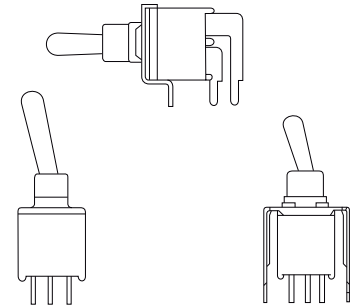


# SW-ES40T Series Sub-Miniature Toggle Switches, sealed

Specifications	
Contact rating	0.4 VA max. @ 20 V AC / DC
Durability	30000 cycles at full load
Contact resistance	20 mΩ max. initial @ 3 VDC, 100 mA
Insulator resistance	1000 MΩ min.
Dielectrical withstanding	1500 VAC
Degree of protection	IP67
Operation temperature	-30 °C to +85 °C
Materials	
Case and bushing	Glass filled nylon 6/6, UL94V-0
Actuator	Copper alloy, plating: chrome; (P2: nylon 4/6, UL94V-0)
Contact and terminal	Copper alloy, plating: see order code and table
Switch support	Copper alloy, plating: tin
Terminal seal	Epoxy



UL 61058



## Straight type - part numbering guide

**S** **W** - **E** **S** - **4** - **P** **2** - **C** **R** - **A** **5** - **H**

Switch Function		Actuator		Termination	Contact Plating	Vertical Support Bracket	RoHS Code
ES-4	SP on-none-on	T1	Std. 10.16	C straight t.	Q silver (std.)	(none) A5 straight type A5S snap-in type (std.)	H = RoHS Compliant
ES-4B	SP on-none-(on)	T2	Std. 6.10		R gold		
ES-4A	SP on-off-on	T3	8.13	G gold over silver			
ES-4H	SP (on)-off-(on)	T4	13.97	K gold / tin			
ES-4I	SP on-off-(on)	T5	3.5				
ES-5	DP on-none-on	ESD Protection Actuator					
ES-5B	DP on-none-(on)	P1	(black) 10.16				
ES-5A	DP on-off-on	P11	(white) 10.16				
ES-5H	DP (on)-off-(on)	P2	(black, std.) 6.10				
ES-5I	DP on-off-(on)	P21	(white) 6.10				

## Right angle type - part numbering guide

**S** **W** - **E** **S** - **6** - **T** **2** - **R** - **S** - **H**

Right Angle Horizontal	Right Angle Vertical	Switches Function	Actuator	Contact Plating	Support Bracket Type
ES-6	ES-8	SP on-none-on	T1 10.16	Q silver (std.)	S snap-in type (std.) (none) straight type
ES-6B	ES-8B	SP on-none-(on)	T2 Std. 6.10	R gold	
ES-6A	ES-8A	SP on-off-on	T3 8.13	G gold over silver	
ES-6H	ES-8H	SP (on)-off-(on)	T4 13.97	K gold / tin	
ES-6I	ES-8I	SP on-off-(on)	T5 3.5		
ES-7	ES-9	DP on-none-on	ESD Protection Actuator		RoHS Code H = RoHS Compliant
ES-7B	ES-9B	DP on-none-(on)	P1 (black) 10.16		
ES-7A	ES-9A	DP on-off-on	P11 (white) 10.16		
ES-7H	ES-9H	DP (on)-off-(on)	P2 (black, std.) 6.10		
ES-7I	ES-9I	DP on-off-(on)	P21 (white) 6.10		

## Contact material option

Code	Contact material	Terminal material	Rating
Q	Silver plated	Silver plated	3 A @ 120V AC or 28 V DC; 1.5 A @ 250 VAC
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plated over silver plated	Gold plated over silver plated	0.4 VA MAX @ 20 V AC or DC MAX or 3 A @ 120V AC or 28 V DC; 1.5 A @ 250 VAC



