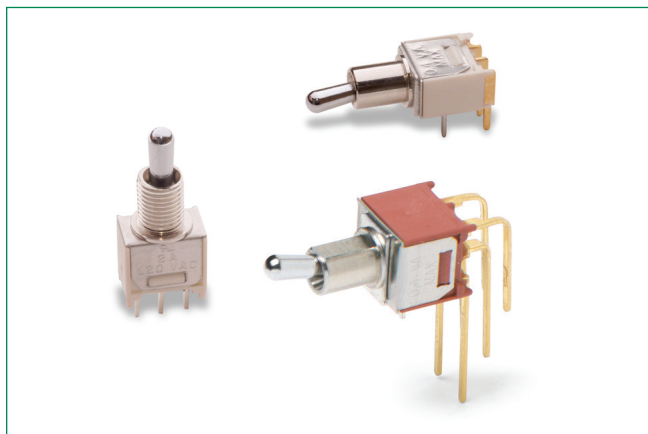


# T Series

## 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.<br>All other models: 30,000 cycles.                                                                          |
| <b>Contact Resistance</b>    | Below 20 m $\Omega$ typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.                                                                       |
| <b>Insulation Resistance</b> | 10 <sup>9</sup> $\Omega$ 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.<br>Lockwasher: Steel, nickel plated.<br>Additional hardware available separately.                                      |

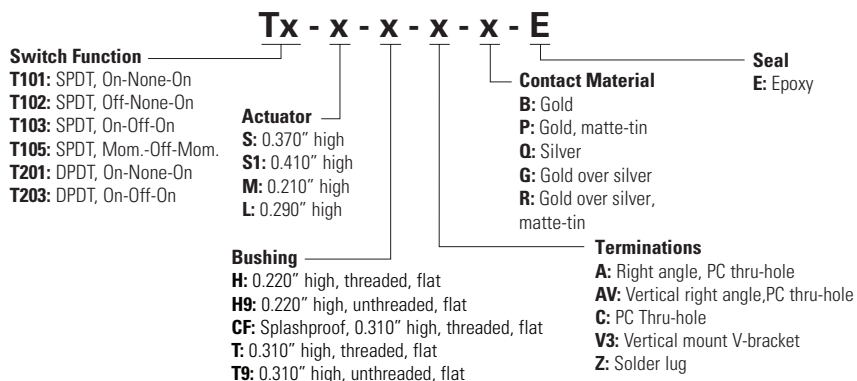
# T Series

## Subminiature Toggle Switches



### Ordering Number

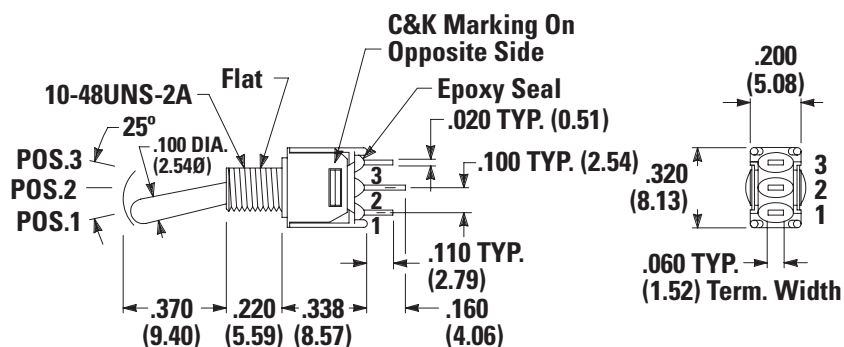
To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.



