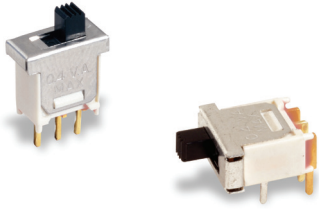


# TS Series Tiny Slide Switches



Models Available

## Features/Benefits

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

## Typical Applications

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

## 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 I-10 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:** 10<sup>9</sup> Ω min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min. @ sea level.

**OPERATING TEMPERATURE:** -30°C to 85°C

**SOLDERABILITY:** Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

## Materials

**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 I-10 for additional contact materials.

**CENTER CONTACT & ALL TERMINALS:** B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page I-10 for additional contact materials.

**TERMINAL SEAL:** Epoxy. Refer to Soldering and Cleaning in Technical Data chapter.

**NOTE:** Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.

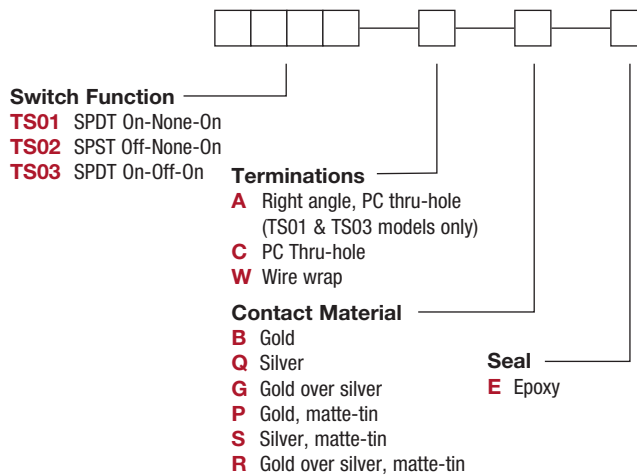
**NOTE:** Specifications and materials listed above are for switches with standard options.

For information on specific and custom switches, consult Customer Service Center.

Slide

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages I-9 and I-10. 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.



## SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS			SCHEMATIC
		POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
SP	<b>TS01</b>	ON	NONE	ON	1-2	OPEN	2-3	
	<b>TS03</b>	ON	OFF	ON				
	<b>TS02</b>	OFF	NONE	ON	OPEN	N/A	3-1	

**SPDT**

Part number shown: TS01CBE

TS02 models:  
Omit center terminal

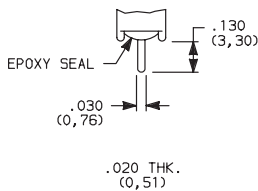
Terminal Nos.  
For Reference Only

All models with all options when ordered with G, Q, R or S contact material.

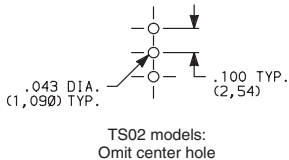
TS02 model not available with A terminations.

## TERMINATIONS

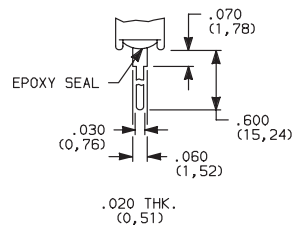
**C** PC THRU-HOLE



**PC MOUNTING**



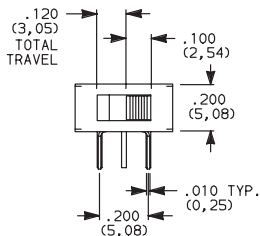
**W** WIRE WRAP



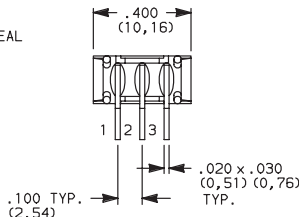
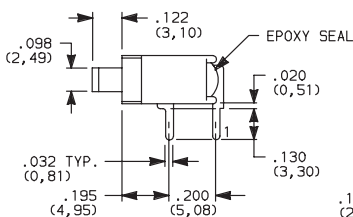
**SPDT and SPST**

**SPDT and SPST**

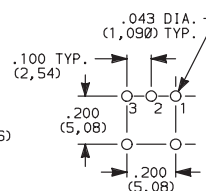
**A** RIGHT ANGLE, PC THRU-HOLE



Actuator shown in pos. 1



**PC MOUNTING**



**TS01ABE**  
Horizontal Actuation  
**SPDT**

Not available with TS02 model.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change


# TS Series Tiny Slide Switches

## CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
<b>B</b>	GOLD <sup>1</sup>	GOLD <sup>3</sup>	LOW LEVEL/DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
<b>P</b>		MATTE-TIN <sup>6</sup>		
<b>Q</b>	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.
<b>S</b>		MATTE-TIN <sup>6</sup>		
<b>G</b>	GOLD OVER SILVER <sup>2,3</sup>	GOLD <sup>3</sup>	LOW LEVEL/DRY 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.
<b>R</b>		MATTE-TIN <sup>6</sup>		

\* Note: 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 CONTACT & ALL TERMINALS: Copper alloy, silver plated.
- 6 TERMINALS: Copper alloy, with matte-tin over nickel plate

All models  with all options when ordered with G, S or R contact material.

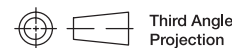
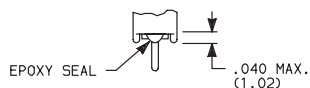
B contact material standard with A and W terminations.

Q contact material standard with C terminations.

**NOTE:** Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.

## SEAL

**E** EPOXY SEAL



Dimensions are shown: Inch (mm)  
Specifications and dimensions subject to change

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Authorized Distributor

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## C&K Switches:

[TS01WQE](#) [TS03CBE](#) [TS01ABE](#) [TS01WBE](#) [TS01CBE](#) [TS01CGE](#) [TS01CQE](#) [TS03ABE](#) [TS01AQE](#) [TS01CLE](#)  
[TS02CBE](#) [TS02WBE](#) [TS02CQE](#) [TS01AGE](#) [TS01CQF](#) [TS03AQE](#) [TS01CGF](#) [TS01CSE](#) [TS01ASE](#) [TS01ALE](#)  
[TS01AME](#) [TS03CQE](#) [TS03WBE](#) [TS01CBF](#) [TS03APE](#)