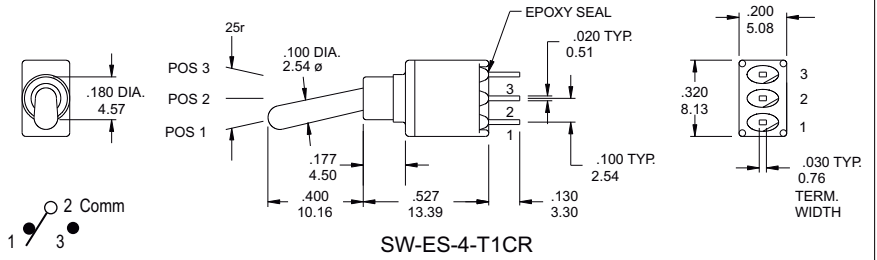
# SW-ES40T Series Sub-Miniature Toggle Switches, sealed

## Straight type

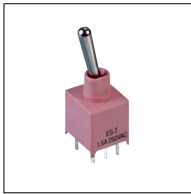
### SPDT



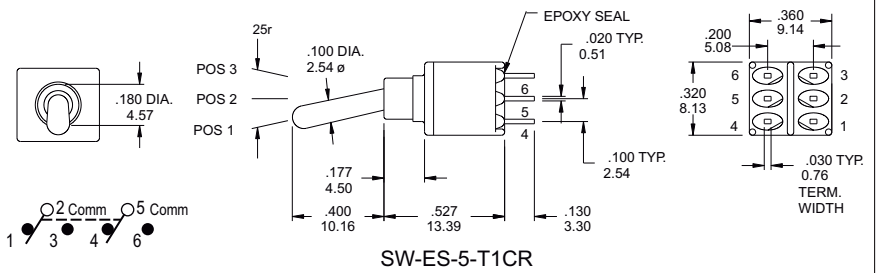
Model No.	Switching position		
ES-4	ON	none	ON
ES-4A	ON	OFF	ON
ES-4B	ON	None	(ON)
ES-4H	(ON)	OFF	(ON)
ES-4I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1



### DPDT

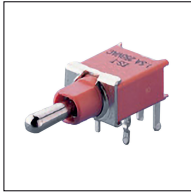


Model No.	Switching position		
ES-5	ON	none	ON
ES-5A	ON	OFF	ON
ES-5B	ON	None	(ON)
ES-5H	(ON)	OFF	(ON)
ES-5I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4

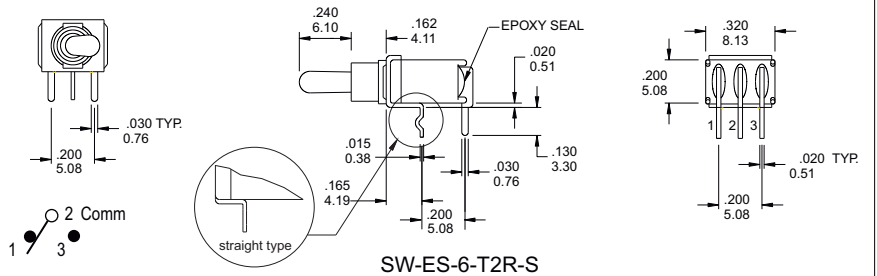


## Right angle horizontal

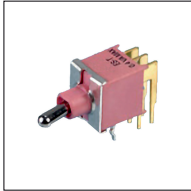
### SPDT



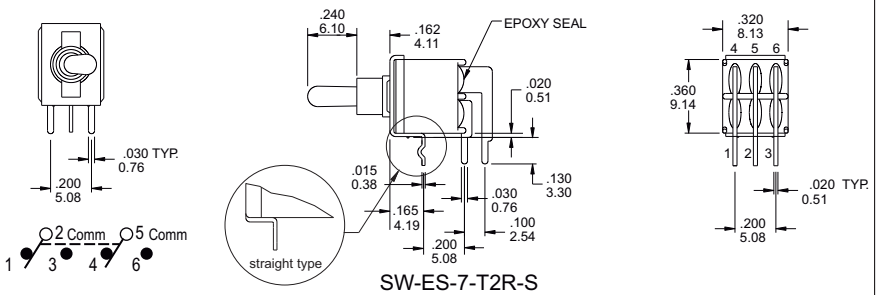
Model No.	Switching position		
ES-6	ON	none	ON
ES-6A	ON	OFF	ON
ES-6B	ON	None	(ON)
ES-6H	(ON)	OFF	(ON)
ES-6I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1



