

### SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material, see page 34.

**MECHANICAL LIFE:** 30,000 make-and-break cycles.

**CONTACT RESISTANCE:** 20 mΩ max. (initial value) @ 2-4VDC  
100mA for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 1,000 MΩ min./1000VDC

**DIELECTRIC STRENGTH:** 1,000 Vrms min. @ sea level. (initial value)

**OPERATING TEMPERATURE:** -40°C to 85°C.

### MATERIALS

**CASE & BUSHING:** Glass filled nylon 6/6, flame retardant,  
heat stabilized (UL94v-0).

**ACTUATOR:** Brass with chrome plated, internal o-ring sealed.

**SWITCH SUPPORT:** Brass, tin plated.

**CONTACT / TERMINALS:** Copper with silver or gold plated.  
(See page 34)

## HOW TO ORDER







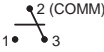
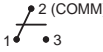


MODEL NO.	ACTUATOR	BUSHING	TERMINAL TYPE	TERMINAL PLATING	SEAL	RoHS SOLDERING
<u>SP</u>	<u>T1</u> 10.16 high	<u>SP</u>			<u>E</u> EPOXY (std)	<u>S</u> RoHS & Lead Free
<u>TGS05-S1</u> ON-NONE-ON	<u>T2</u> 6.10 high	<u>A1</u> 4.65 high		<u>Q</u> Gold flash over silver		
<u>TGS05-S2</u> ON-NONE-(ON)	<u>T3</u> 8.13 high	<u>A3</u> 5.00 high		<u>R</u> Gold		
<u>TGS05-S3</u> ON-OFF-ON	<u>T4</u> 13.97 high			<u>C</u> Gold over silver		
<u>TGS05-S4</u> (ON)-OFF-(ON)		<u>DP</u>				
<u>TGS05-S5</u> ON-OFF-(ON)	Plastic, Black	<u>A2</u> 4.50 high				
<u>TGS05-S6</u> OFF-NONE-ON	<u>TA</u> 10.16 high		<u>M2</u> PC thru-hole			
	<u>TB</u> 6.10 high		<u>M51</u> Wire wrap			
<u>DP</u>			<u>M6</u> Right angle, PC thru-hole *			
<u>TGS05-D1</u> ON-NONE-ON			<u>M6N</u> Right angle, snap-in, PC thru-hole *			
<u>TGS05-D2</u> ON-NONE-(ON)			<u>M7</u> Vertical right angle, PC thru-hole *			
<u>TGS05-D3</u> ON-OFF-ON			<u>M7N</u> Vertical right angle, snap-in, PC thru-hole *			
			<u>V-bracket</u>			
			<u>VS2</u> 9.30 high			
			<u>V2N</u> 9.30 high Snap-in.			

\* The terminal type of M6, M6N, M7, M7N

EXAMPLE: TGS05-S1T1A1M2QES

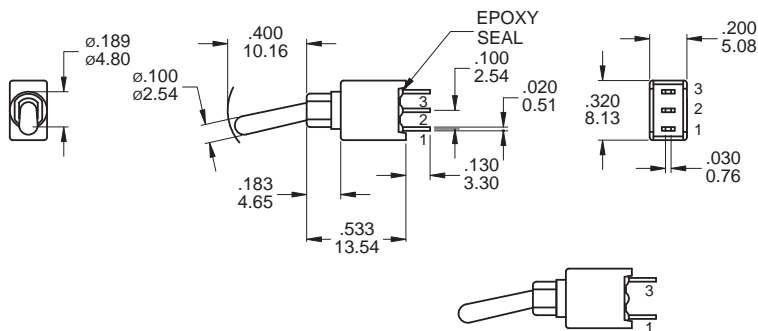


## ▼ SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
								
SP	Q22A11	TGS05-S1	ON	NONE	ON	2-3 	N/A	2-1 
	Q22A12	TGS05-S2	ON	NONE	(ON)		OPEN	
	Q22A13	TGS05-S3	ON	OFF	ON			
	Q22A14	TGS05-S4	(ON)	OFF	(ON)			
	Q22A15	TGS05-S5	ON	OFF	(ON)	OPEN	N/A	3-1
	Q22A16	TGS05-S6	OFF	NONE	ON			
DP	Q22A21	TGS05-D1	ON	NONE	ON	2-3,5-6 	N/A	2-1,5-4 
	Q22A22	TGS05-D2	ON	NONE	(ON)	OPEN	OPEN	
	Q22A23	TGS05-D3	ON	OFF	ON			

