



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See Page 85.

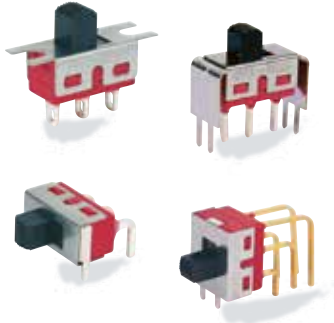
MECHANICAL LIFE: 30,000 make-and-break cycles.

CONTACT RESISTANCE: 10 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: -40°C to 85°C.



MATERIALS

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

HOUSING: Stainless Steel.

ACTUATOR: Nylon,black std.

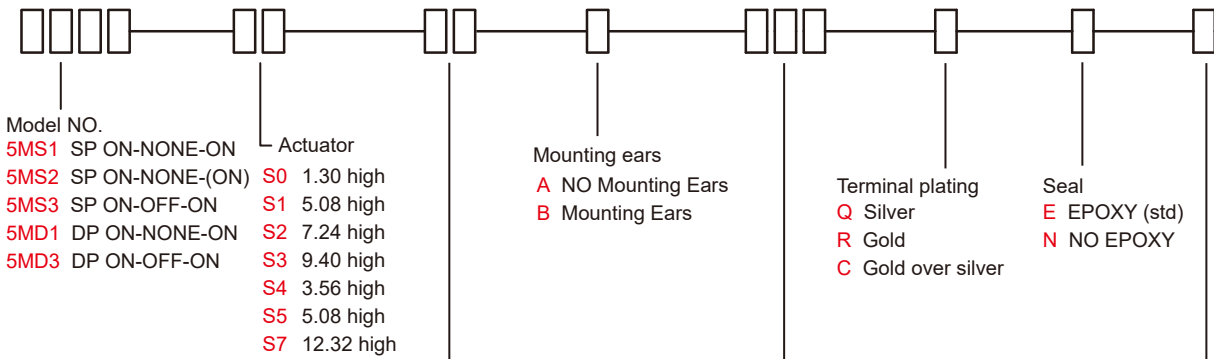
CONTACT/TERMINALS: Copper alloy, with silver or gold plated.

TERMINAL SEAL: Epoxy.



HOW TO ORDER

MODEL NO.    ACTUATOR    ACTUATOR COLOR    MOUNTING EARS    TERMINATIONS    TERMINAL PLATING    SEAL    RoHS SOLDERING



Model NO.  
5MS1 SP ON-NONE-ON  
5MS2 SP ON-NONE-(ON)  
5MS3 SP ON-OFF-ON  
5MD1 DP ON-NONE-ON  
5MD3 DP ON-OFF-ON

Actuator  
S0 1.30 high  
S1 5.08 high  
S2 7.24 high  
S3 9.40 high  
S4 3.56 high  
S5 5.08 high  
S7 12.32 high

Mounting ears  
A NO Mounting Ears  
B Mounting Ears

Terminal plating  
Q Silver  
R Gold  
C Gold over silver

Seal  
E EPOXY (std)  
N NO EPOXY

Actuator color	
ITEM NO	COLOR
01	White
02	Black (Std)
03	Red
04	Orange
05	Yellow
06	Green
07	Blue
08	Brown
09	Gray

Terminations  
M1 Solder Lug  
M2 PC thru-hole  
M3 Quick Connect  
M51 18.70 high, wire wrap  
M52 24.20 high, wire wrap  
M53 10.55 high, wire wrap  
M54 26.97 high, wire wrap  
M6 Right angle, PC thru-hole  
M7 Vertical right angle, PC thru-hole  
VS2 V-bracket , Not applicable for the actuator of S5

RoHS soldering  
S RoHS & Lead Free

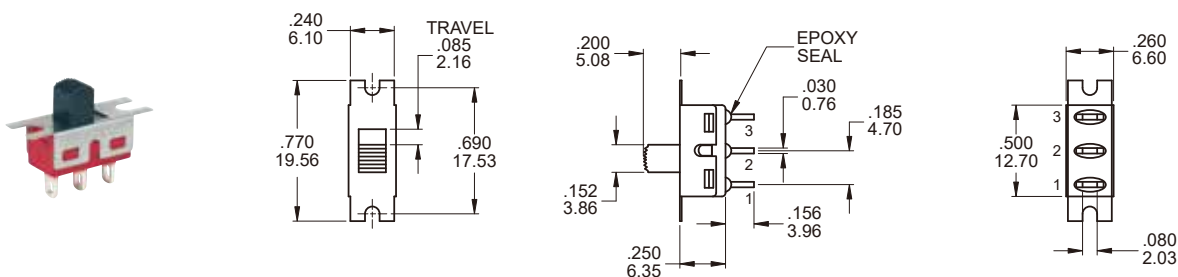
\* Besides standard color, other colors need to check stocks available.

