

# C&K TS Series Tiny Slide Switches



## 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**



Models Available

## 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 6/6, flame retardant, heat stabilized, or diallyl phthalate (DAP) (UL 94V-0).

**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 J-9 for additional contact materials.

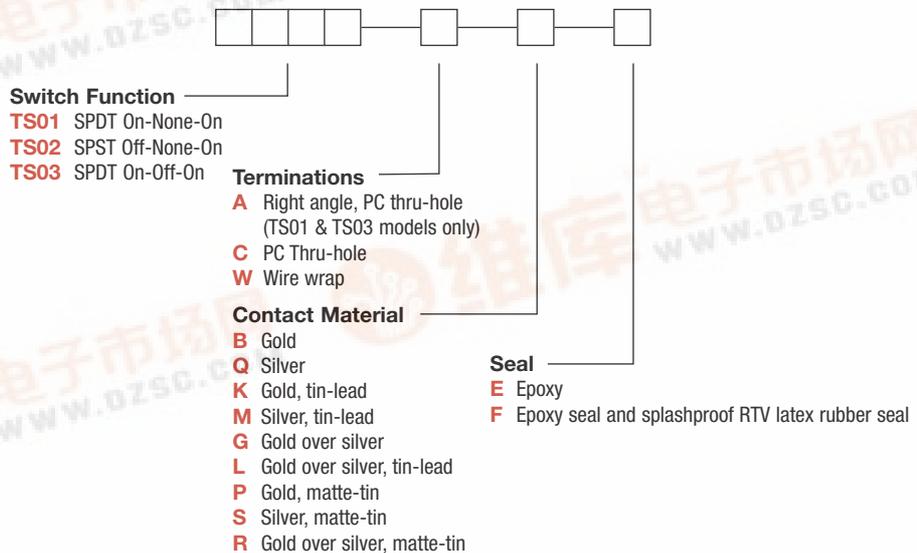
**TERMINAL SEAL:** Epoxy. Refer to Soldering and Cleaning in Technical Data chapter.

**NOTE:** Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant. For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

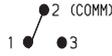
## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-8 and J-9. 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.



# C&K 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			C&K marking on opposite side			
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**

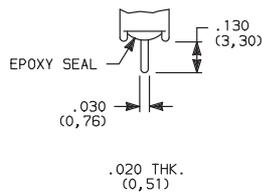
Terminal Nos.  
For Reference Only

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

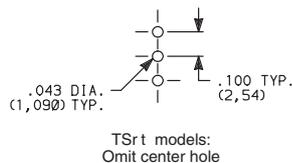
TS02 model not available with A terminations.

## TERMINATIONS

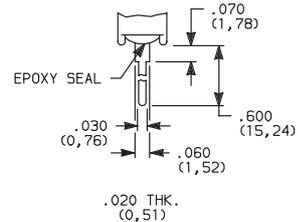
### C PC THRU-HOLE



### PC MOUNTING



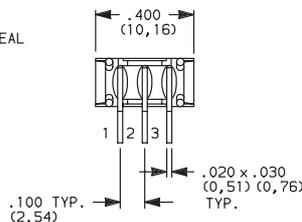
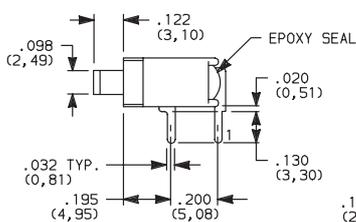
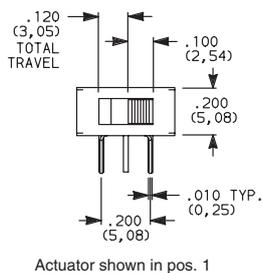
### W WIRE WRAP



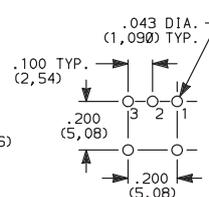
## SPDT and SPST

## SPDT and SPST

### A RIGHT ANGLE, PC THRU-HOLE



### PC MOUNTING



Not available with TS02 model.



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

Slide 

# C&K TS Series Tiny Slide Switches

## CONTACT MATERIAL

OPTION CODE	RoHS COMPLIANT		CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
<b>B</b>	YES	YES	GOLD <sup>1</sup>	GOLD <sup>3</sup>	LOW LEVEL/DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
<b>K</b>	NO	YES		TIN-LEAD <sup>6</sup>		
<b>P</b>	YES	YES		MATTE-TIN <sup>7</sup>		
<b>Q</b>	YES	YES	SILVER <sup>4,5</sup>	GOLD <sup>3</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>M</b>	NO	YES		TIN-LEAD <sup>6</sup>		
<b>S</b>	YES	YES		MATTE-TIN <sup>7</sup>		
<b>G</b>	YES	YES	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>L</b>	NO	YES		TIN-LEAD <sup>6</sup>		
<b>R</b>	YES	YES		MATTE-TIN <sup>7</sup>		

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

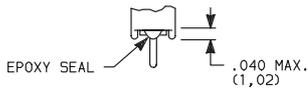
- <sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>2</sup> END CONTACTS: Coin silver, with gold plate over nickel plate.
- <sup>3</sup> CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>4</sup> END CONTACTS: Coin silver, silver plated.
- <sup>5</sup> CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
- <sup>6</sup> TERMINALS: Copper alloy, with tin-lead alloy over nickel plate.
- <sup>7</sup> TERMINALS: Copper alloy, with matte-tin over nickel plate

All models  with all options when ordered with G, L, M, 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. For the latest information regarding RoHS compliance, please go to: [www.ittcannon.com/rohs](http://www.ittcannon.com/rohs).

## SEAL

**E** EPOXY SEAL



**F** EPOXY SEAL AND SPLASHPROOF RTV LATEX RUBBER SEAL



**NOTE:** RTV latex rubber seal peels off easily after installation. Epoxy terminal seal standard. Not available with A termination.