Distributed by:

JAMECO

ELECTRONICS

# www.Jameco.com + 1-800-831-4242

The content and copyrights of the attached material are the property of its owner.

Jameco Part Number 595956

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

## Typical Applications

- Hand-held telecommunications
- Instrumentation
- Medical equipment





## **Specifications**

CONTACT RATING: 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. See page F-38 for additional ratings.

ELECTRICAL LIFE: TX01 models: 60,000 make-and-break cycles at full load. All other models: 30,000 cycles.

CONTACT RESISTANCE: Below 20 m  $\Omega$  typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE:  $10^9\,\Omega$  min.

DIELECTRIC STRENGTH: 1000 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).

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

#### Materials

CASE: Glass filled nylon 6/6, flame retardant, heat stabilized or diallyl phthalate (DAP), (UL 94V-0).

ACTUATOR: Brass, chrome plated. BUSHING: Brass, nickel plated.

HOUSING: Stainless steel. SWITCH SUPPORT: Brass, tin plated.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See above for additional contact materials.

CENTER CONTACTS & TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page F-38 for additional contact materials.

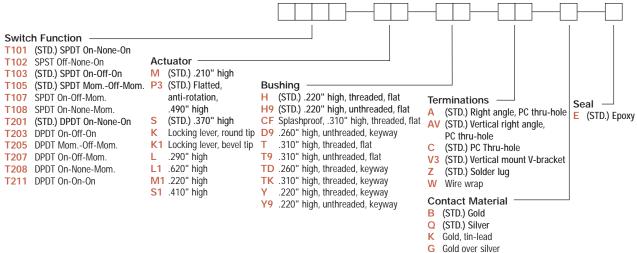
TERMINAL SEAL: Epoxy.

HARDWARE: Nut & Locking Ring: Brass, nickel plated. Lockwasher: Steel, nickel plated. Additional hardware available separately, see section N.

> Gold over silver. tin-lead

## **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 F-34 thru F-38. 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.







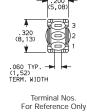
Dimensions are shown: IN (mm) Dimensions subject to change

# **SWITCH FUNCTION**



		SWITCH FUNCTION			CONNECTED TERMINALS				
		POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	]	
NO. POLES	MODEL NO.	C&K ma	arking on oppo	site side	A C&k	K marking on oppo	site side		SCHEMATIC
SP	T101 (STD.)	ON	NONE	ON	2-3	N/A	2-1		
	T103 (STD.)	ON	OFF	ON	2-3	OPEN	2-1	●2 (COMM)	
	T105 (STD.)	МОМ.	OFF	MOM.				1 ● <b>\</b> ●3	
	T107	ON	OFF	MOM.					
	T108	ON	NONE	MOM.	2-3	N/A	2-1	SPDT	
	T102	OFF	NONE	ON	OPEN	N/A	3-1	SPST	1 • 3
SPDT	-	10-48	:UNS-2A — FL	<sup>4†</sup> 7 /	C&K MARKING ON OPPOSITE SIDE		<b>→</b> 200 <b>→</b>		

.020 TYP. .110 TYP. .220 - .340 · (5,59) (8,64)



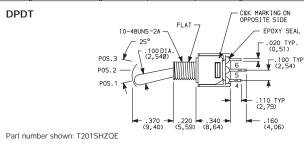
Part number shown: T101SHZQE

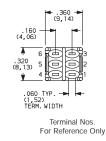
T102 Models: Omit terminal 2

DP	T201 (STD.)	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	T203	ON	OFF	ON				
	T205	MOM.	OFF	MOM.	2-3,5-6	OPEN	2-1,5-4	
	T207	ON	OFF	MOM.				
	T208	ON	NONE	MOM.	2-3,5-6	N/A	2-1,5-4	
	T211*	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4	



DPDT





MOM. = Momentary

\* Wiring for 3-way switch, see Section N.

All models with all options when ordered with G, Lor Q contact material.



