

### SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material See Page 68.

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

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

**INSULATION RESISTANCE:** 1,000 MΩ min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min.@sea level.

**OPERATING TEMPERATURE:** -30°C to 85°C.

### MATERIALS

**CASE:** Diallyl phthalate (DAP) (UL94v-0).

**ACTUATOR:** Nylon,black std.

**BUSHING:** Brass or Zinc,nickel plated.

**HOUSING:** Stainless Steel.

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

**TERMINAL/CONTACT:** Brass,with silver or gold .(See Page 68)

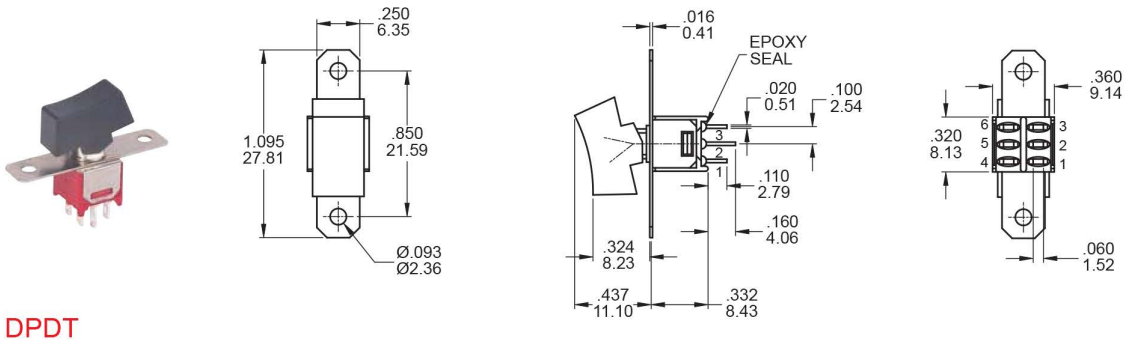
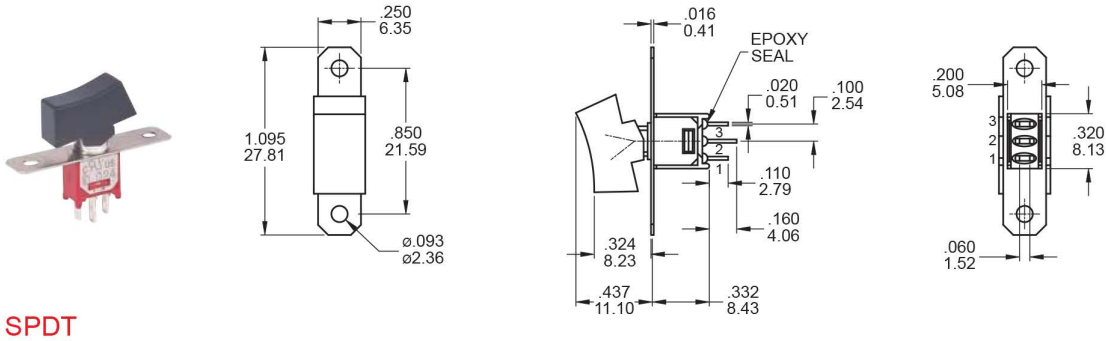


## SWITCH FUNCTION

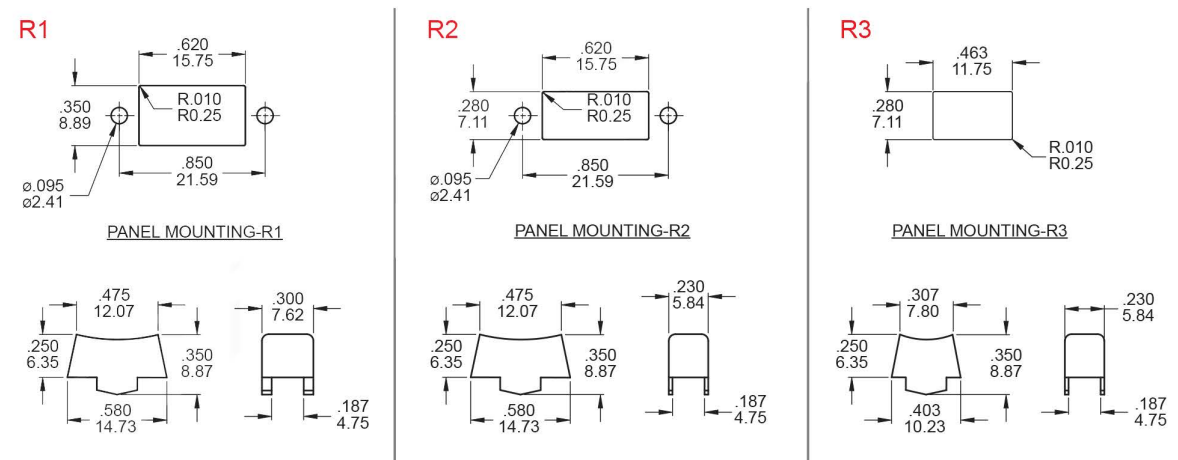
NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC			
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3	
SP	Q2411	4MS1	ON	NONE	ON	2-3	N/A	2-1	
	Q2412	4MS2	ON	NONE	MOM				
	Q2413	4MS3	ON	OFF	ON	OPEN			
	Q2414	4MS4	MOM	OFF	MOM				
	Q2415	4MS5	ON	OFF	MOM	OPEN		N/A	
	Q2416	4MS6	OFF	NONE	ON		OPEN		N/A
DP	Q2421	4MD1	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	Q2422	4MD2	ON	NONE	MOM				
	Q2423	4MD3	ON	OFF	ON	OPEN	OPEN		

