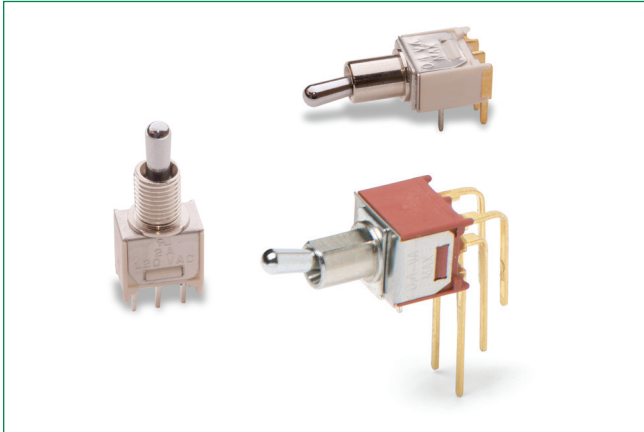


# T Series

## Subminiature Toggle Switches



### Agency Approvals

Agency	Agency File Number
US	E42363

### Specifications

<b>Contact Rating</b>	B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material (TX01 models): 3 amps @ 120 V AC or 28 V DC. All other models: 2 amps @ 120 V AC or 28 V DC.
<b>Electrical Life</b>	TX01 models: 60,000 make-and-break cycles at full load. All other 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>	1000 Vrms min. @ sea level.
<b>Operating Temperature</b>	-30°C to 85°C
<b>Solderability</b>	Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

#### Notes:

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

### Description

The T series subminiature toggle switch is an RoHS-compliant, compact toggle switch most often used in hand-held communications and medical instrumentation devices. In addition to a small footprint, with the T series, engineers have the option of PC or panel-mounted versions and the choice between single and double pole models to power their product designs.

### Features & Benefits

- Compact size—small footprint
- Single and double pole models
- PC and panel mount options available
- RoHS compliant models available

### Applications

- Hand-held telecommunications
- Instrumentation
- Medical equipment

### Materials

<b>Case</b>	Glass filled nylon 6/6, flame retardant, heat stabilized ordiallyl phthalate (DAP), (UL 94V-0) or glass filled nylon 4/6, flame retardant, heat stabilized
<b>Actuator</b>	Brass, chrome plated.
<b>Switch Support</b>	Brass, matte-tin plated.
<b>Bushing</b>	Brass, nickel plated.
<b>Housing</b>	Stainless Steel
<b>End Contacts</b>	B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See above for additional contact materials.
<b>Center Contacts &amp; Terminals</b>	B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated.
<b>Terminal Seal</b>	Epoxy
<b>Hardware</b>	Nut & Locking Ring: Brass, nickel plated. Lockwasher: Steel, nickel plated. Additional hardware available separately.

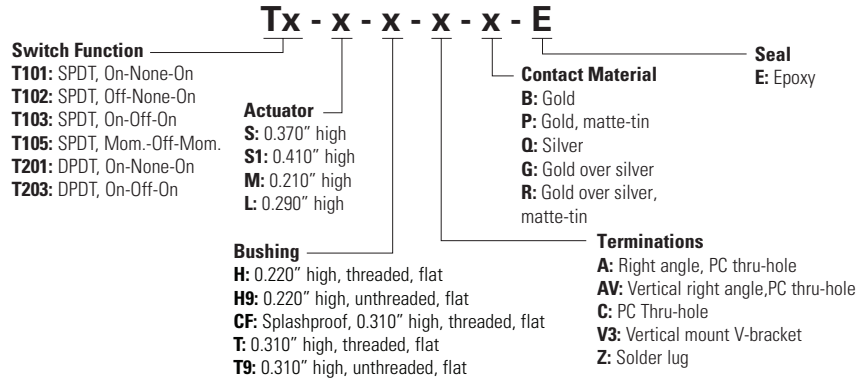
# T Series

## Subminiature Toggle Switches



### Ordering Number

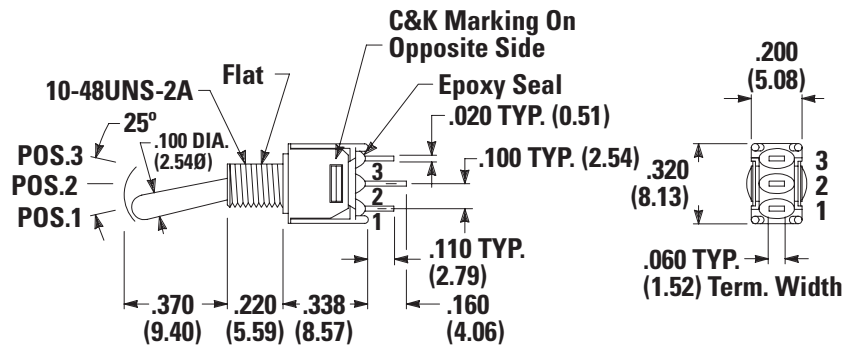
To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.