Third Angle Projection

### **Subminiature Toggle Switches ACTUATOR** ----M1 **S1** (STD.) .210" HIGH (STD.) .370" HIGH .220" HIGH .410" HIGH (with "T" bushing) (with "T" bushing) .100 DIA. .100 DIA. .100 DIA. .370 .410 Standard with A, AV or V3 terminations Standard with Z, C or W terminations. L1 620" HIGH (STD.) ANTI-ROTATION, FLATTED, 290" HIGH .450" HIGH <sup>1</sup> Actuator shown with standard H bushing. .200 DIA. (5,080) Subtract .040 (1,02) for TD and D9 bushings, subtract .090 (2,29) for T, T9, TK, K9 & CF bushings. .100 DIA. .640 (16,26) <sup>2</sup> Actuators shown with T, T9, TK & CF bushings, .490 add .050 (1,27) for TD and D9 bushings, add .090 (2,29) for H, H9, Y & Y9 bushings. .290 (7,37) All actuators have chrome finish (except K & K1).

Available with T & T9 bushings only. Dress nut part number 709901201 supplied standard with threaded bushing



# .214 DIA. (5,440) .610 (15,49) LOCKED 1/4-40 UNS-2A 1/4-40 UNS-2A .337 (8,56) .337 (8,56) .030 (0,76)

Not available with CF bushing option.

Bushing option code not required. Not available with TX05 & TX07 models

# **Locking Positions**



-01 & -02 Models 2 Position lock 3 Position lock



1 Position lock

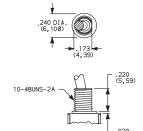
K & K1 actuators have natural aluminum finish.

Keyway on right side. To prevent accidental actuation, toggles must be lifted before being actuated. When released, toggles again lock in place. Overtightening mounting nut may cause actuator to bind.





