

- Wide variety of applications from consumer electronics to commercial
- Standard epoxy sealed terminations
- Gold contacts available for low power applications
- Available support brackets for greater stability
- Up to four poles with five functions available
- Many rocker and paddle styles to choose from
- Wide variety of terminal options



**cULus** - E222871

**SPECIFICATIONS**

Electrical Ratings	5A @ 120VAC, 28VDC; 2A @ 250VAC See Contact Options
Electrical Life	50,000 cycles typical
Contact Resistance	< 20 mΩ max initial @ 2-4VDC, 100mA
Dielectric Strength	1500Vrms min
Insulation Resistance	> 100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C



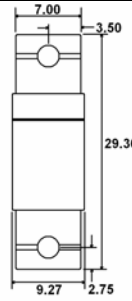
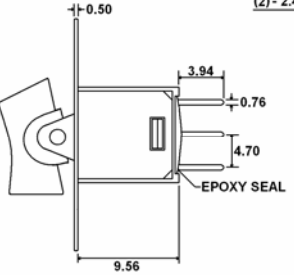
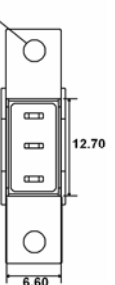


**MATERIALS ←RoHS COMPLIANT**


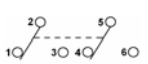
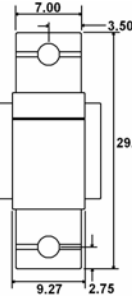
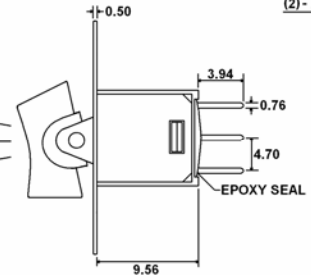
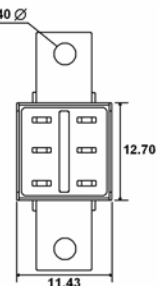


Actuator	ABS
Housing	DAP – Diallyl Phthalate
Frame	6/6 Nylon
Bushing	Brass or Zinc, Nickel Plated
Contacts	Copper Alloy, Silver Plated
Terminals	Brass, Silver Plated


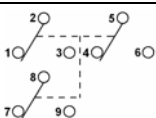
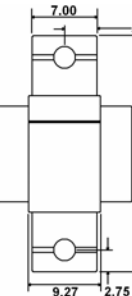
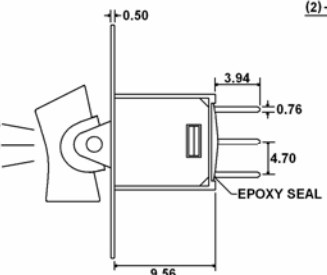
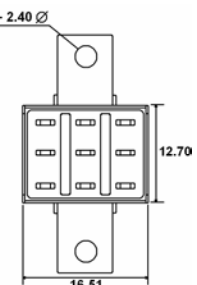


**ORDERING INFORMATION**


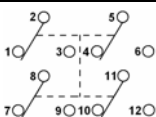
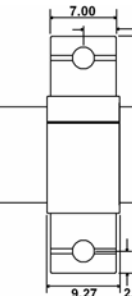
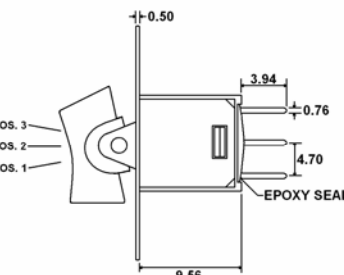
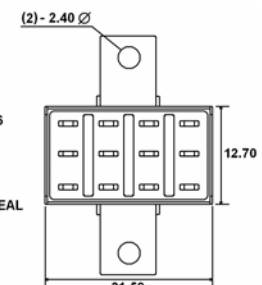


<b>1. Series:</b>	<b>ANR</b>	<b>1</b>	<b>1</b>	<b>R11</b>	<b>2</b>		<b>B</b>	<b>Q</b>	<b>E</b>
ANR									
<b>2. Number of Poles:</b>									
1 = SPDT									
2 = DPDT									
3 = 3PDT									
4 = 4PDT									
<b>3. Switch Function:</b>									
1 = ON-NONE-ON									
2 = ON-NONE-(ON)									
3 = ON-OFF-ON									
4 = (ON)-OFF-(ON)									
5 = ON-OFF-(ON)									
6 = ON-ON-ON ** See Three Way Wiring Section for Details									
<b>4. Actuator:</b>									
R11P / R11 = Rocker, PC Mount / Panel Mount									
R15P / R15 = Rocker, PC Mount / Panel Mount									
R19P / R19 = Rocker, PC Mount / Panel Mount									
R21P / R21 = Rocker, PC Mount / Panel Mount									
P13P / P13 = Paddle, PC Mount / Panel Mount									
P23P / P23 = Paddle, PC Mount / Panel Mount									
P43P / P43 = Paddle, PC Mount / Panel Mount									
P47P / P47 = Paddle, PC Mount / Panel Mount									
P48P / P48 = Paddle, PC Mount / Panel Mount									
R12 / R22 = Rocker, Snap-in Panel Mount w/ Frame / Snap-in Panel Mount w/o Frame									
P14 / P24 = Paddle, Snap-in Panel Mount w/ Frame / Snap-in Panel Mount w/o Frame									
P17 / P27 = Paddle, Snap-in Panel Mount w/ Frame / Snap-in Panel Mount w/o Frame									
P18 / P28 = Paddle, Snap-in Panel Mount w/ Frame / Snap-in Panel Mount w/o Frame									
R51R = Rocker, Snap-in Panel Mount w/ Frame and LED (Red LED standard)									
P53R = Rocker, Snap-in Panel Mount w/ Frame and LED (Red LED standard)									
<b>5. Actuator Color:</b>									
1 = White                      4 = Yellow                      7 = Blue									
2 = Black                      5 = Green                      8 = Brown									
3 = Red                      6 = Orange                      9 = Gray									
<b>6. Frame Color:</b>									
1 = White                      4 = Yellow                      7 = Blue                      Blank = No Frame									
2 = Black                      5 = Green                      8 = Brown									
3 = Red                      6 = Orange                      9 = Gray									
<b>7. Actuator Marking Style:</b>									
Blank = No Marking									
A, B, C, D, E, F, G									
<b>8. Actuator Marking Color:</b>									
Blank = No Marking, W = White (Standard), B = Black									
<b>9. Terminals:</b>									
B = Solder Lug									
C = PC Pin									
D = Quick Connect									
H = Horizontal Mount, Right Angle PC Pin; HS = Snap-in									
V = Vertical Mount, Right Angle PC Pin									
S20 or S25 = PC Pin with Support Bracket; V20 or V25 = Snap-in Support Bracket									
S35 or S40 = PC Pin with Support Bracket; S35 or V40 = Snap-in Support Bracket									
<b>10. Contacts:</b>									
Q = Silver Plated									
R = Gold Plated									
G = Gold over Silver Plated									
<b>11. Epoxy Seal:</b>									
E = Epoxy Seal									