### Switch Function

#### SPDT

| No. Poles | Model No. | Switch Function |        |        | Connected Terminals |        |        | Schematic |
|-----------|-----------|-----------------|--------|--------|---------------------|--------|--------|-----------|
|           |           | POS. 1          | POS. 2 | POS. 3 | POS. 1              | POS. 2 | POS. 3 |           |
|           |           |                 |        |        |                     |        |        |           |
| SP        | T101      | ON              | NONE   | ON     | 2-3                 | N/A    | 2-1    | SPDT<br>  |
|           | T103      |                 | OFF    | MOM.   |                     | OPEN   |        |           |
|           | T105      | MOM.            | OFF    | ON     | OPEN                | N/A    | 2-1    | SPST 1    |
|           | T102      | OFF             |        |        |                     |        |        |           |



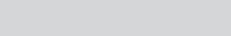
Part number shown: T101SHZ0E

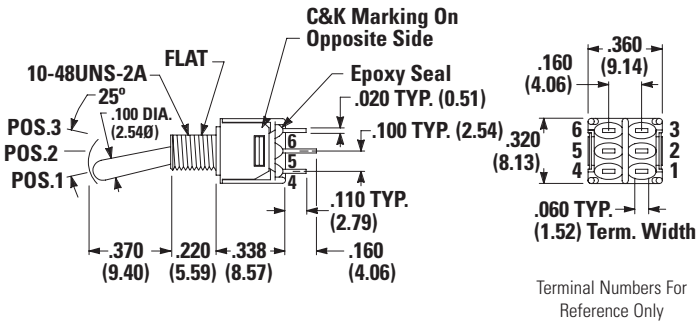
# T Series

## Subminiature Toggle Switches



DPDT

| No. Poles | Model No. | Switch Function                                                                             |                                                                                             |                                                                                             | Connected Terminals                                                                         |                                                                                              |                                                                                               | Schematic                                                                           |
|-----------|-----------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           |           | POS. 1<br> | POS. 2<br> | POS. 3<br> | POS. 1<br> | POS. 2<br> | POS. 3<br> |                                                                                     |
|           |           | C&K Marking on Opposite Side                                                                |                                                                                             |                                                                                             |                                                                                             |                                                                                              |                                                                                               |                                                                                     |
| DP        | T201      | ON                                                                                          | NONE                                                                                        | ON                                                                                          | 2-3,5-6                                                                                     | N/A                                                                                          | 2-1,5-4                                                                                       |  |
|           | T203      |                                                                                             | OFF                                                                                         |                                                                                             |                                                                                             | OPEN                                                                                         |                                                                                               |                                                                                     |



Part number shown: T201SHZQE

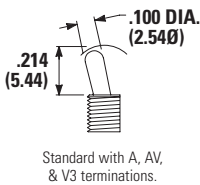
Notes:

MOM. = Momentary.  
Wiring for 3 way switch.

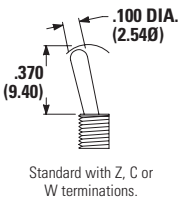
All models **C&K** us with all options when ordered with G, L, R or Q contact material.

Actuator

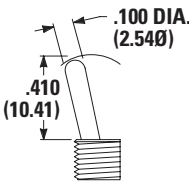
M 0.210" High



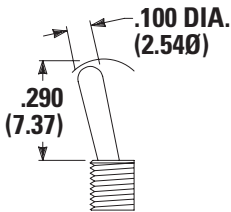
S 0.370" High



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).

