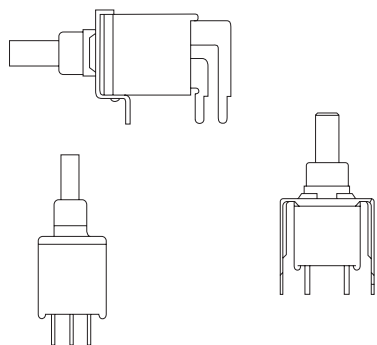




### FEATURES:

- 1. Sealed construction - internal plunger o-ring and epoxy terminal seal standard
- 2. Carry the IP67 approvals



**IP67 approvals**

### SPECIFICATIONS

CONTACT RATING: R- 0.4 VA max @ 20 V AC or DC  
 ELECTRICAL LIFE: 30,000 make-and-break cycles at full load  
 CONTACT RESISTANCE: 20 mΩ max. initial @ 2-4 VDC, 100 mA  
 INSULATION RESISTANCE: 1,000 MΩ min.  
 DIELECTRIC STRENGTH: 1,500 V RMS @ sea level.  
 DEGREE OF PROTECTION : IP67  
 OPERATING TEMPERATURE: -30°C to +85°C

### MATERIALS

CASE and BUSHING - glass filled nylon 6/6, flame retardant heat stabilized (UL94V-0)  
 PLUNGER - Thermoplastic polyester or glass filled nylon (UL94V-0)  
 CONTACT AND TERMINAL - Copper alloy , silver plated  
 SWITCH SUPPORT - Copper alloy , tin plated  
 TERMINAL SEAL - Epoxy

### How do you build the switches you need!!

The ES-21 / ES-22 (straight terminal type ), please see the (A) ;

The ES-21A/ES-21B/ES-22A/ES-22B, (Right angle type )please see the (B)

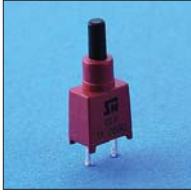
(A) ES - 21 - CV - 1 - C R - A5S -

Switches Function		Cap		Cap color		Plunger		Terminal		Vertical support Bracket	
ES-21	SPST off-mom.	CV	5.08	1	white	(none)	5.46(std.)	C	(std) P.C	(none)	std. snap-in type straight type
ES-22	SPDT on-mom.	CV1	7.62	2	black	SP	3.00			A5S	
				3	red	FP	flush type			A5	
				4	orange			Contact Material			RoHS code H = RoHS Compliant
				5	yellow			Q	silver plated		
				6	green			R	gold plated		
				7	blue			G	gold over silver		
				9	gray			K	gold / tin		

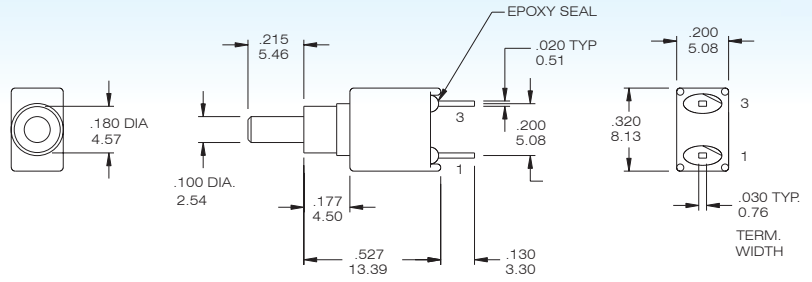
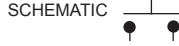
(B) ES - 21A - CV - 2 - R - S -

Horizon Right Angle		Vertical Right Angle		Switches Function		Cap		Cap color		Plunger		Support Bracket Option	
ES-21A	ES-21B	ES-21B	ES-22B	SPST off-mom.	CV	5.08	1	white	(none)	5.46(std.)	S	(std.) snap-in type	
ES-22A	ES-22B	SPDT on-mom.	CV1	7.62	2	black	2	black	SP	3.00		RoHS code H = RoHS Compliant	
					3	red	3	red	FP	flush type			
					4	orange		4	orange				
					5	yellow		5	yellow				
					6	green		6	green				
					7	blue		7	blue				
					9	gray		9	gray				
					Contact Material								
					Q	silver plated							
					R	gold plated							
					G	gold over silver							
					K	gold / tin							