**SWITCH FUNCTION**

 <b>SPDT</b> 	Function	Toggle Position			  
					
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
	4	(ON)	OFF	(ON)	
5	ON	OFF	(ON)		
Terminals	2-3	---	2-1		

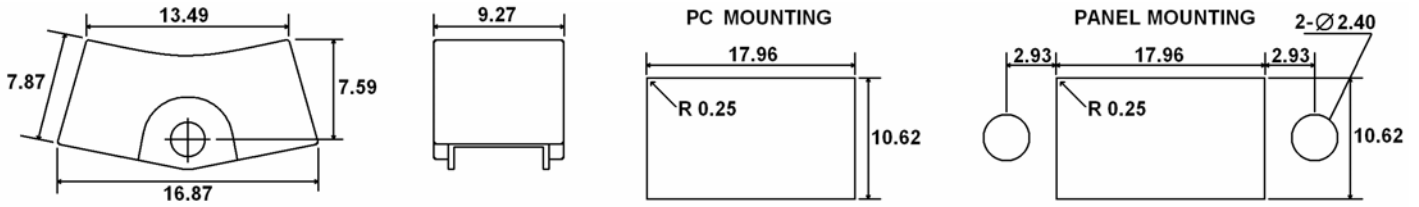
 <b>DPDT</b> 	Function	Toggle Position			  
					
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
	4	(ON)	OFF	(ON)	
5	ON	OFF	(ON)		
Terminals	2-3 5-6	---	2-1 5-4		
6	ON	ON	ON		
Terminals	2-3 5-6	2-3 5-4	2-1 5-4		

 <b>3PDT</b> 	Function	Toggle Position			  
					
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
	4	(ON)	OFF	(ON)	
5	ON	OFF	(ON)		
Terminals	2-3 5-6 8-9	---	2-1 5-4 8-7		

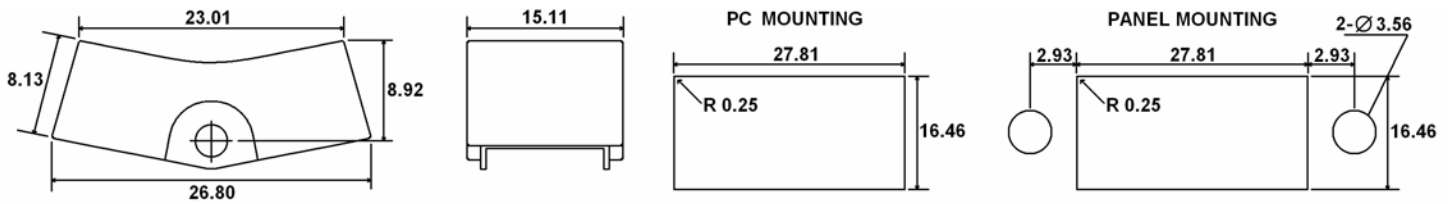
 <b>4PDT</b> 	Function	Toggle Position			  
					
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
	4	(ON)	OFF	(ON)	
5	ON	OFF	(ON)		
Terminals	2-3 5-6 8-9 11-12	---	2-1 5-4 8-7 11-10		
6	ON	ON	ON		
Terminals	2-3 5-6 8-9 11-12	2-3 5-4 8-9 11-10	2-1 5-4 8-7 11-10		

**ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)**

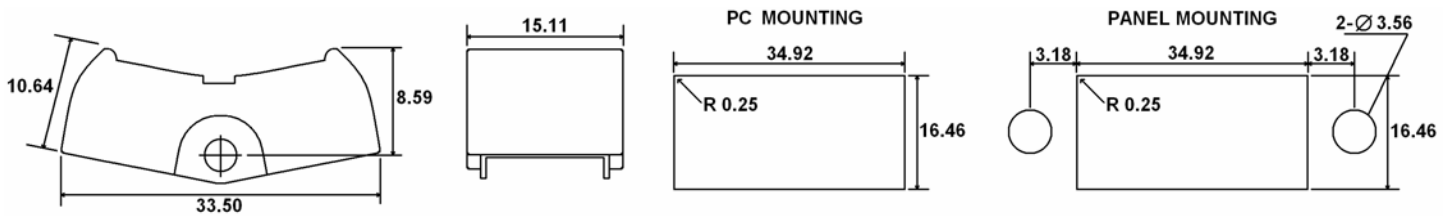
**R11P / R11**



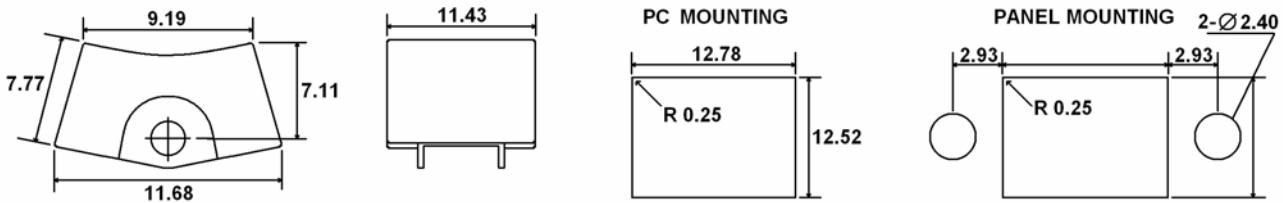
**R15P / R15**



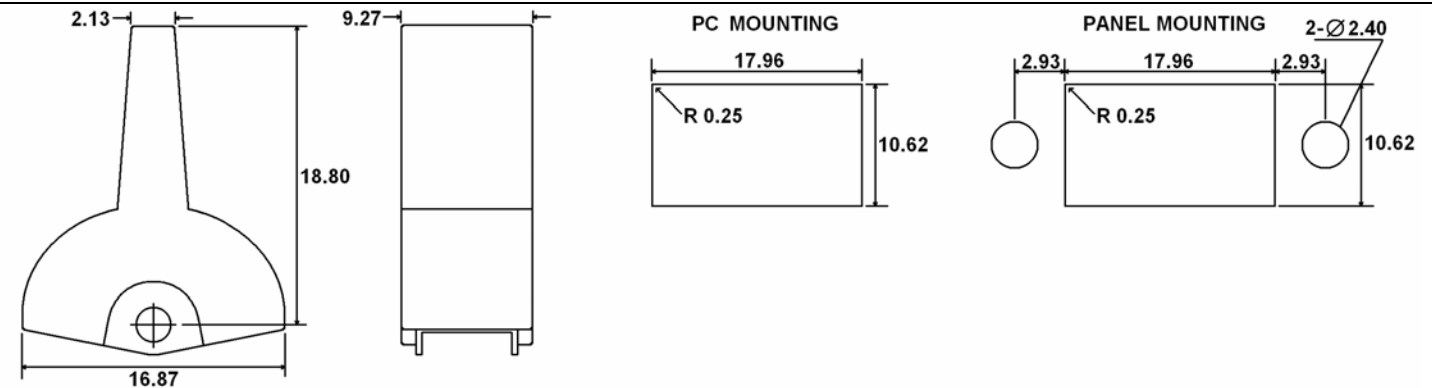
**R19P / R19**



**R21P / R21**

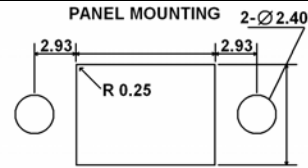
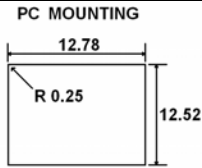
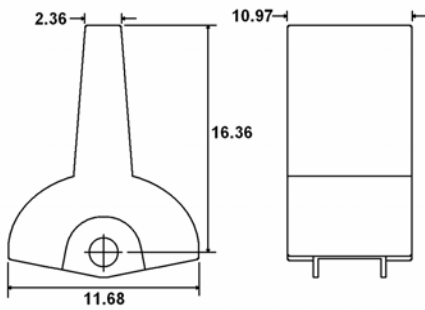


**P13P / P13**

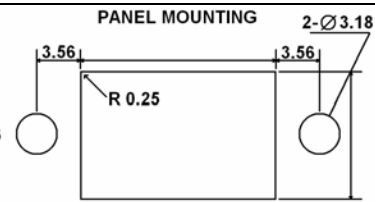
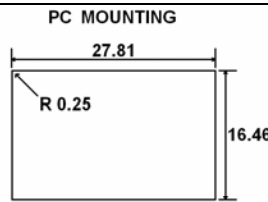
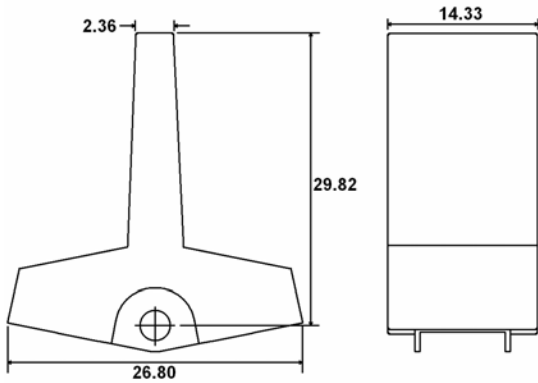


**ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)**

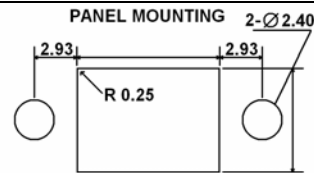
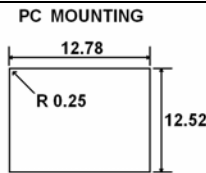
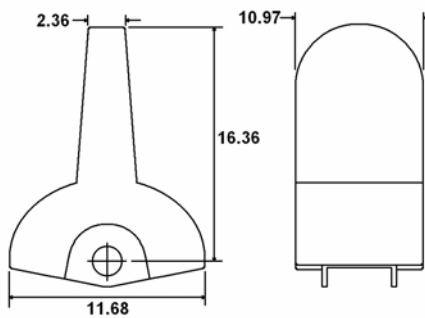
**P23P / P23**



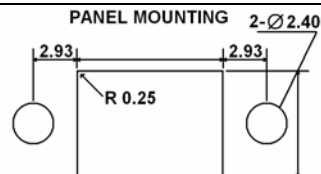
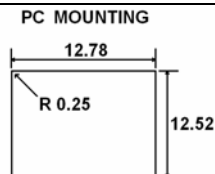
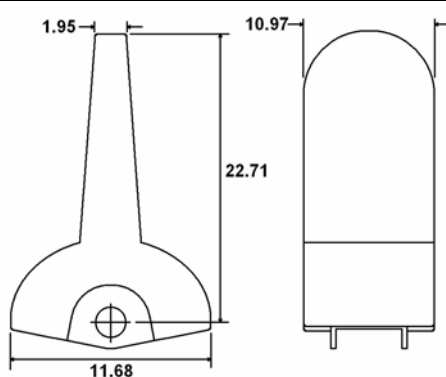
**P43P / P43**



**P47P / P47**



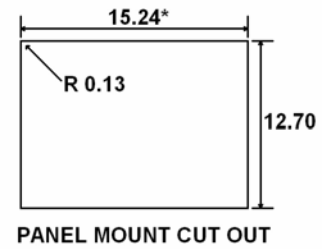
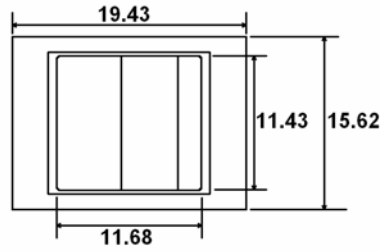
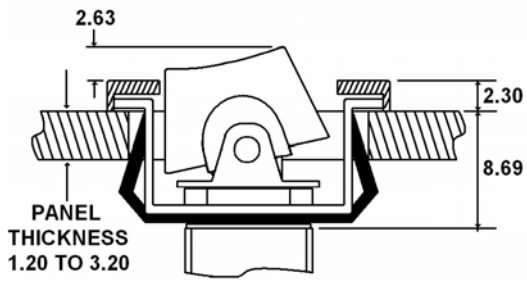
**P48P / P48**



**ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)**

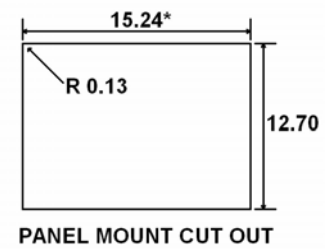
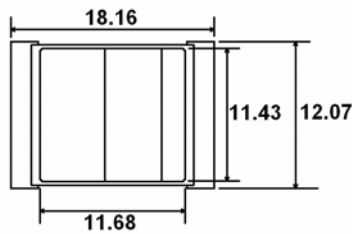
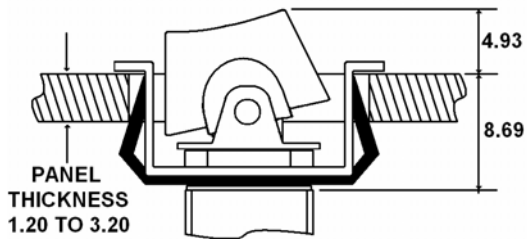
**R12**

**\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



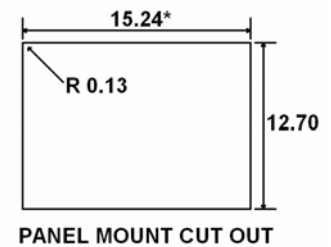
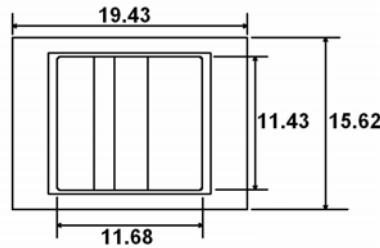
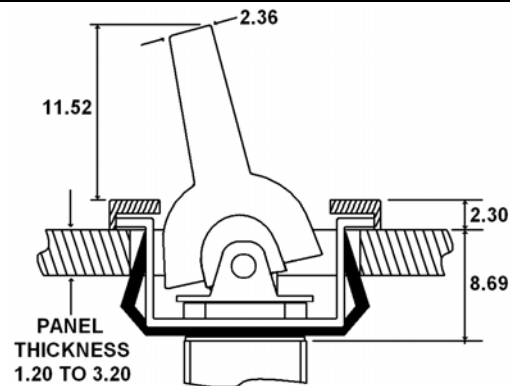
**R22**

**\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



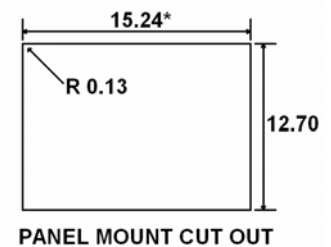
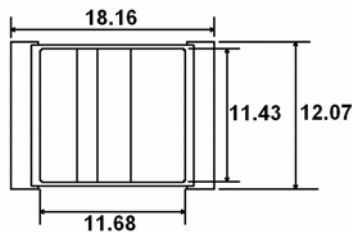
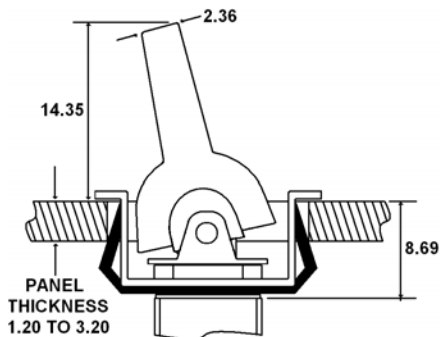
**P14**

**\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



**P24**

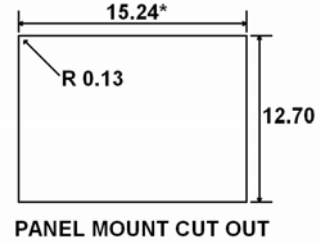
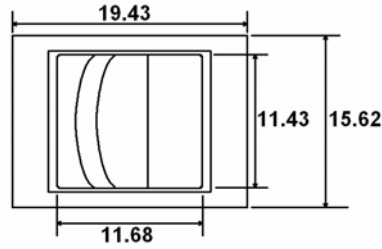
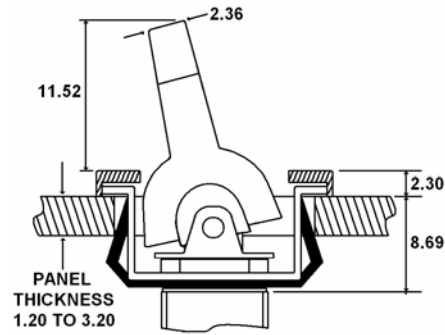
**\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



**ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)**

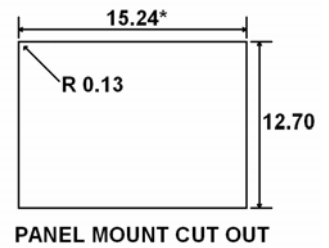
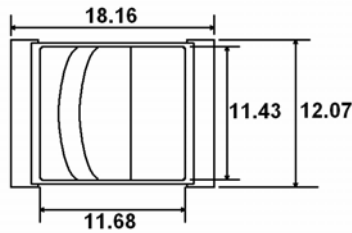
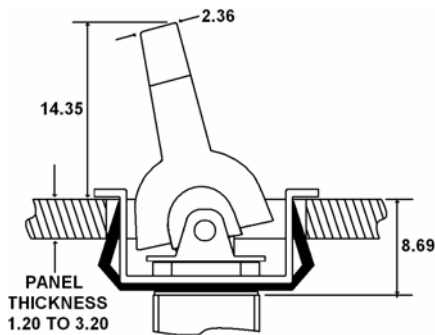
**P17**

