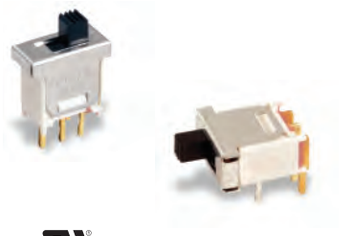
TS Series
Tiny Slide Switches



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: 10^9 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.

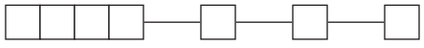
TERMINAL SEAL: Epoxy. Refer to Soldering and Cleaning in Technical Data chapter.

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.

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
TS01 SPDT On-None-On
TS02 SPST Off-None-On
TS03 SPDT On-Off-On

Terminations
A Right angle, PC thru-hole (TS01 & TS03 models only)
C PC Thru-hole
W Wire wrap

Contact Material
B Gold
Q Silver
G Gold over silver
P Gold, matte-tin
S Silver, matte-tin
R Gold over silver, matte-tin

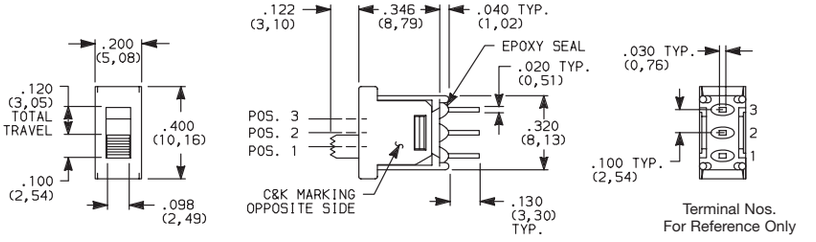
Seal
E Epoxy
F Epoxy seal and splashproof RTV latex rubber seal

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

SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION POS. 1	SWITCH FUNCTION POS. 2	SWITCH FUNCTION POS. 3	CONNECTED TERMINALS POS. 1	CONNECTED TERMINALS POS. 2	CONNECTED TERMINALS POS. 3	SCHEMATIC
		C&K marking on opposite side			C&K marking on opposite side			
SP	TS01	ON	NONE	ON	1-2	OPEN	2-3	2 (COMM), 1, 3 — SPDT
	TS03	ON	OFF	ON				
	TS02	OFF	NONE	ON	OPEN	N/A	3-1	SPST 1 3

SPDT



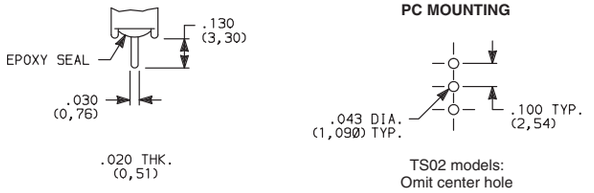
Part number shown: TS01CBE

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

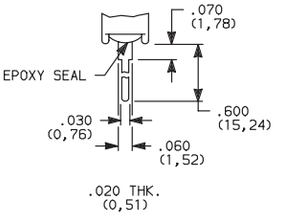
TS02 model not available with A terminations.

TERMINATIONS

C PC THRU-HOLE

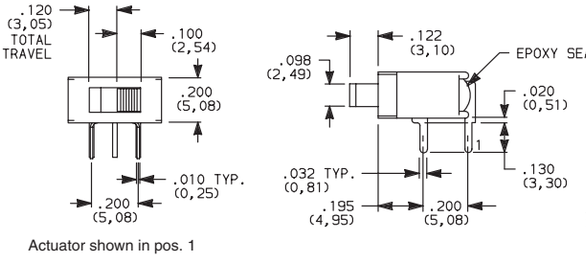


W WIRE WRAP



SPDT and SPST

A RIGHT ANGLE, PC THRU-HOLE



Actuator shown in pos. 1



TS01ABE
Horizontal Actuation
SPDT

Not available with TS02 model.

Third Angle Projection

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	GOLD [1]	GOLD [3]	LOW LEVEL/DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN [6]		
Q	SILVER [4,5]	SILVER [5]	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		MATTE-TIN [6]		
G	GOLD OVER SILVER [2,3]	GOLD [3]	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.
R		MATTE-TIN [6]		

* 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 c UL us with all options when ordered with G, S or R contact material.

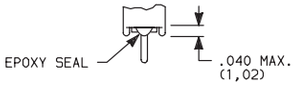
B contact material standard with A and W terminations.

Q contact material standard with C terminations.

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

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.

Third Angle Projection

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