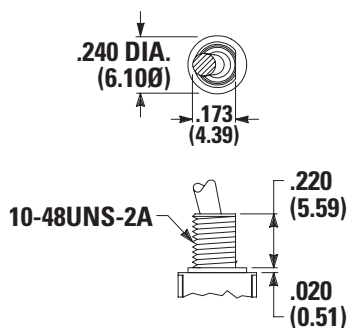
# T Series

## Subminiature Toggle Switches



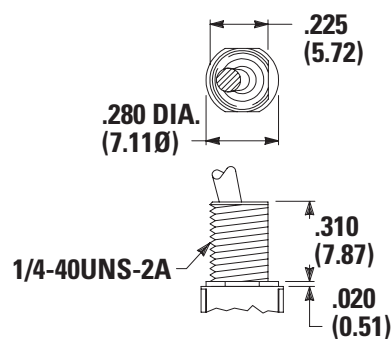
### Bushing

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

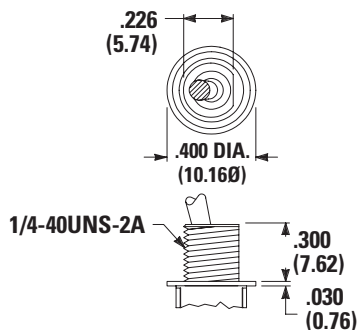


**Notes:** H standard with C, W & Z terminations.  
 H9 standard with A, AV & V3 terminations.

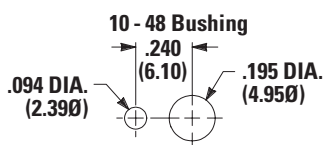
**T 0.310" High Threaded, Flat**  
**T9 0.310" High Unthreaded, Flat**



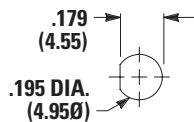
**CF Splashproof, 0.310" High Threaded, Flat**



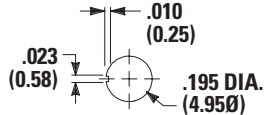
**Notes:** IP67 Degree of protection. Internal o-ring actuator seal and external bushing seal washer standard.



With Standard Locking Ring

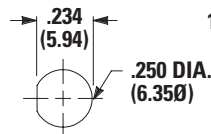


Without Locking Ring

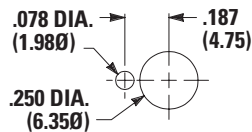


Without Locking Ring

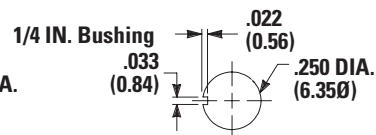
Panel Mounting



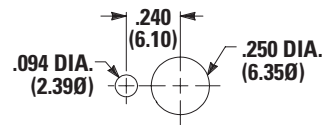
Without Locking Ring



With Small Locking Ring



Without Locking Ring



With Standard Locking Ring

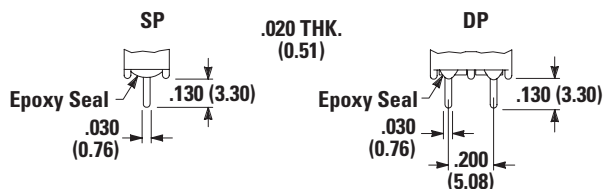
# T Series

## Subminiature Toggle Switches

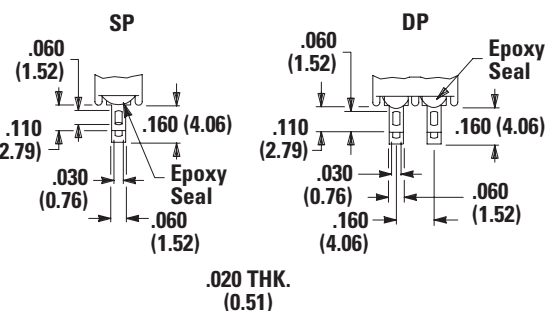


### Terminations

#### C PC Thru-hole

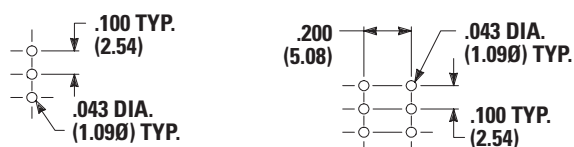


#### Z Solder Lug



Notes: Not available with P or R contact materials.