## SPST

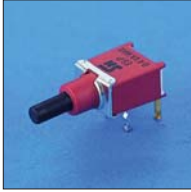


Model No.	Switching position	
ES-21	Off	Mom
Term. Comm.	open	1-3

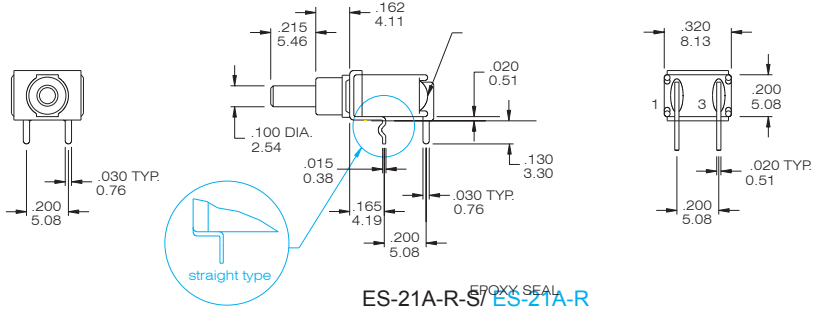
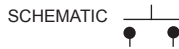


ES-21-CR

## SPST

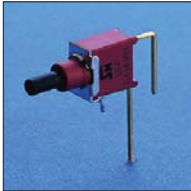


Model No.	Switching position	
ES-21A	Off	Mom
Term. Comm.	open	1-3

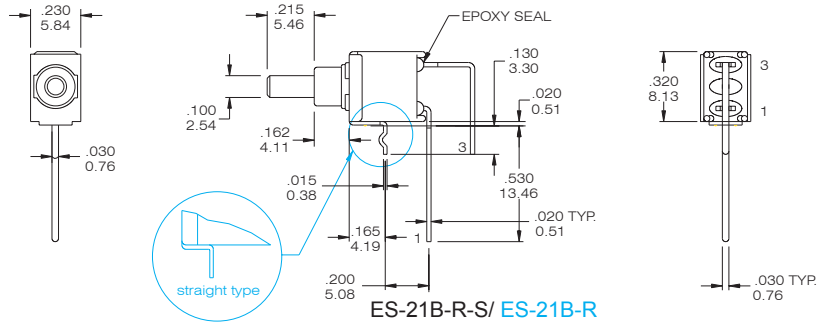
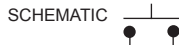