MOM=MOMENTARY

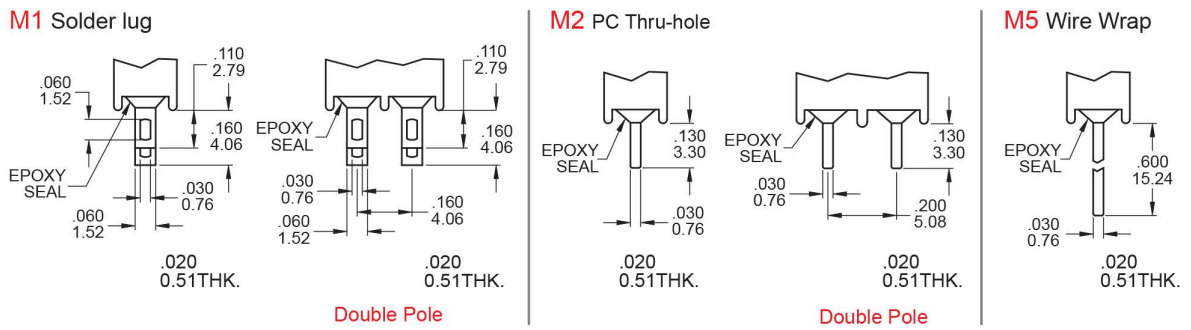
## POLE OPTIONS



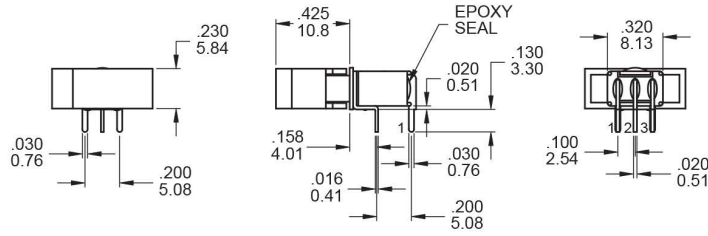
## ACTUATOR OPTIONS - PANEL MOUNT



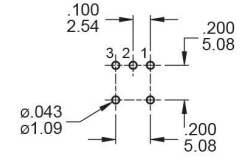
## TERMINATION OPTIONS



## M6

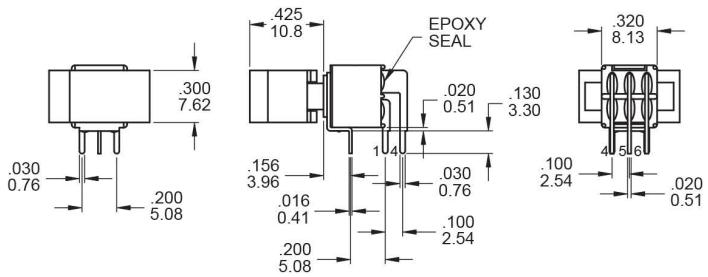


### P.C. MOUNTING

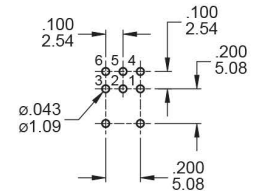


## SPDT

## M6

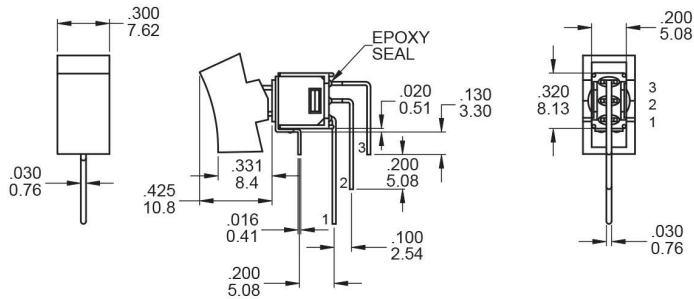


### P.C. MOUNTING

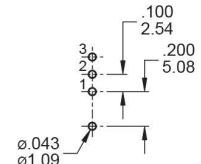


## DPDT

## M7

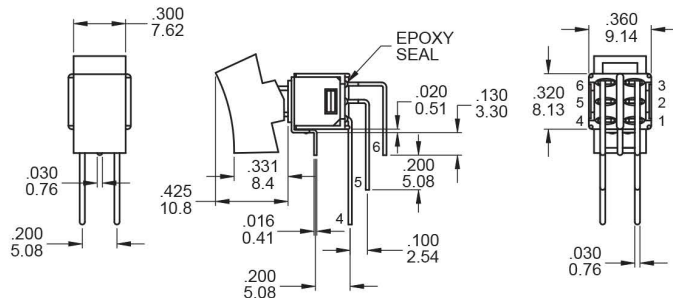


### P.C. MOUNTING

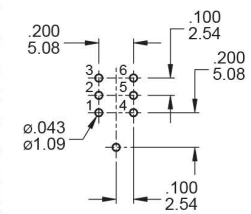


## SPDT

## M7

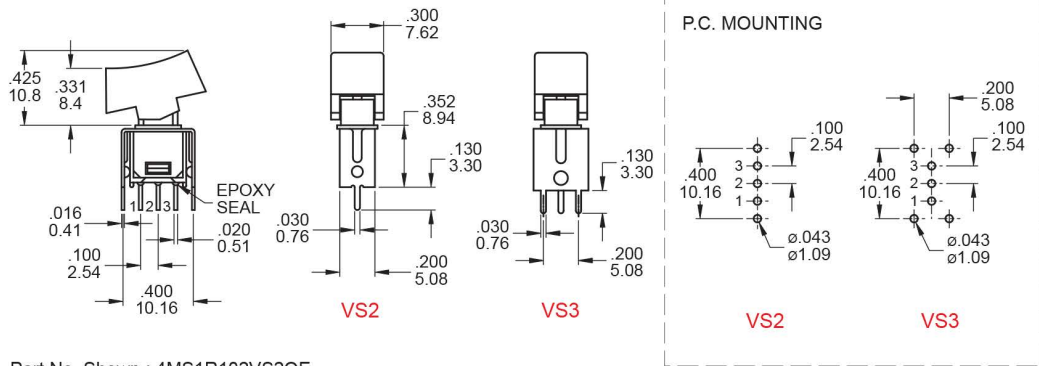


### P.C. MOUNTING



## DPDT

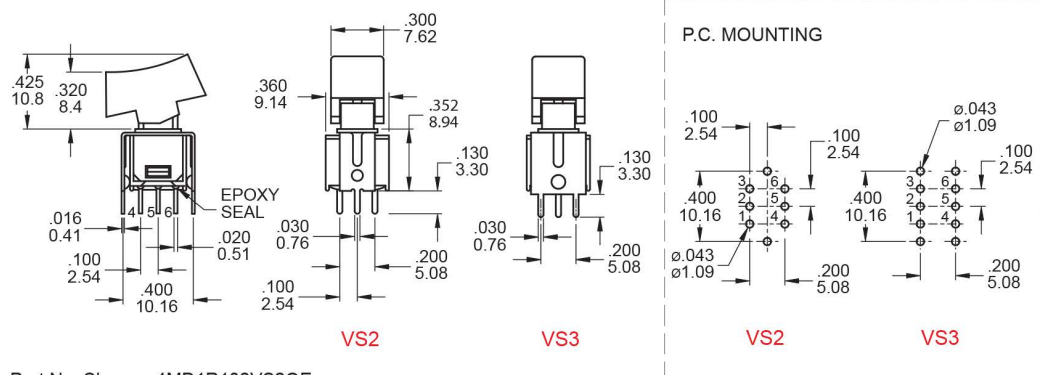
## VS2 - VS3



SPDT

Part No. Shown : 4MS1R102VS2QE

## VS2 - VS3



DPDT

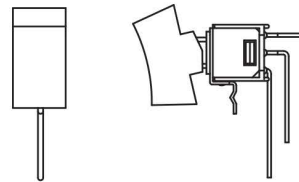
Part No. Shown : 4MD1R102VS2QE

## SNAP-IN TERMINATION OPTIONS

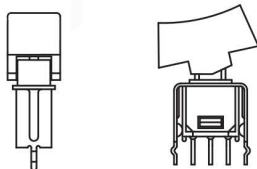
### M6N



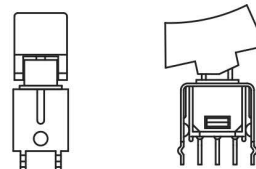
### M7N



### V2N



### V3N



## CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
<b>Q</b>	Silver	<b>Q</b> = Silver	3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC
<b>S</b>		<b>S</b> = Silver,pure - tin	
<b>C</b>	Gold over Silver	<b>C</b> = Gold over silver	
<b>K</b>		<b>K</b> = Gold over silver,pure - tin	
<b>R</b>	Gold	<b>R</b> = Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )
<b>G</b>		<b>G</b> = Gold,pure - tin	

## SOLDERING PROCESSES

**MANUAL SOLDERING:** Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

**WAVE SOLDERING:** Recommended Soldering Temperature: 260 ± 5°C

Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)