\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



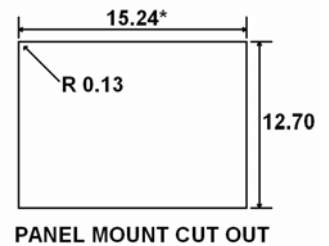
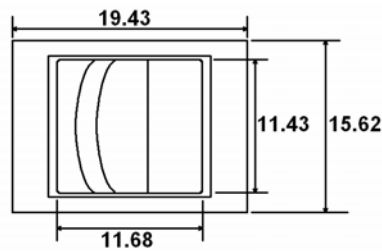
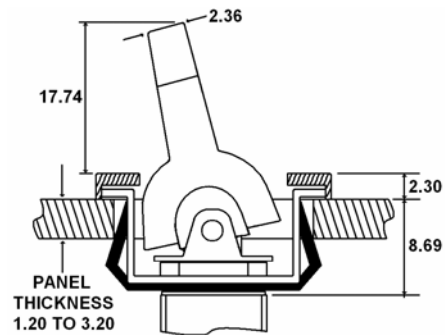
**P27**

\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



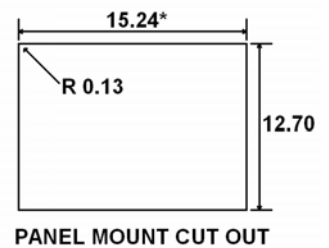
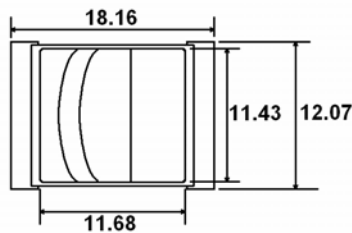
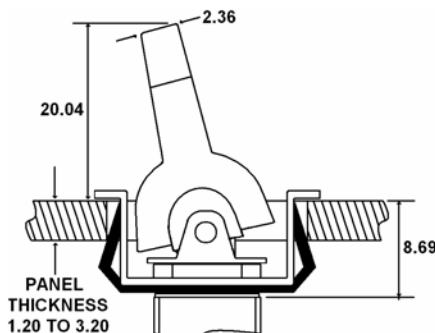
**P18**

