 V AC or DC max.
P		Matte-Tin <sup>6</sup>		
Q	Silver <sup>4,5</sup>	Silver <sup>5</sup>	Power	TS01 models: 3 amps @ 120 V AC or 28 V DC. TS02, TS03 models: 1 amp @ 120 V AC or 28 V DC.
S				
G	Gold over Silver <sup>2,3</sup>	Gold <sup>3</sup>	Low Level / Dry Level Circuit or Power	TS01 models: 0.4 VA max. @ 20 V AC or DC max. or 3 amps @ 120 V AC or 28 V DC. TS02, TS03 models: 0.4 VA max. @ 20 V AC or DC max. or 1 amp @ 120 V AC or 28 V DC.
R		Matte-Tin <sup>6</sup>		

**Notes:** See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

**1. Contacts & Terminals:** Copper alloy, with gold plate over nickel plate.

**2. End Contacts:** Coin silver, with gold plate over nickel plate.

**3. Center Contacts & All Terminals:** Copper alloy, with gold plate over nickel plate.

**4. End Contacts:** Coin silver, silver plated.

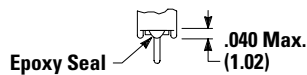
**5. Center Contacts & All Terminals:** Copper alloy, silver plated.

**6. Terminals:** Copper alloy, with matte tin alloy nickel plate.

**Notes:** All models C&K® US with all options when ordered with G, S or R contact material. B contact material standard with A and W terminations. Q contact material standard with C terminations. Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.

### Seal

#### E Epoxy Seal



**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.