### Switch Function

#### SPDT

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	T101	ON	NONE	ON	2-3	N/A	2-1	
	T103		OFF			OPEN		
	T105	MOM.		MOM.				
	T102	OFF	NONE	ON	OPEN	N/A	2-1	



Part number shown: T101SHZ0E

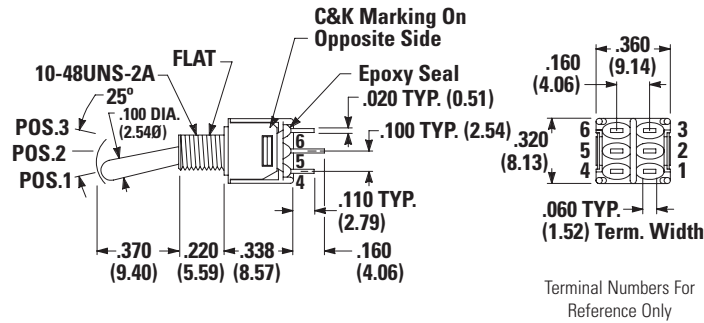
# T Series

## Subminiature Toggle Switches



### DPDT

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						
DP	T201	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	T203	ON	OFF	ON	2-3,5-6	OPEN	2-1,5-4	



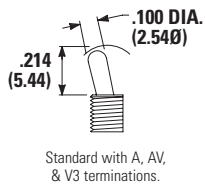
Part number shown: T201SHZQE

**Notes:**  
 MOM. = Momentary.  
 Wiring for 3 way switch.

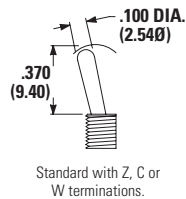
All models **C&K** us with all options when ordered with G, L, R or Q contact material.

### Actuator

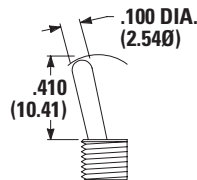
#### M 0.210" High



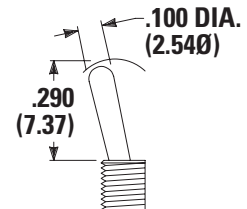
#### S 0.370" High



#### S1 0.410" High (with "T" bushing)



#### L 0.290" High



**Notes:**  
 1. Actuator shown with standard H bushing. Subtract 0.090 (2.29) for T, T9 & CF bushings.  
 2. Actuators shown with T, T9, TK & CF bushings, add 0.090 (2.29) for H & H9 bushings. All actuators have chrome finish (except K).

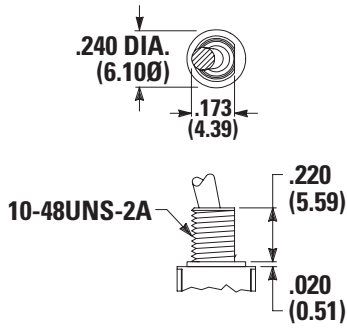
# T Series

## Subminiature Toggle Switches

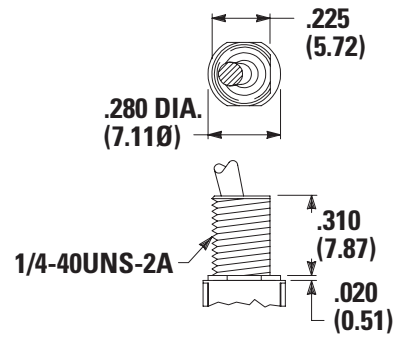


### Bushing

**H 0.220" High Threaded, Flat**  
**H9 0.220" High Unthreaded, Flat**

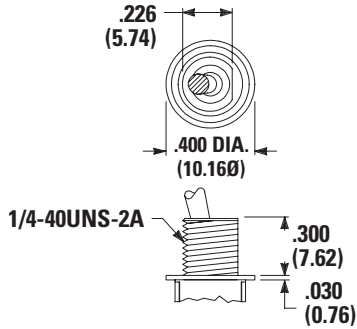


**T 0.310" High Threaded, Flat**  
**T9 0.310" High Unthreaded, Flat**

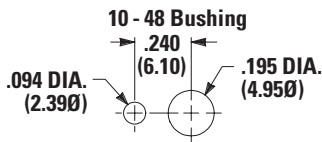


**Notes:** H standard with C, W & Z terminations.  
 H9 standard with A, AV & V3 terminations.

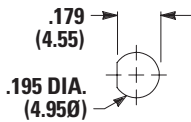
**CF Splashproof, 0.310" High Threaded, Flat**



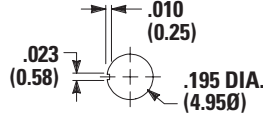
**Notes:** IP67 Degree of protection. Internal o-ring actuator seal and external bushing seal washer standard.