\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



**P28**

\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels

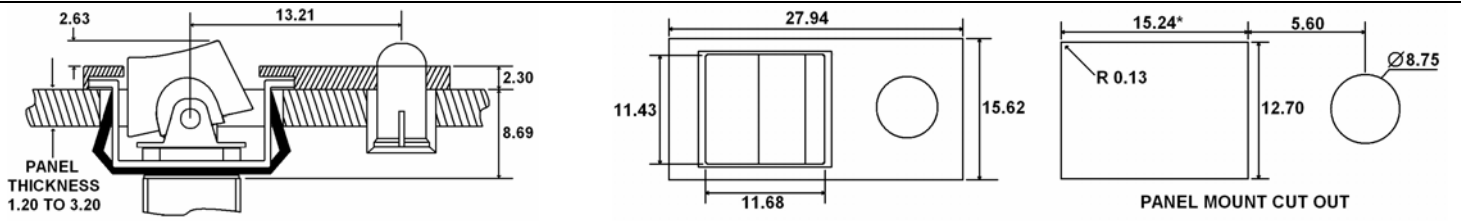




**ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)**

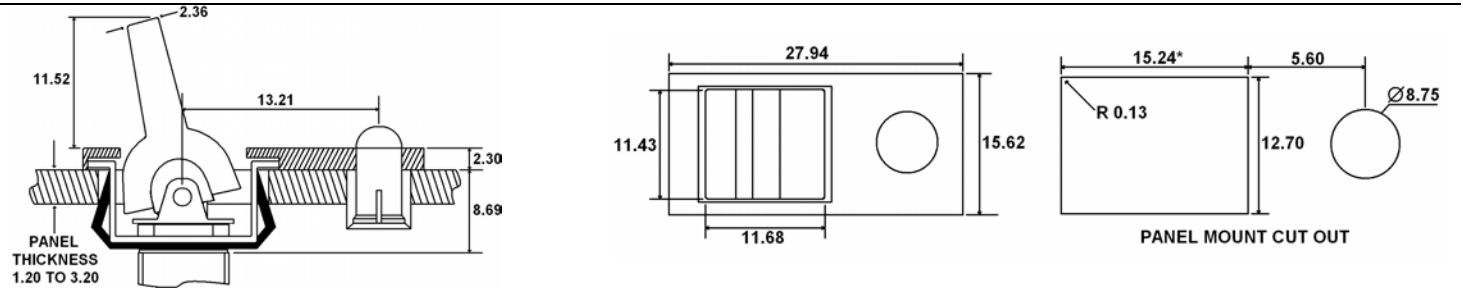
**R51R**

\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels

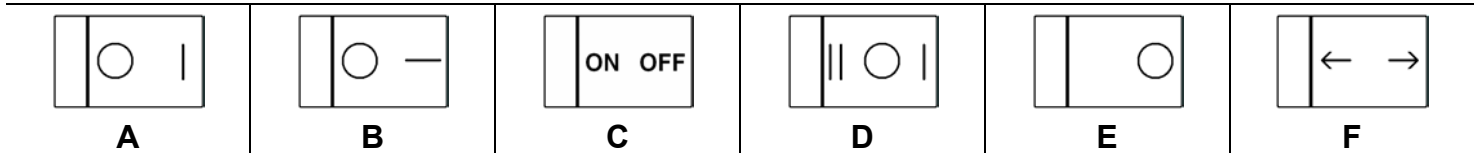


**P53R**

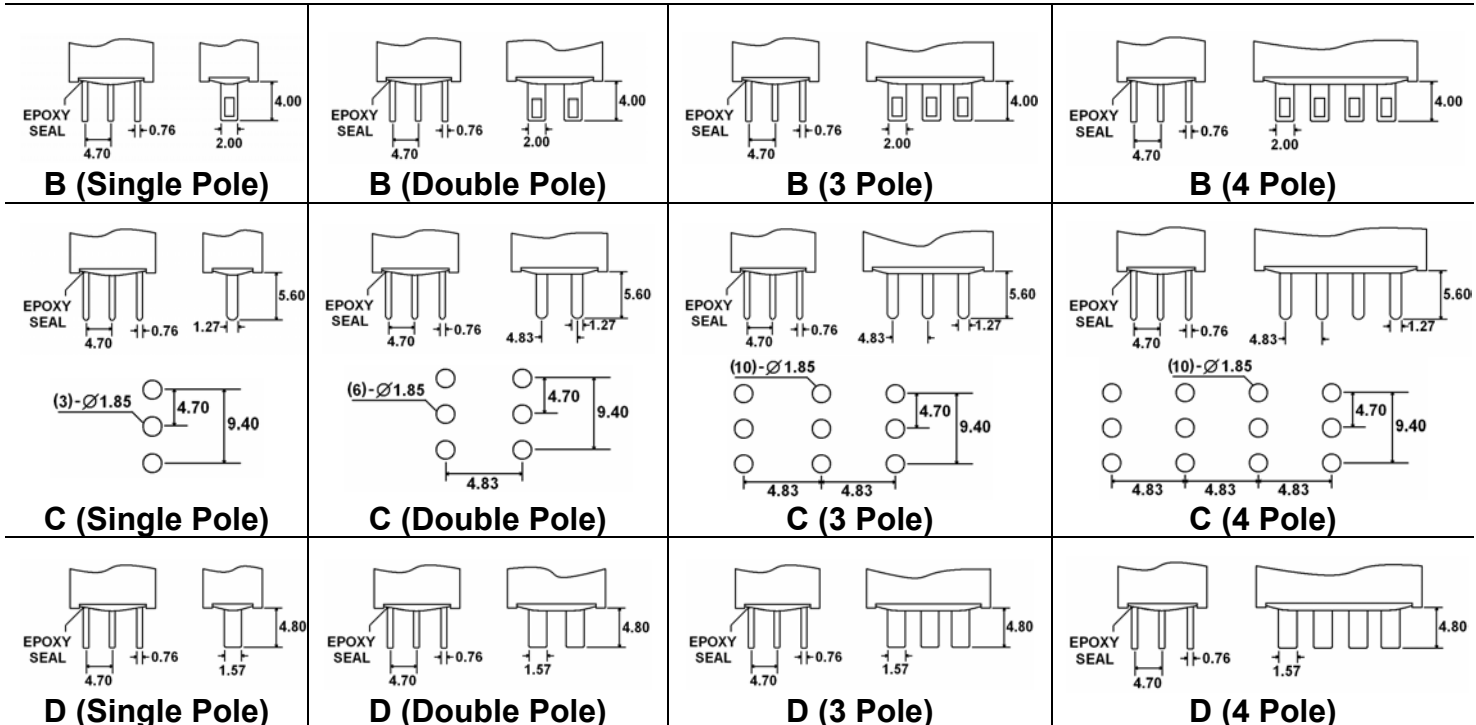
\*\* Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



**ACTUATOR MARKINGS**

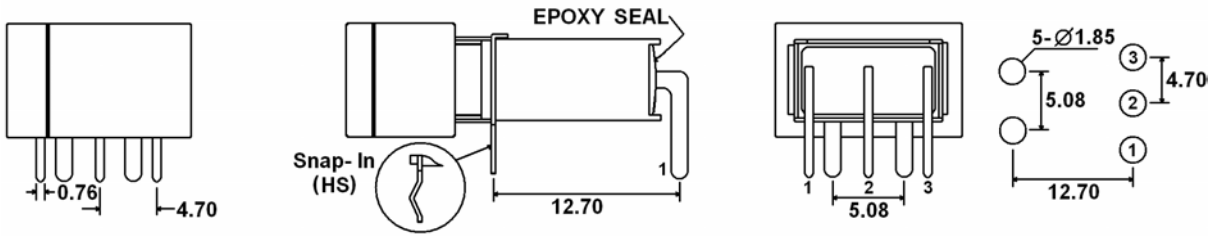


**TERMINAL OPTIONS**

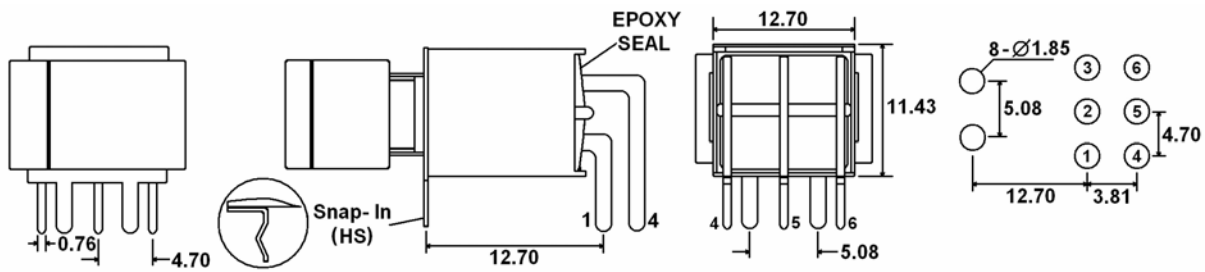




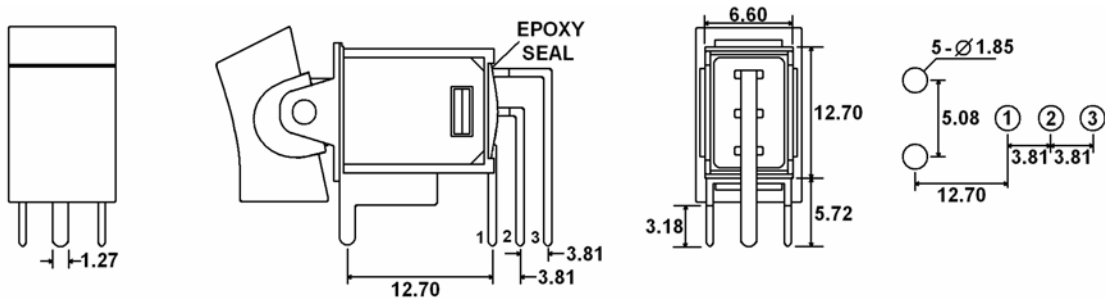
**TERMINAL OPTIONS**



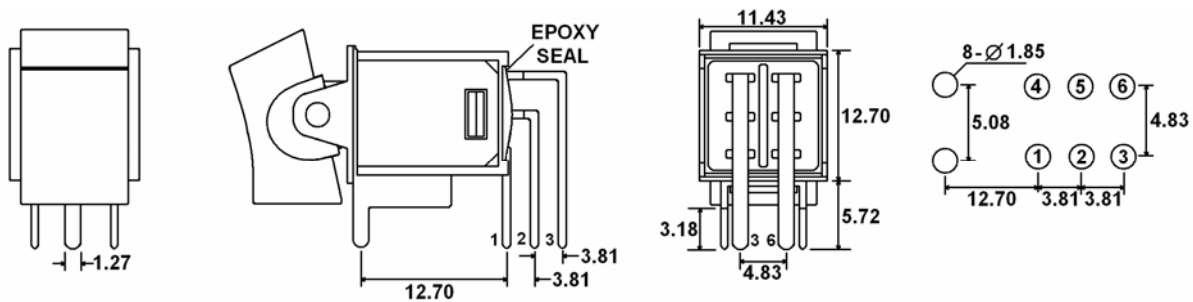
**H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Single Pole)**