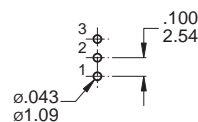
( )=MOMENTARY

## ▼ POLE OPTIONS



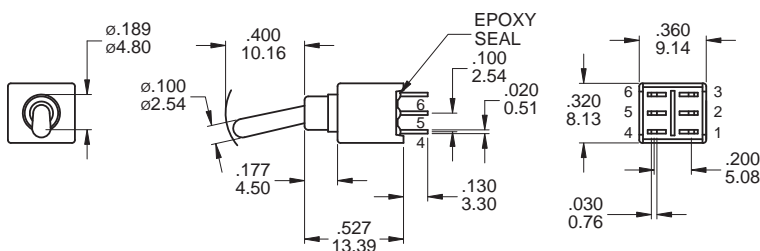
\* 2AS6 Models: Omit terminal 2

## PCB MOUNTING

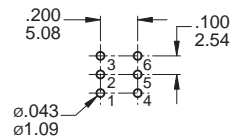


SPDT

Model name. TGS05-S1T1A1M2RES



## PCB MOUNTING



DPDT

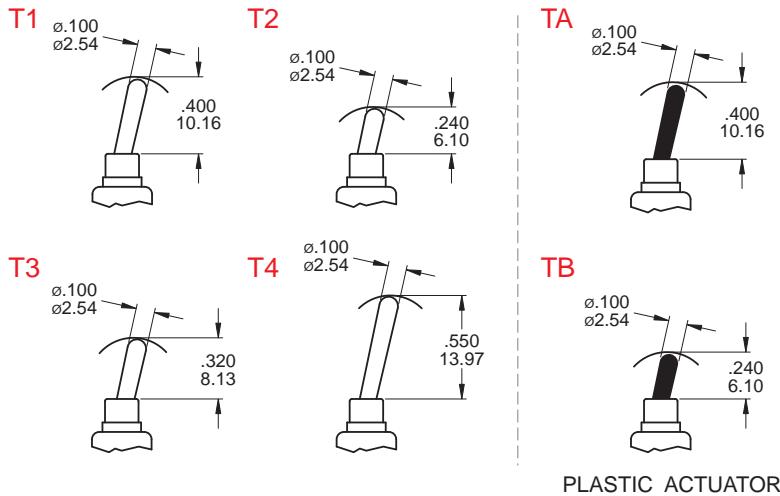
Model name. TGS05-D1T1A2M2QES



### ▼ ACTUATOR OPTIONS

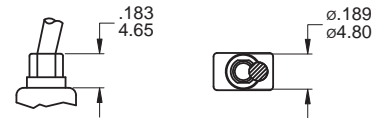
Actuator are shown with Bushing A1(standard)

Note: For A3 Bushing: - .020inch(0.50mm)

