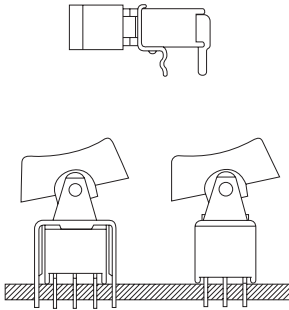


## FEATURES

1. Sealed construction - internal actuator o-ring and epoxy terminal seal standard
2. IP67 protection Degree



## 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 m $\Omega$  max. initial @ 2-4 VDC, 100 mA  
 INSULATION RESISTANCE: 1,000 M $\Omega$  min.  
 DIELECTRIC STRENGTH: 1,500 V RMS @ sea level.  
 DEGREE OF PROTECTION : IP67  
 OPERATING TEMPERATURE: -30 $^{\circ}$  C to 85 $^{\circ}$  C

## MATERIALS

CASE and BUSHING - glass filled nylon ,6/6 flame retardant heat stabilized (UL94V-0 )  
 Actuator - Nylon, black standard. Internal o-ring seal standard with all actuator.  
 CONTACT AND TERMINAL - Copper alloy , gold plated  
 SWITCH SUPPORT - Brass , tin-lead  
 TERMINAL SEAL - Epoxy

How do you build the switches you need!!

The ER-4 / ER-5 , please see the (A) ;

The ER-6/ER-7/ER-8/ER-9, please see the (B)

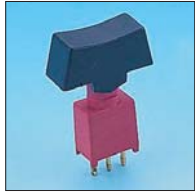
(A) **E** **R** - **4** - **R** **2** - **2** - **C** **R** - **A** **5** **S**

Switches Function		Actuator		Actuator Color		Contact Material		Vertical support Bracket	
ER-4	SP on-none-on	R1	Std. 7.62	1	white	Q	silver plated	(none)	(std.) snap-in type straight type
ER-4B	SP on-none-(on)	R2	Std. 5.84	2	(std.) black	R	gold plated	A5S	
ER-4A	SP on-off-on			3	Red	G	gold over silver	A5	
ER-4H	SP (on)-off-(on)					K	gold / tin-lead		
ER-4I	SP on-off-(on)			Termination					
ER-5	DP on-none-on			C	(std) P.C				
ER-5B	DP on-none-(on)								
ER-5A	DP on-off-on								
ER-5H	DP (on)-off-(on)								
ER-5I	DP on-off-(on)								

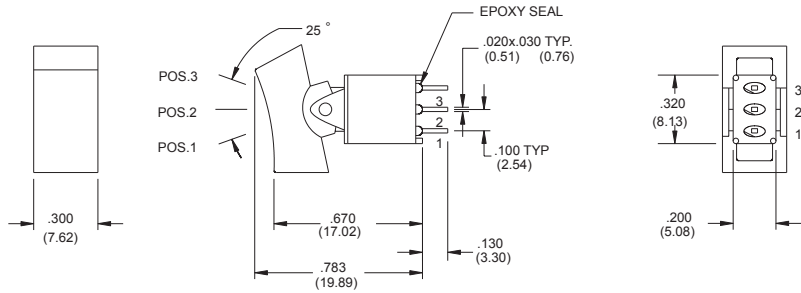
(A) **E** **S** - **6** - **R** **2** - **2** - **R** - **S**

Horizon Right Angle	Vertical Right Angle	Switches Function	Actuator		Actuator Color		Support Bracket	
ER-6	ER-8	SP on-none-on	R1	Std. 7.62	1	white	S	(std.) snap-in type straight type
ER-6B	ER-8B	SP on-none-(on)	R2	Std. 5.84	2	(std.) black	(none)	
ER-6A	ER-8A	SP on-off-on			3	Red		
ER-6H	ER-8H	SP (on)-off-(on)			Contact Material			
ER-6I	ER-8I	SP on-off-(on)			Q	silver plated		
ER-7	ER-9	DP on-none-on			R	gold plated		
ER-7B	ER-9B	DP on-none-(on)			G	gold over silver		
ER-7A	ER-9A	DP on-off-on			K	gold / tin-lead		
ER-7H	ER-9H	DP (on)-off-(on)						
ER-7I	ER-9I	DP on-off-(on)						

## SPDT

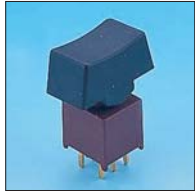


Model No.	Switching position		
ER-4	ON	none	ON
ER-4A	ON	OFF	ON
ER-4B	ON	None	(ON)
ER-4H	(ON)	OFF	(ON)
ER-4I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