### DPDT

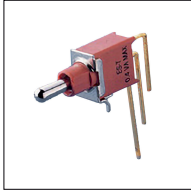


Model No.	Switching position		
ES-7	ON	none	ON
ES-7A	ON	OFF	ON
ES-7B	ON	None	(ON)
ES-7H	(ON)	OFF	(ON)
ES-7I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4

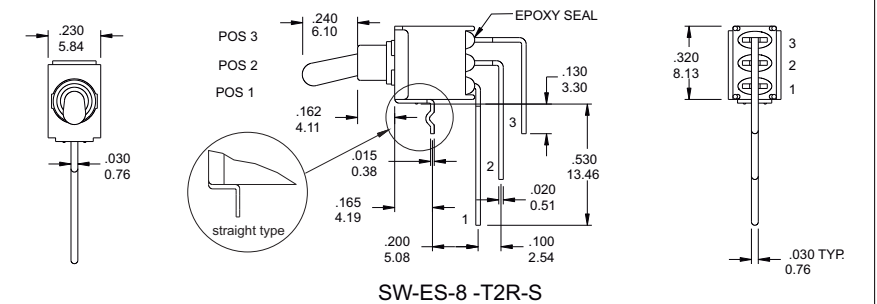


## Right angle vertical

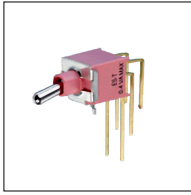
### SPDT



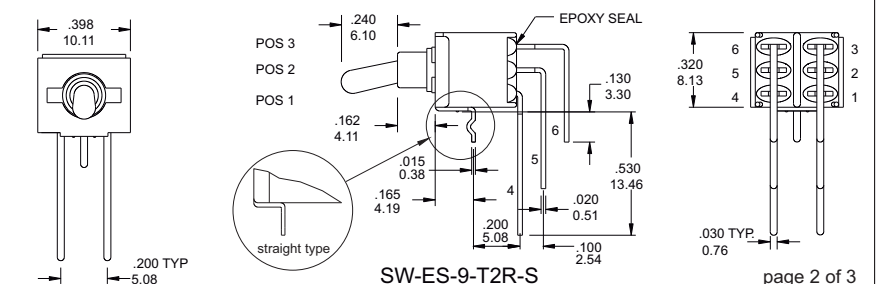
Model No.	Switching position		
ES-8	ON	none	ON
ES-8A	ON	OFF	ON
ES-8B	ON	None	(ON)
ES-8H	(ON)	OFF	(ON)
ES-8I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1



### DPDT

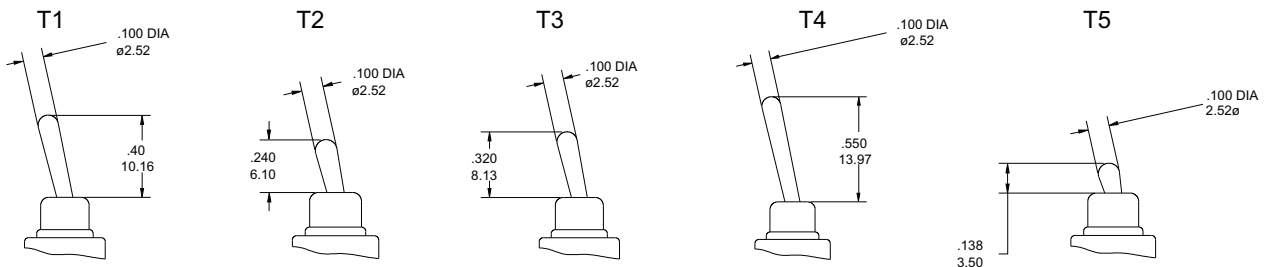


Model No.	Switching position		
ES-9	ON	none	ON
ES-9A	ON	OFF	ON
ES-9B	ON	None	(ON)
ES-9H	(ON)	OFF	(ON)
ES-9I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4