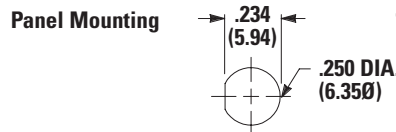
With Standard Locking Ring



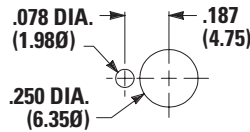
Without Locking Ring



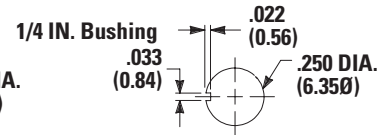
Without Locking Ring



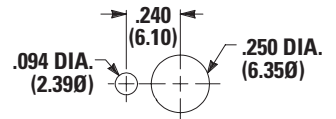
Without Locking Ring



With Small Locking Ring



Without Locking Ring



With Standard Locking Ring

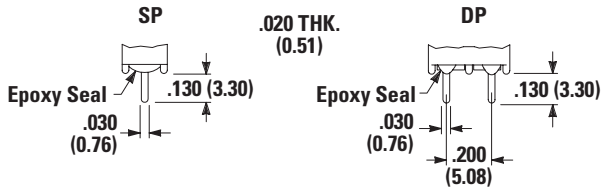
# T Series

## Subminiature Toggle Switches

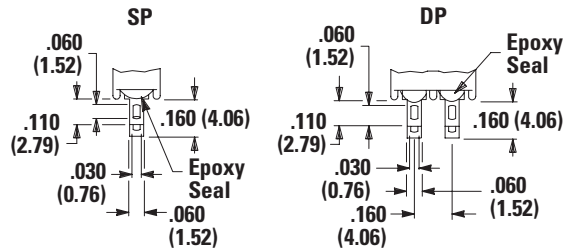


### Terminations

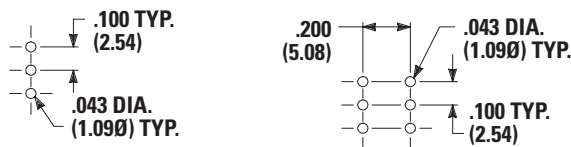
#### C PC Thru-hole



#### Z Solder Lug



#### PC Mounting



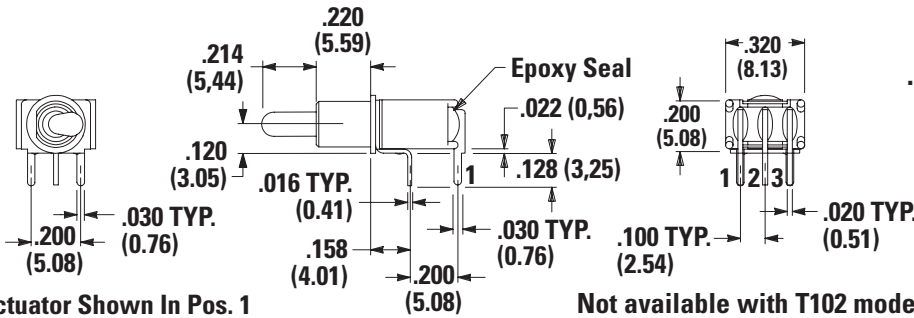
T102 – omit center hole.

.020 THK. (0.51)

Notes: Not available with P or R contact materials.