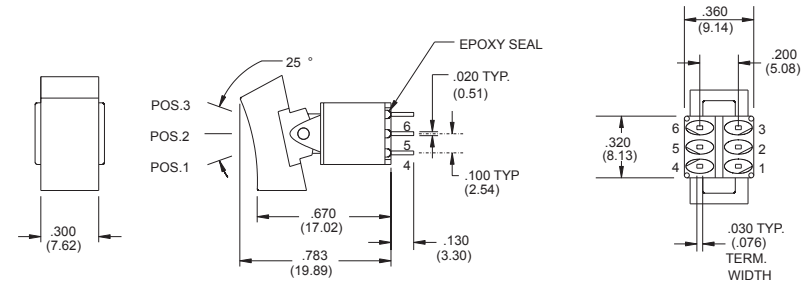


ER-4 - R1-2-CR

## DPDT

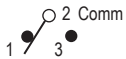
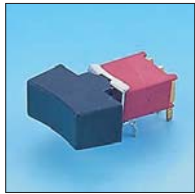


Model No.	Switching position		
ER-5	ON	none	ON
ER-5A	ON	OFF	ON
ER-5B	ON	None	(ON)
ER-5H	(ON)	OFF	(ON)
ER-5I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4

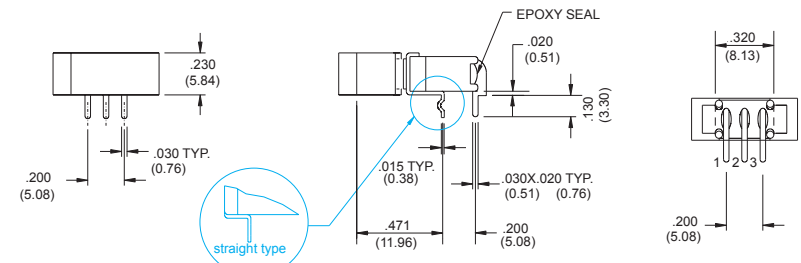


ER-5 - R1-2-CR

## SPDT

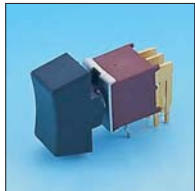


Model No.	Switching position		
ER-6	ON	none	ON
ER-6A	ON	OFF	ON
ER-6B	ON	None	(ON)
ER-6H	(ON)	OFF	(ON)
ER-6I	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

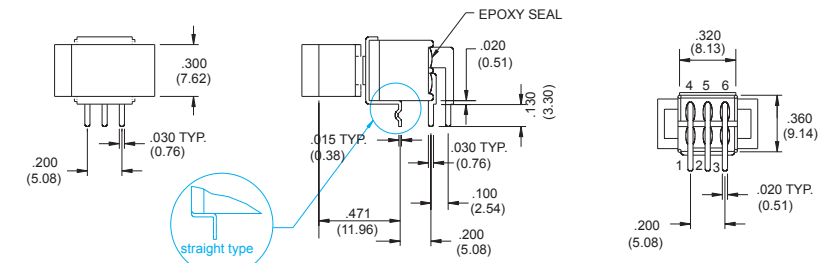


ER-6 - R2-2-R-S / ER-6-R2-2-R

## DPDT

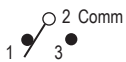


Model No.	Switching position		
ER-7	ON	none	ON
ER-7A	ON	OFF	ON
ER-7B	ON	None	(ON)
ER-7H	(ON)	OFF	(ON)
ER-7I	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4