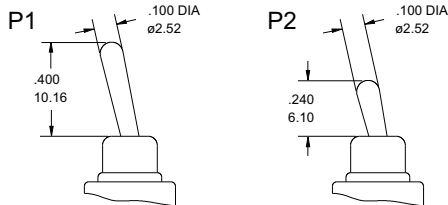


# SW-ES40T Series Sub-Miniature Toggle Switches, sealed

## Actuator option



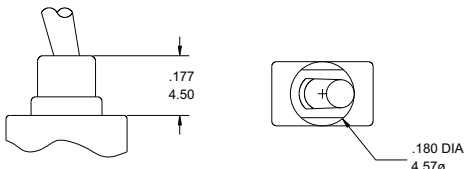
## Plastic toggle



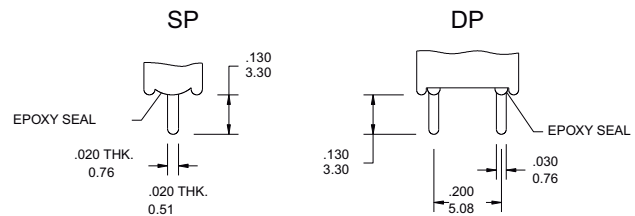
Material Nylon 4/6 (UL 94V-0), black std.  
Static resistance: 9,000V DC min. @ sea level, actuator to terminals

code	description
P1/P2	black(std.)
P11/P21	white

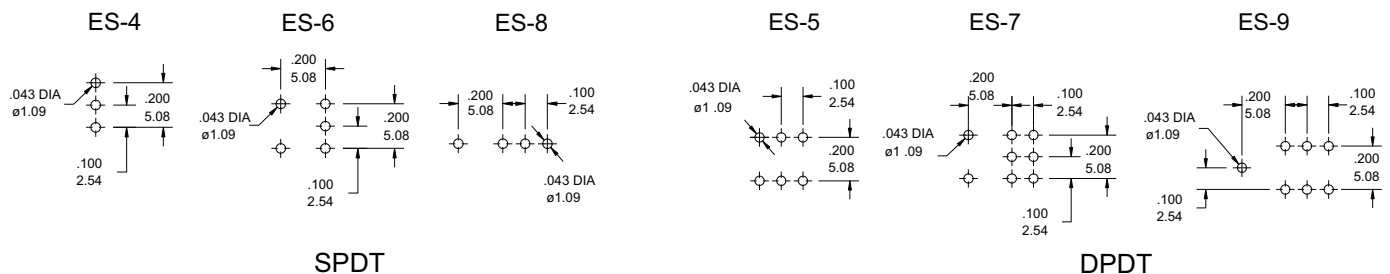
## Bushing dimension



## Terminal dimension

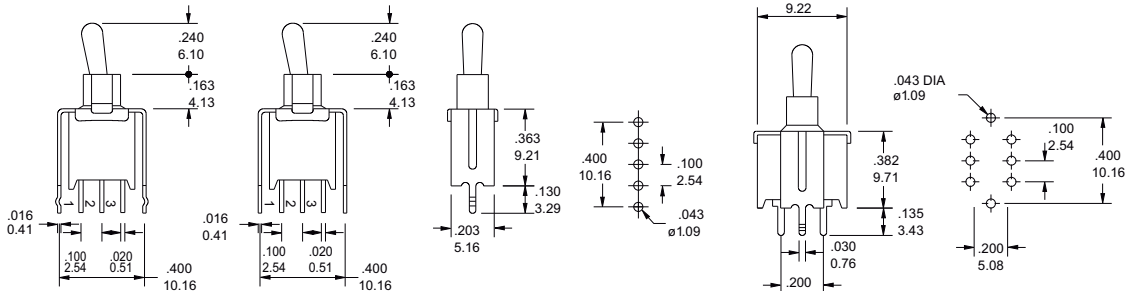


## Recommended P.C.B. layout



## Vertical support bracket option (apply only on straight type)

### A5



A5S (std.) snap-in type

A5 straight type

ES-4-T2CQ-A5S

ES-5-T2CQ-A5S