### T101MH9ABE Horizontal Actuation SPDT

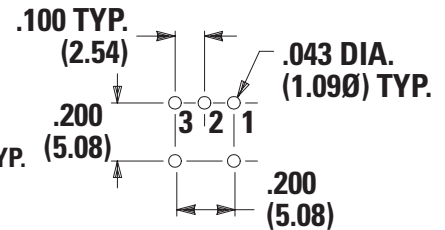
#### A Right Angle, PC Thru-hole



Actuator Shown In Pos. 1

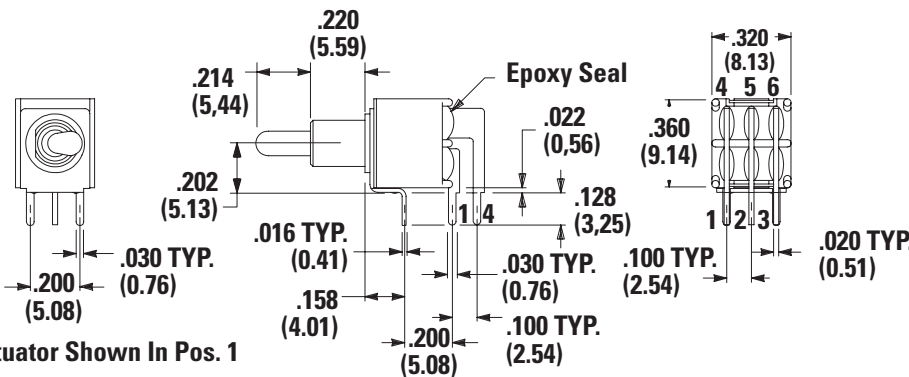
Not available with T102 model.

#### PC Mounting



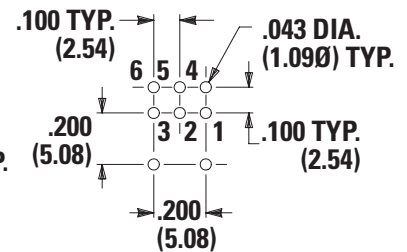
### T201MH9ABE Horizontal Actuation DPDT

#### A Right Angle, PC Thru-hole



Actuator Shown In Pos. 1

#### PC Mounting



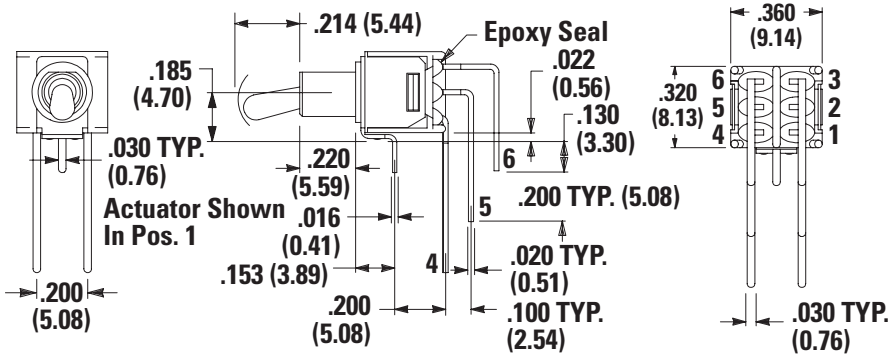
# T Series

## Subminiature Toggle Switches

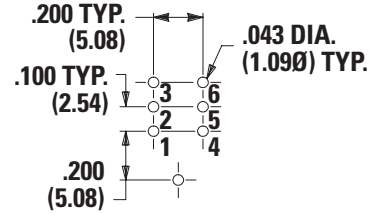


### T101MH9AVBE Vertical Actuation SPDT

AV Vertical Right Angle, PC Thru-hole



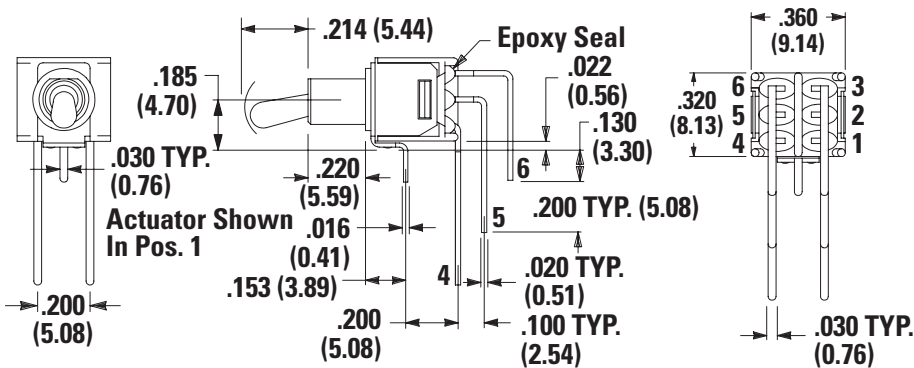
PC Mounting



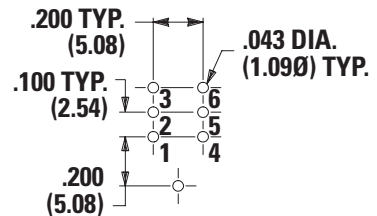
Notes: Terminal bend radii and lead-in manufacturing option.