### 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	Q1511	5MS1	ON	NONE	ON	2-1	N/A	2-3
	Q1512	5MS2	ON	NONE	(ON)		OPEN	
	Q1513	5MS3	ON	OFF	ON			
DP	Q1521	5MD1	ON	NONE	ON	2-1,5-4	N/A	2-3,5-6
	Q1523	5MD3	ON	OFF	ON		OPEN	

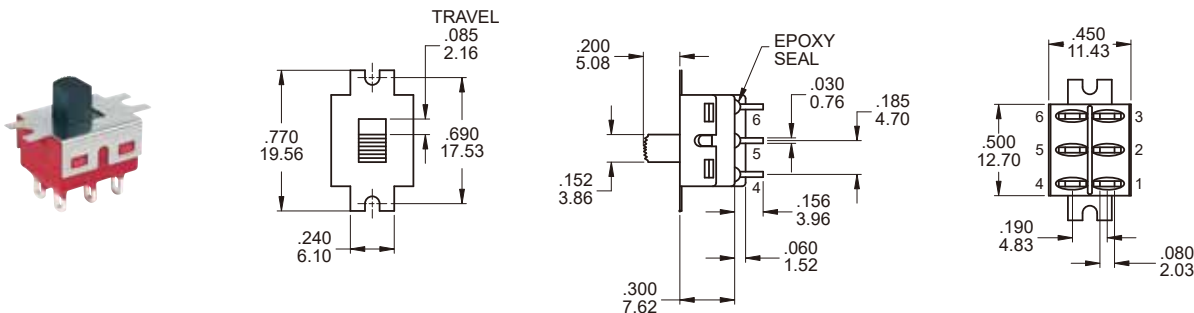
( ) =MOMENTARY

### POLE OPTIONS



#### SPDT

Part No. Shown : 5MS1S102BM1QES

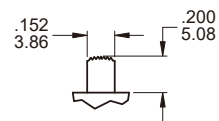


#### DPDT

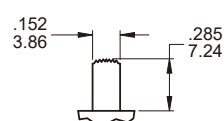
Part No. Shown : 5MD1S102BM1QES

### ACTUATOR OPTIONS

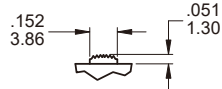
#### S1 STD



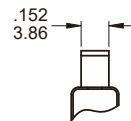
#### S2



#### S0 Only for S1,S2,D1,D3 model type

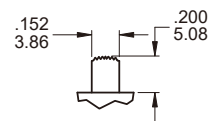


#### FRONT

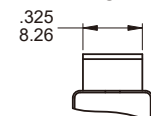


For S0,S1,S2,S3,S4 actuator

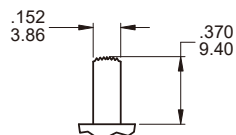
#### ▲ S5 Only DPDT



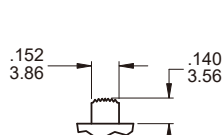
#### FRONT



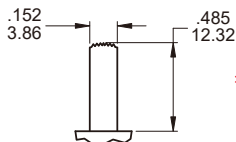
#### S3



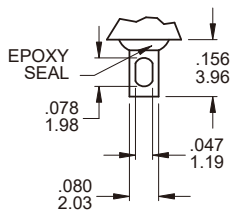
#### S4



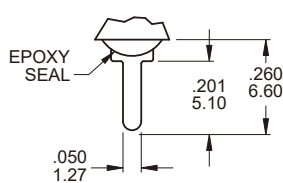
#### S7



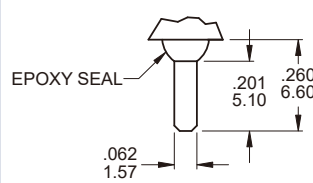
\* Subtract .014(0.36) from Actuator height for M6, M7 P.C. mounting option.