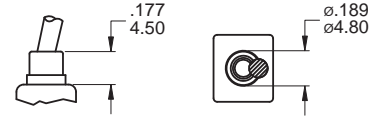


### ▼ BUSHING OPTIONS

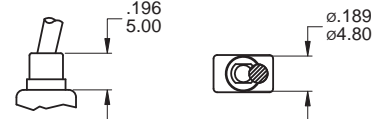
A1 For SPDT



A2 For DPDT

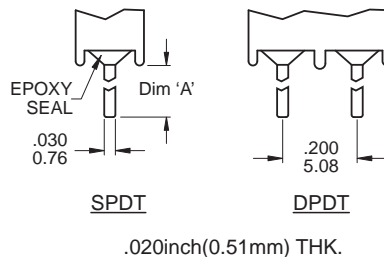


A3 For SPDT



### ▼ TERMINAL OPTIONS

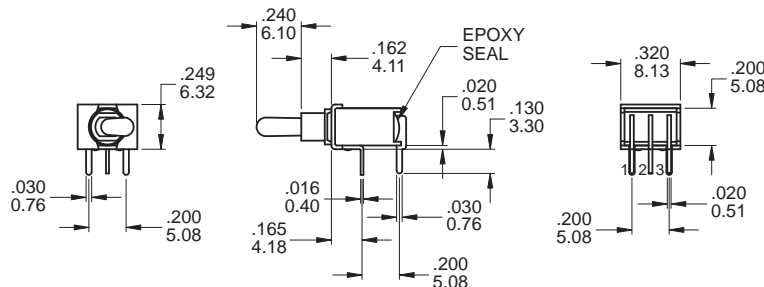
TERMINAL	DIM. 'A'
M2 PC Thru-hole	.130 (3.30)
M51 Wire Wrap	.600 (15.24)



### OTHER TERMINAL OPTIONS

- M6 Right angle P.C. Mount
- M6N Right angle P.C. Mount Snap-in bracket
- M7 Vertical right angle P.C. Mount
- M7N Vertical right angle P.C. Mount Snap-in bracket
- VS2 Vertical bracket P.C. Mount

M6  
(M6N - Snap-in)

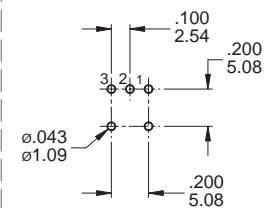


Note: Not available for 2AS6.

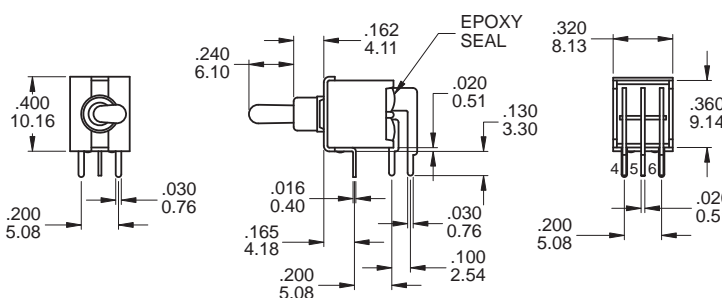
SPDT

Model name. TGS05-S1T2A1M6QES

### PCB MOUNTING



M6  
(M6N - Snap-in)

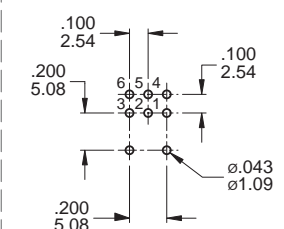


Note: Not available for 2AS6.

DPDT

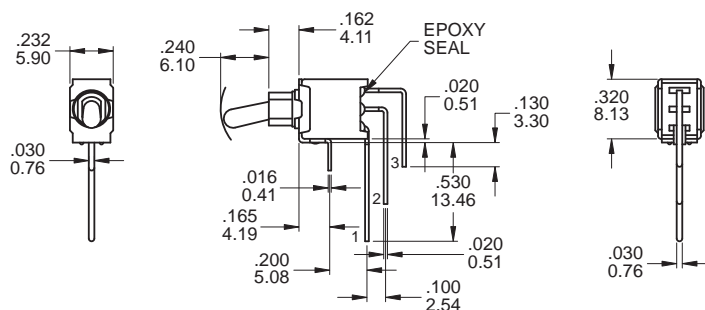
Model name. TGS05-D1T2A2M6RES

### PCB MOUNTING

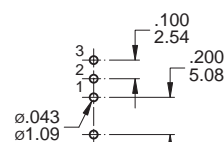




## M7 (M7N - Snap-in)



### PCB MOUNTING

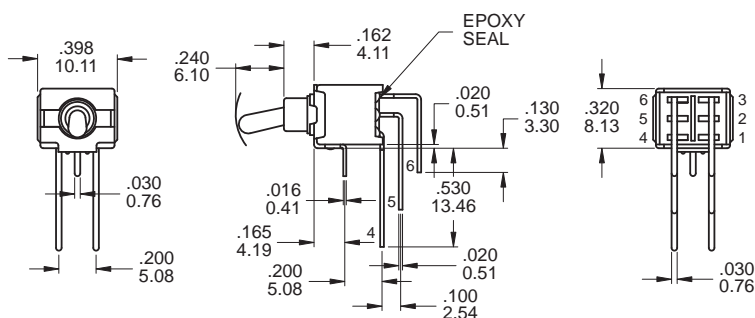
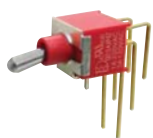


Note: Not available for 2AS6.