### T201MH9AVBE Vertical Actuation DPDT

AV Vertical Right Angle, PC Thru-hole



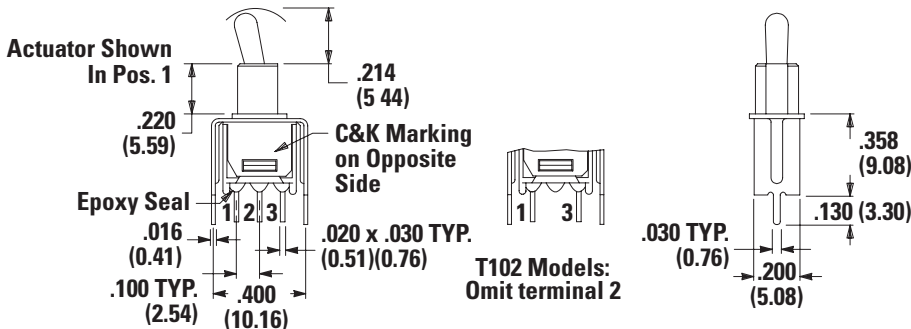
PC Mounting



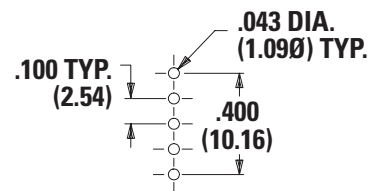
Notes: Terminal bend radii and lead-in manufacturing option.

### T101MH9V3BE SPDT

V3 Vertical Mount V-bracket



PC Mounting



T102 Models:  
Omit center hole.

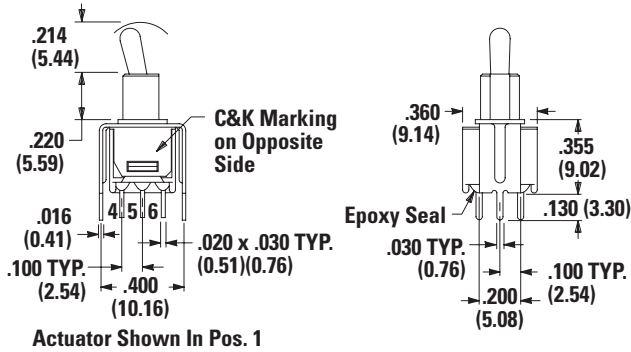
# T Series

## Subminiature Toggle Switches

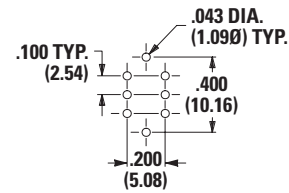


### T201MH9V3BE DPDT

#### V3 Vertical Mount, V-bracket



#### PC Mounting



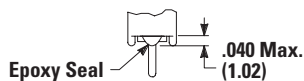
### Contact Material

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	TX01 models: 3 amps @ 120 V AC OR 28 V DC. All other models: 2 amps @ 120 V AC OR 28 V DC.
G	Gold over Silver <sup>2,3</sup>	Gold <sup>3</sup>	Low Level / Dry Level Circuit or Power	TX01 models: 0.4 VA max. @ 20 V AC or DC max. or 3 amps @ 120 V AC or 28 V DC. All other models: 0.4 VA max. @ 20 V AC or DC max. or 2 amps @ 120 V AC or 28 V DC.
R		Matte-Tin <sup>6</sup>		

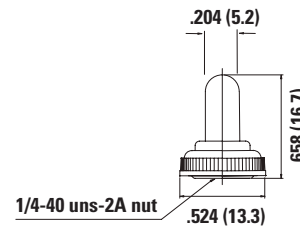
**Notes:**

- Contacts & Terminals:** Copper alloy, with gold plate over nickel plate.
  - End Contacts:** Coin silver, with gold plate over nickel plate.
  - Center Contacts & All Terminals:** Copper alloy, with gold plate over nickel plate.
  - End Contacts:** Coin silver, silver plated.
  - Center Contacts & All Terminals:** Copper alloy, silver plated.
  - Terminals:** Copper alloy, with matte tin alloy nickel plate.
- Any models supplied with Q, B, G, P or R contact material are RoHS compliant.  
All models **compliant** with all options (except M3 actuator) when ordered with G, L, R, or Q contact material except with F1 conductive bushings.

#### Seal E Epoxy Seal



#### Available Hardware 759D02000 Sealing Boot



**Notes:** For use with S1 actuator style when combined with T and CF bushings.

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