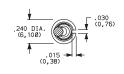
(STD.) .220" HIGH UNTHREADED, FLAT

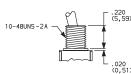


H standard with C, W & Z terminations. H9 standard with A, AV & V3 terminations



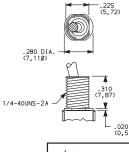
.220" HIGH UNTHREADED, KEYWAY





Τ .310" HIGH THREADED, FLAT

.310" HIGH UNTHREADED, FLAT





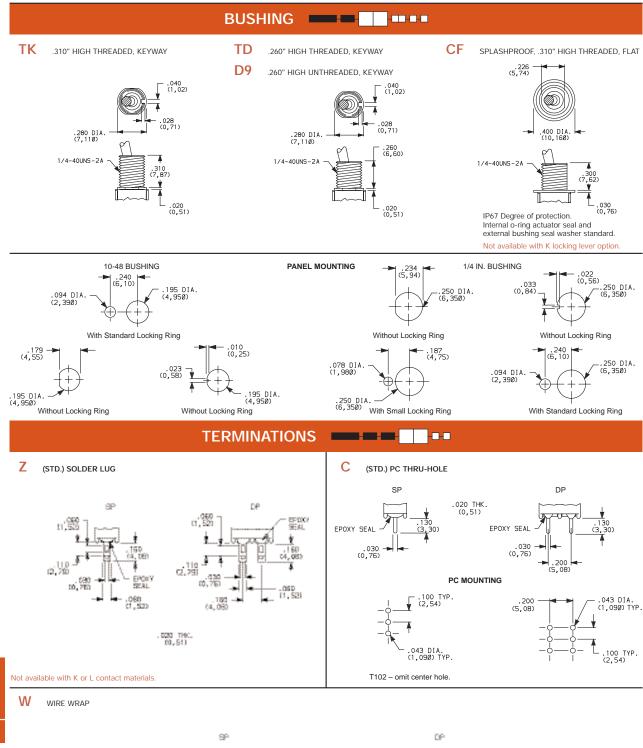
Third Angle Projection

Dimensions are shown: IN (mm) Dimensions subject to change

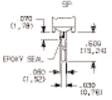


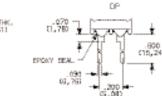
Cannon

www.ittcannon.com









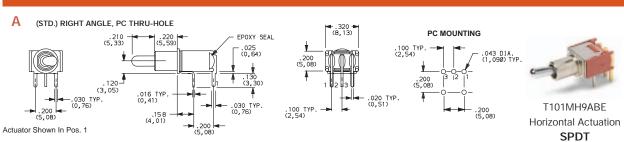


Projection

Dimensions are shown: IN (mm) Dimensions subject to change

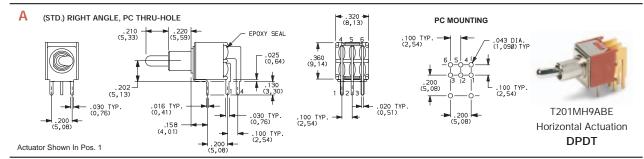


# **Subminiature Toggle Switches**

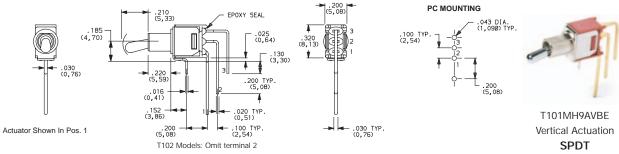


**TERMINATIONS** 

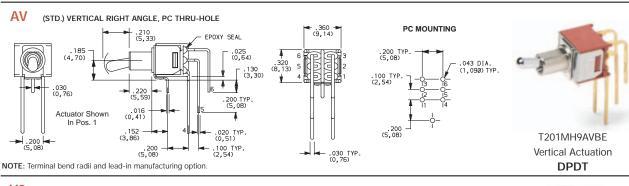
Not available with T102 model

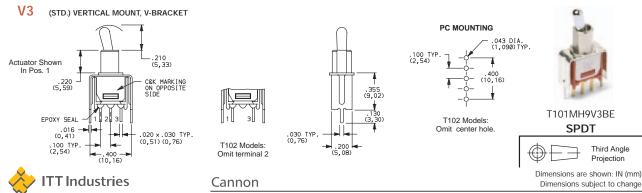






NOTE: Terminal bend radii and lead-in manufacturing option



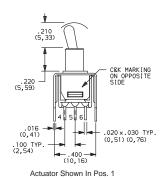


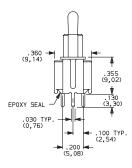
## TERMINATIONS ---

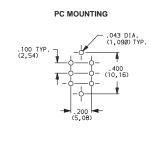
V3 (STD.) VERTICAL MOUNT, V-BRACKET



T201MH9V3BE **DPDT** 







## **CONTACT MATERIAL**

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS			
B (STD.)	GOLD <sup>1</sup>	GOLD <sup>1</sup>				
K	GOLD '	TIN-LEAD 6	LOW LEVEL/DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.		
Q (STD.)	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	COLD OVED CHARD 23	GOLD <sup>3</sup>	LOW LEVEL/DRY 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.		
L	GOLD OVER SILVER <sup>2,3</sup>	TIN-LEAD 6	LOW LEVEL/DRT CIRCUIT OR POWER			

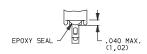
CONTACT MATERIAL/APPLICATION RECOMMENDATIONS-SEE SECTION N.

All models **M** with all options when ordered with G, L or Q contact material. B contact material standard with A, AV, V3 & W terminations.

Q contact material standard with C & Z terminations.

# SEAL SEAL

E (STD.) EPOXY SEAL





<sup>&</sup>lt;sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

<sup>&</sup>lt;sup>2</sup> END CONTACTS: Coin silver, with gold plate over nickel plate.

<sup>&</sup>lt;sup>3</sup> CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.

<sup>&</sup>lt;sup>4</sup> END CONTACTS: Coin silver, silver plated.

<sup>&</sup>lt;sup>5</sup> CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.

<sup>&</sup>lt;sup>6</sup> TERMINALS: Copper alloy, with tin-lead alloy over nickel plate.