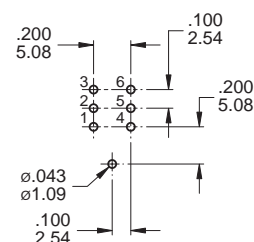
## SPDT

Model name. TGS05-S1T2A1M7RES

## M7 (M7N - Snap-in)



### PCB MOUNTING

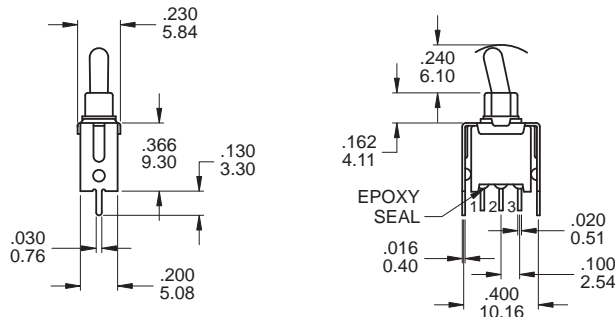


Note: Not available for 2AS6.

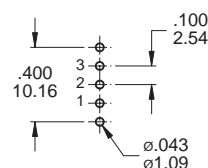
## DPDT

Model name. TGS05-D1T2A2M7QES

## VS2 (V2N - Snap-in)



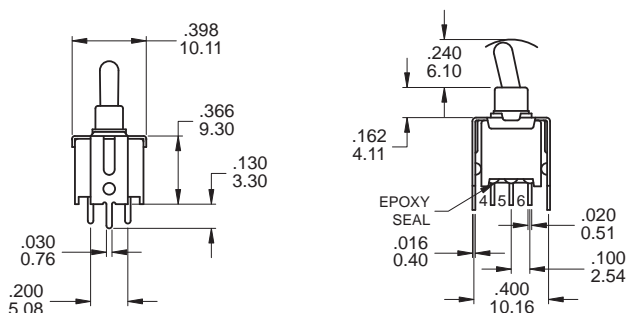
### PCB MOUNTING



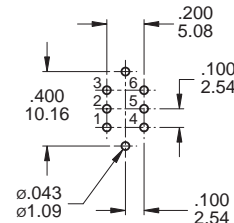
## SPDT

Model name. TGS05-S1T2A1VS2RES

## VS2 (V2N - Snap-in)



### PCB MOUNTING



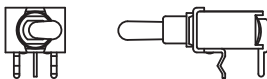
## DPDT

Model name. TGS05-D1T2A2VS2QES

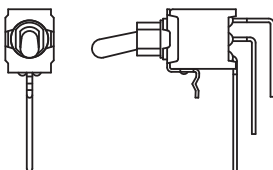


▼ SNAP-IN TERMINAL OPTIONS

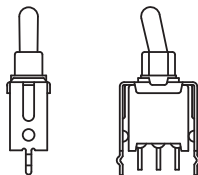
M6N



M7N



V2N



Note: The terminal type of M6N, M7N are not suitable for 2AS6.

▼ CONTACT & TERMINAL PLATING OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Gold flash over silver	3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC
C	Gold over Silver	Gold over silver	
R	Gold	Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )

▼ SOLDERING PROCESS

MANUAL SOLDERING: Use 30 watts soldering iron and controlled the temperature at 350°.

Duration of solder immersion: Max. 5 sec.

WAVE SOLDERING: Recommend soldering temperature: 260 ± 5°C

Duration of solder immersion: Max. 5 sec. (PCB thickness is 1.6mm)