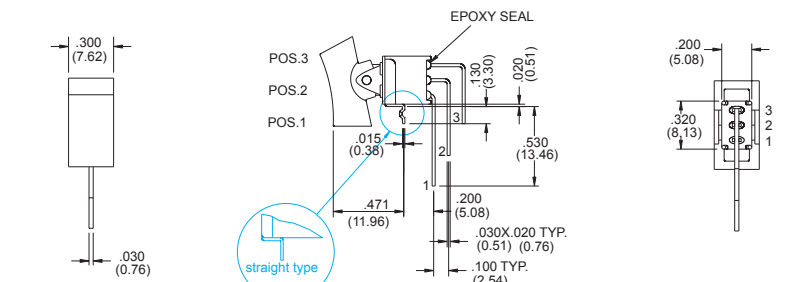


ER-7 - R1-2-R-S / ER-7-R1-2-R

## SPDT



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

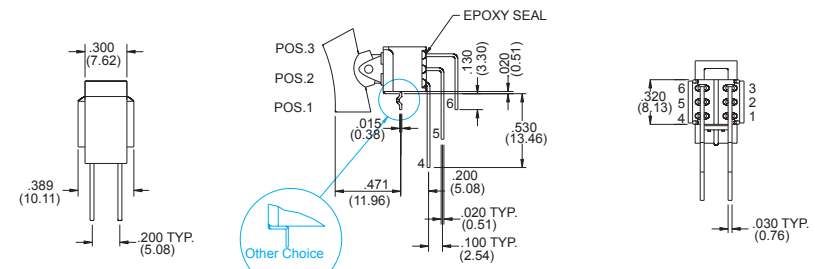


ER-8 - R1-2-R-S / ER-8-R1-2-R

## DPDT



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

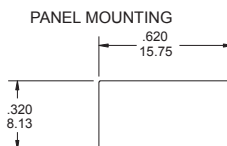
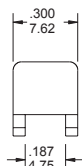
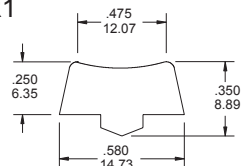


ER-9 - R1-2-R-S / ER-9-R1-2-R

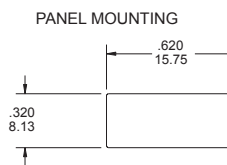
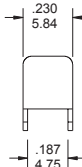
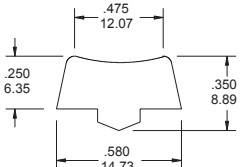
## Actuator Option

## Actuator Color Option

R1



R2



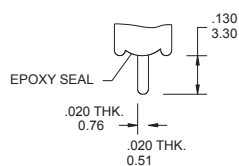
Code	Color
1	white
2	Black(std.)
3	Red

Other colors, custom actuator marking available consult factory.

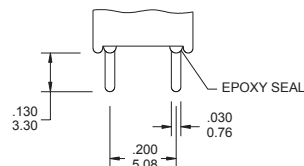
## TERMINAL OPTION (ER-4 / ER-5)

## THE P.C.B MOUNTING

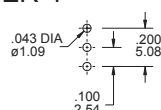
SP



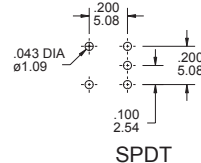
DP



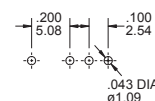
ER-4



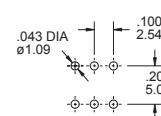
ER-6



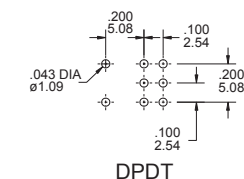
ER-8



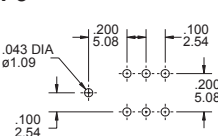
ER-5



ER-7



ER-9

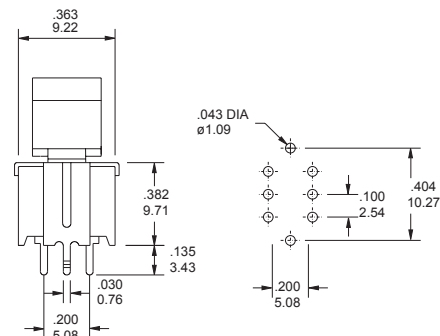
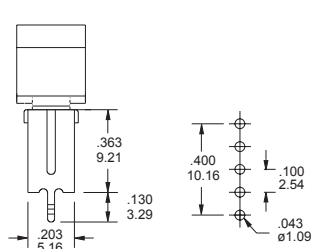
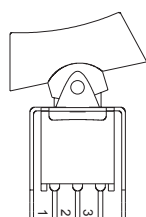
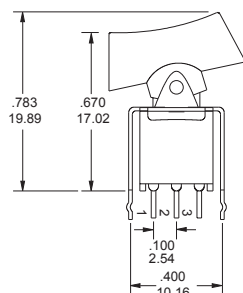


## CONTACT MATERIAL OPTIONS

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 plate 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
K	Gold plated over nickel plated	Tin-lead over nickel plated	0.4VA MAX @ 20 V AC or DC MAX

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

## VERTICAL SUPPORT BRACKET OPTION



A5S (std.) snap-in type

A5 straight type

ER-4-R1-2-CQ-A5S

ER-5-R1-2-CQ-A5S