ES-21A-R-S/ES-21A-R

## SPST

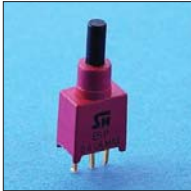


Model No.	Switching position	
ES-21B	Off	Mom
Term. Comm.	open	1-3

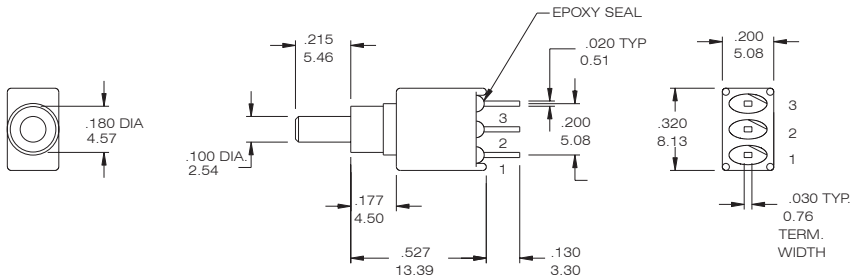


ES-21B-R-S/ES-21B-R

## SPDT

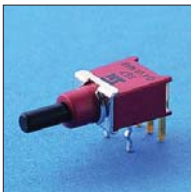


Model No.	Switching position	
ES-22	On	Mom
Term. Comm.	2-1	2-3

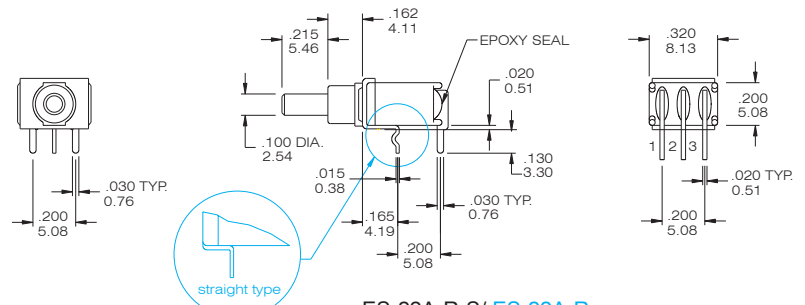


ES-22-CR

## SPDT



Model No.	Switching position	
ES-22A	On	Mom
Term. Comm.	2-1	2-3

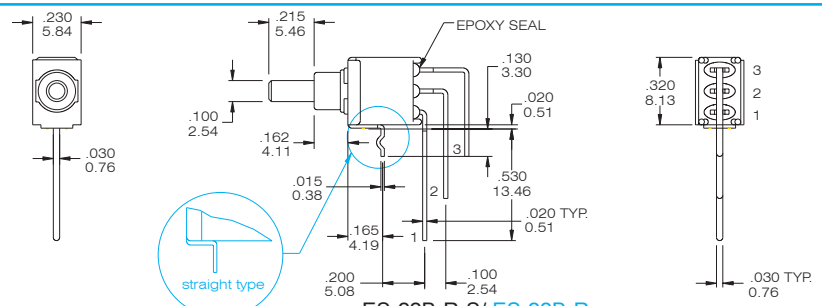


ES-22A-R-S/ES-22A-R

## SPDT



Model No.	Switching position	
ES-22B	On	Mom
Term. Comm.	2-1	2-3

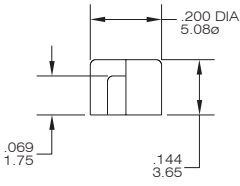


ES-22B-R-S/ES-22B-R

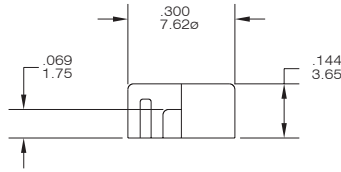


## Cap Option

CV



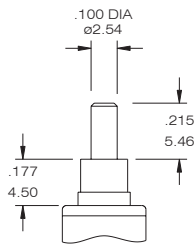
CV1



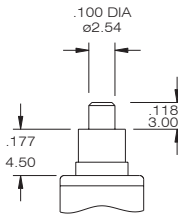
## Cap color Option

CAP & ACTUATOR OPTIONS	
1	White
2	Black(Std.)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
9	Gray

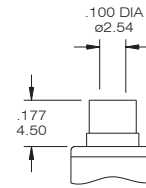
## The Plunger Option



(none) std.



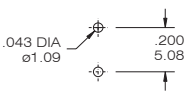
SP



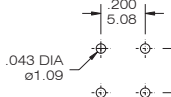
FP flush type

## The P.C.B MOUNTING

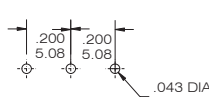
ES-21



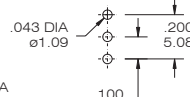
ES-21A



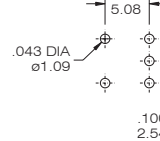
ES-21B



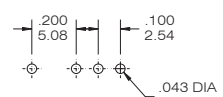
ES-22



ES-22A



ES-22B



## CONTACT MATERIAL OPTIONS

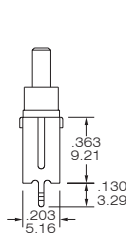
CODE	CONTACT MATERIAL	TERMINAL MATERIAL	RATING
Q	Silver plated	Silver plated	1 A @ 120V AC or 28 V DC;
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plated over silver plated	Gold plated over silver plated	0.4 VA MAX @ 20 V AC or DC MAX or 1 A @ 120V AC or 28 V DC;
K	Gold plated over nickel plated	Tin over nickel plated	0.4VA MAX @ 20 V AC or DC MAX

\* THE K option is only for some special item. Please inquire first when you need the "K" option

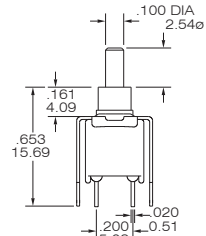
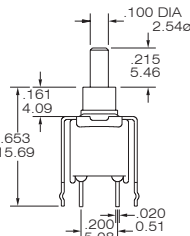
## VERTICAL SUPPORT BRACKET OPTION

only for the ES-21/ES-22 .

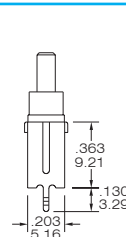
A5S



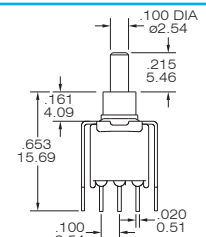
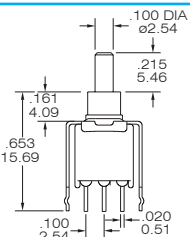
ES-21-CR-A5S (std.) snap-in type



A5 straight type



ES-22-CR-A5S (std.) snap-in type



A5 straight type