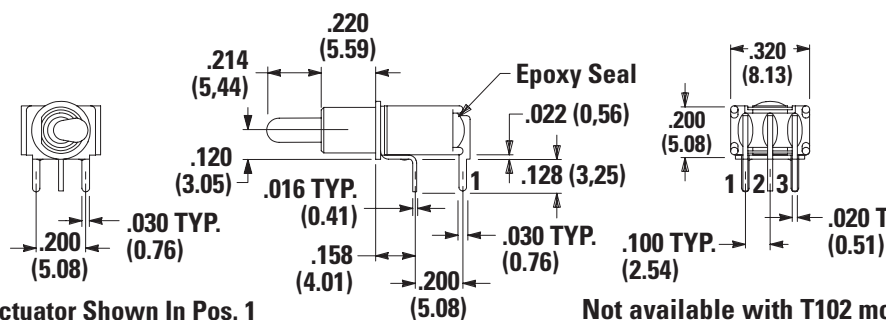
#### PC Mounting



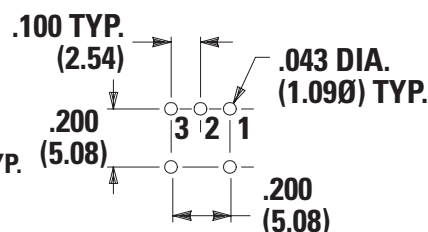
T102 – omit center hole.

### T101MH9ABE Horizontal Actuation SPDT

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

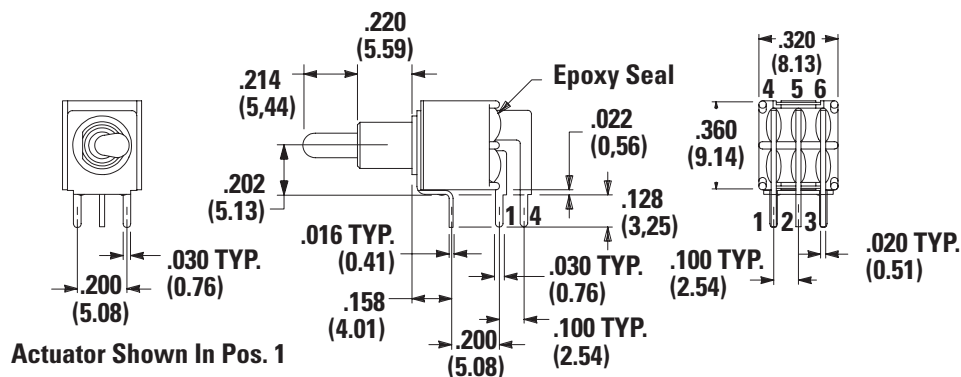


#### PC Mounting

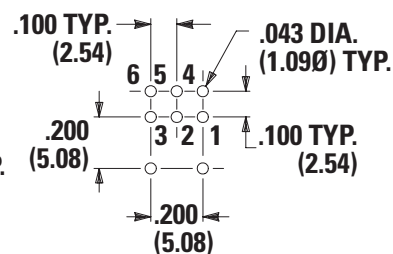


### T201MH9ABE Horizontal Actuation DPDT

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



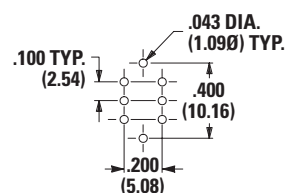
#### PC Mounting



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Specifications are subject to change without notice.  
Revised: VL 02/18/25

**T201MH9V3BE DPDT**

## PC Mounting



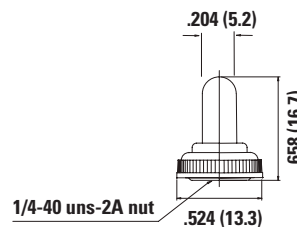
| Option Code | Contact Material                | Terminal Plating       | Ratings                                |                                                                                                                                                                       |
|-------------|---------------------------------|------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.<br>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.<br>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> |                                        |                                                                                                                                                                       |

- 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 Contacts & All Terminals:** Copper alloy, silver plated.
- 6. 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 **complies** with all options (except M3 actuator) when ordered with G, L, R, or Q contact material except with F1 conductive bushings.

**Available Hardware**  
**759D02000 Sealing Boot**



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