**H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Double Pole)**

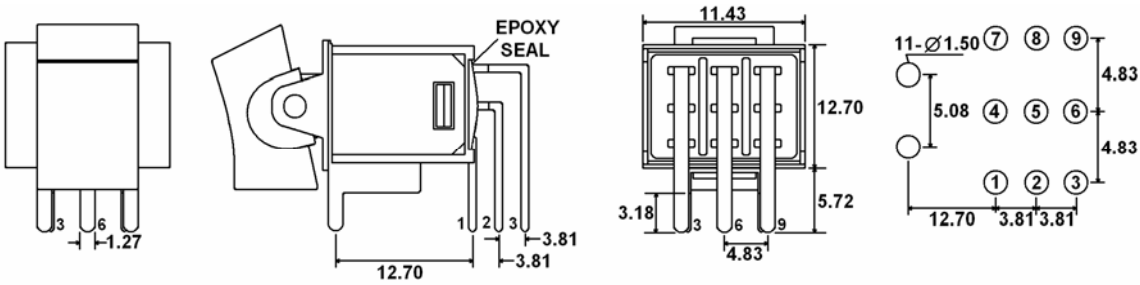


**V = Vertical Mount, Right Angle PC Pins (Single Pole)**

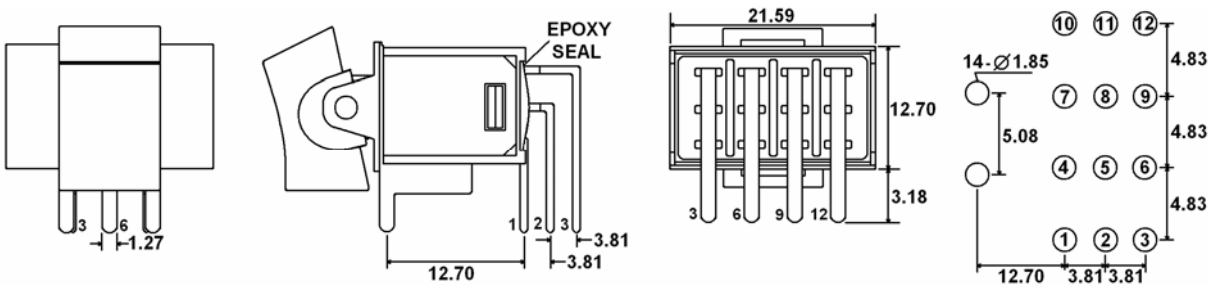


**V = Vertical Mount, Right Angle PC Pins (Double Pole)**

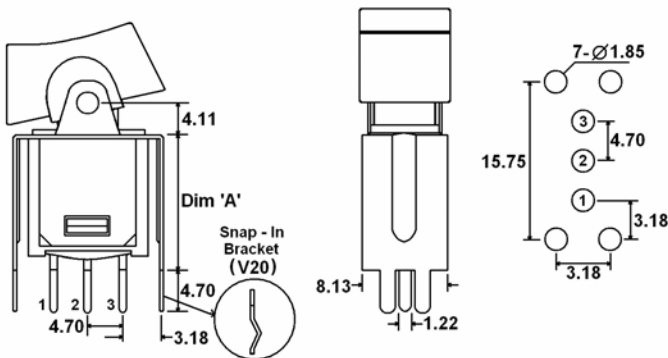
**TERMINAL OPTIONS**



**V = Vertical Mount, Right Angle PC Pins (Three Pole)**

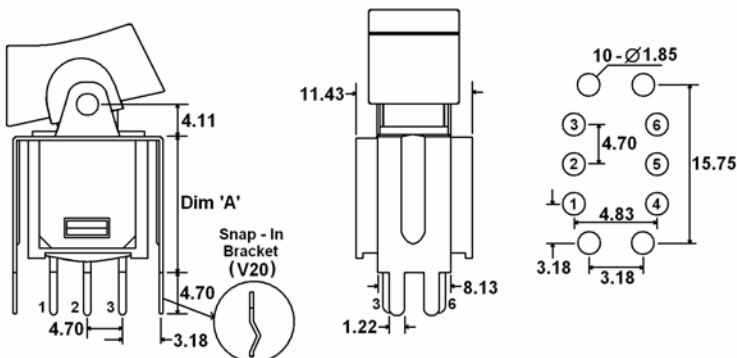


**V = Vertical Mount, Right Angle PC Pins (Four Pole)**



Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

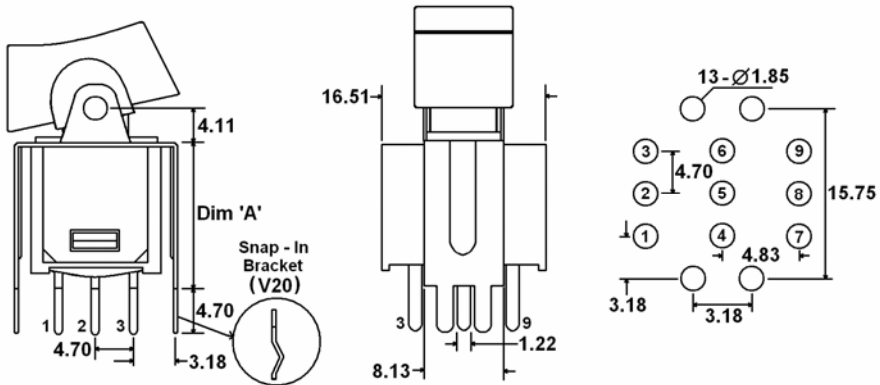
**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)**



Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

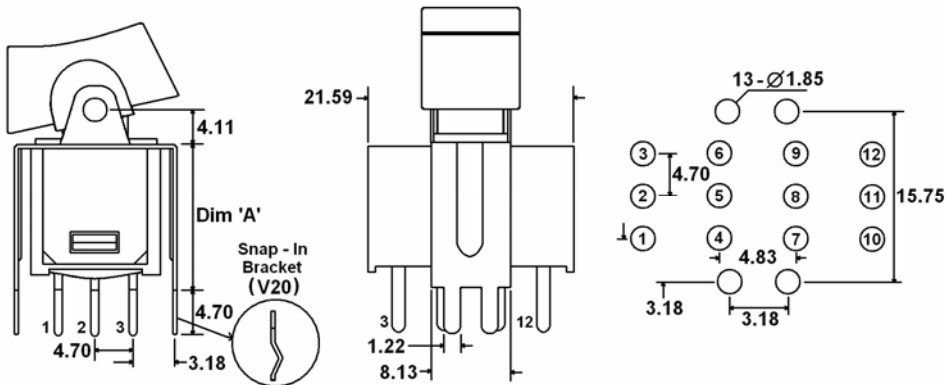
**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)**

**TERMINAL OPTIONS**



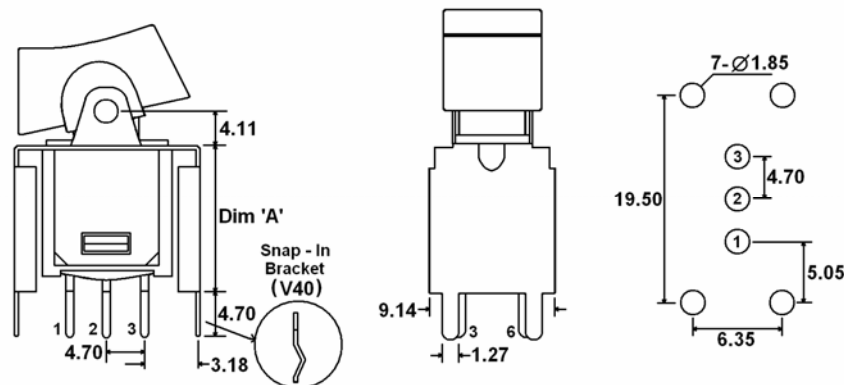
Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)**



Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

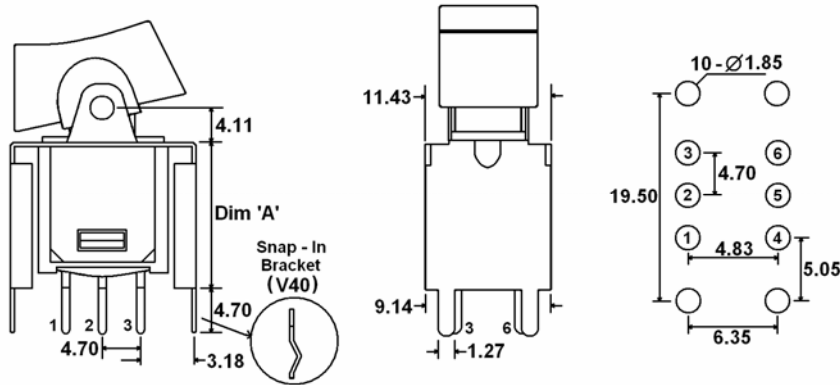
**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Four Pole)**



Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

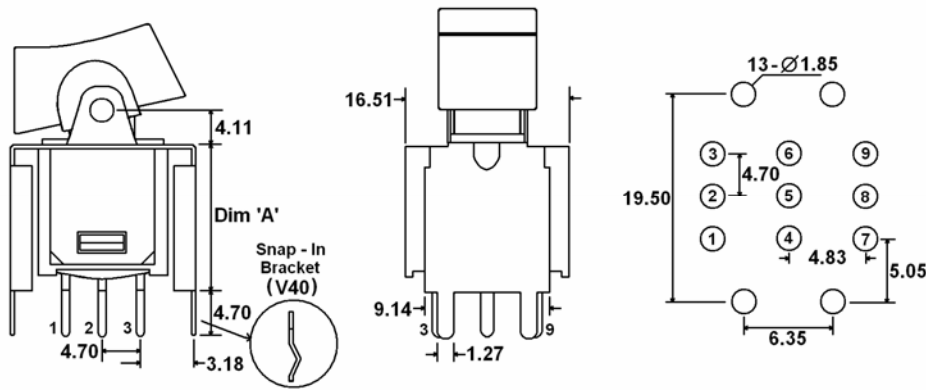
**S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)**

**TERMINAL OPTIONS**



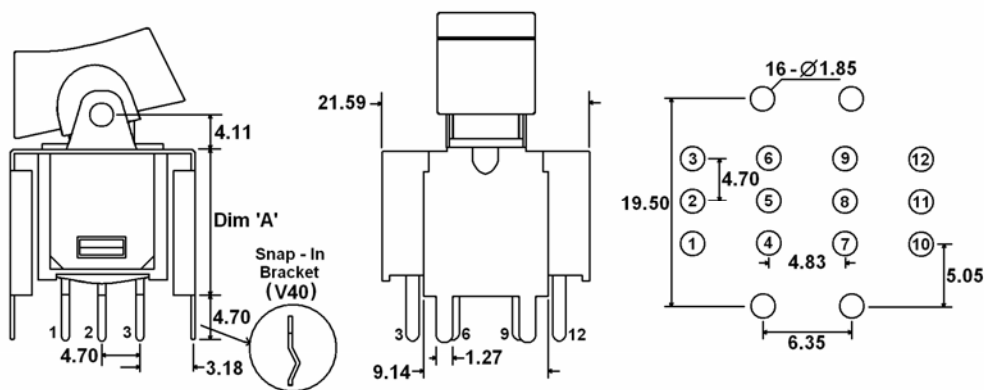
Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

**S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)**



Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

**S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)**



Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

**S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Four Pole)**

**CONTACT OPTIONS**

Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	5A @ 120VAC, 28VDC; 2A @ 250VAC
R	Gold over Nickel Plating	Gold over Nickel Plating	.4 VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plating	.4 VA max @ 20VAC or VDC max or 5A @ 120VAC, 28VDC; 2A @ 250VAC

**THREE WAY WIRING DIAGRAM**

