Littelfuse Cak



### **Agency Approvals**

Agency	Agency File Number
c <b>Ru</b> s	E42363

### Specifications

Contact Rating	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.	
Electrical Life	TS01 models: 60,000 make-and-break cycles at full load. TS02, TS03 models: 30,000 cycles.	
Contact Resistance	Below 20 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.	
Insulation Resistance	10º Ω min.	
Dielectric Strength	1,000 Vrms min. @ sea level.	
<b>Operating Temperature</b>	-30°C to 85°C	
Solderability	Per MIL-STD-202G method 208H	

# 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

## **Applications**

- Test & measurement equipment
- Computers & peripherals
- RoHS compliant

Telecommunications &

networking equipment

compatible with bottom wash

Epoxy terminal-seal

cleaning

### Materials

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

Notes:

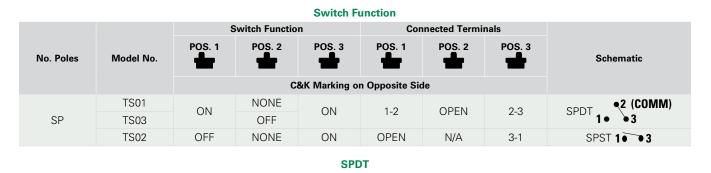
Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

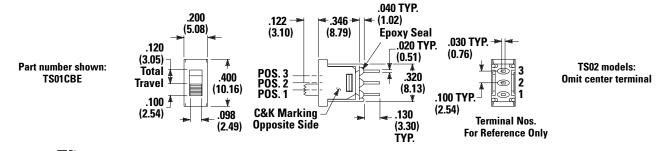
### Ordering Number

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.

TSxx - x - x - E					
Switch Function —	Seal				
TS01: SPDT On-None-On	E: Epoxy				
TS02: SPST Off-None-On TS03: SPDT On-Off-On	— Contact Material				
1503: SPD1 Un-UTT-UN	B: Gold				
Terminations	<b>Q:</b> Silver				
A: Right angle, PC	G: Gold over silver				
thru-hole (TS01 & TS03 models	only) P: Gold, matte-tin				
C: PC Thru-hole	S: Silver, matte-tin				
W: Wire wrap	R: Gold over silver, matte-tin				

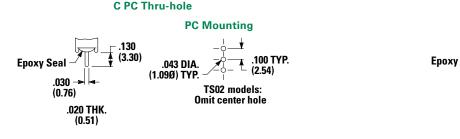




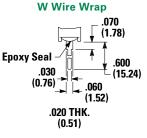


Notes: All models c Rus with all options when ordered with G, Q, R or S contact material. TS02 model not available with A terminations.





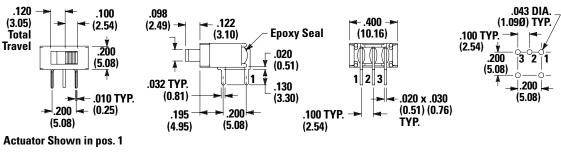
SPDT and SPST



SPDT and SPST

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

**PC Mounting** 



Notes: Not available with TS02 model.





#### **Contact Material**

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

RoHS compliant.

B contact material standard with A and W terminations. O contact material standard with C terminations. Any models supplied with Q, B, G, P, S or R contact material are

Notes: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications. Notes: All models c Wus with all options when ordered with G, S or R contact material.

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

Epoxy Seal -

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

> Seal E Epoxy Seal .040 Max. (1.02)

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