**TERMINATION OPTIONS**
**M1 Solder lug**


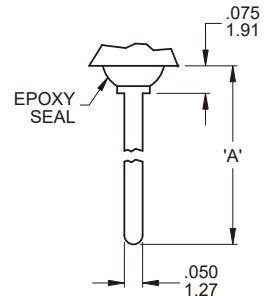
.030(0.76) THK.

**M2 PC Thru-hole**


.030(0.76) THK.

**M3 Quick connect**


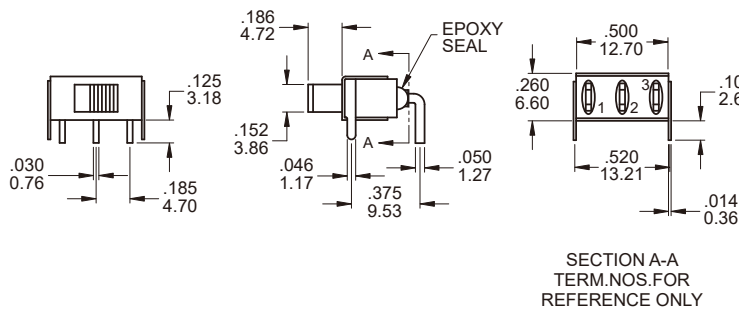
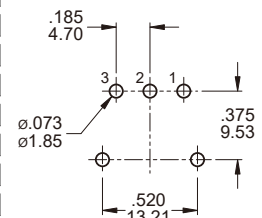
THK .030(0.76)

**M5 Wire Wrap**


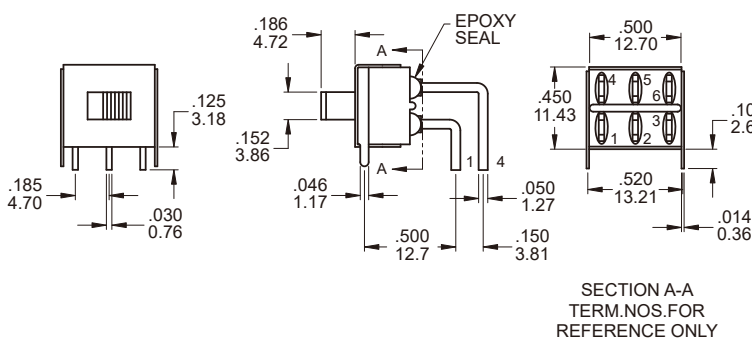
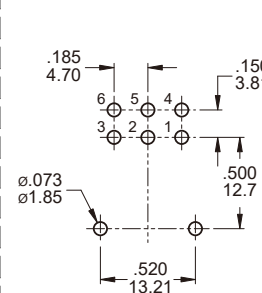
THK .030(0.76)

**OTHER TERMINATION OPTIONS**
**M6 Right angle P.C. Mount**
**M7 Right angle P.C. Mount**
**VS2 Vertical bracket P.C. Mount**

OPTION CODE	DIM. 'A'
M51	.736 (18.70)
M52	.953 (24.20)
M53	.415 (10.55)
M54	1.062 (26.97)

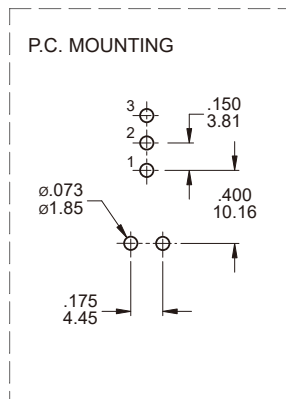
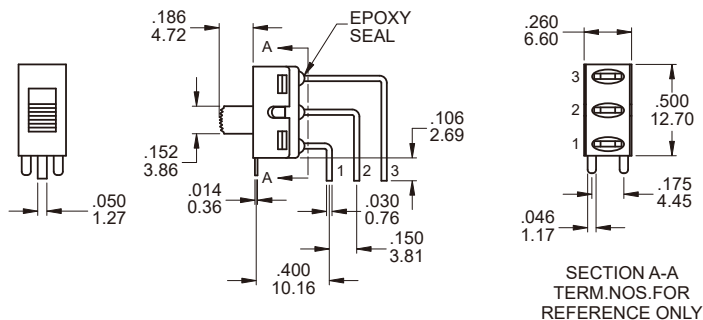
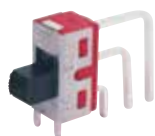
**M6**

**P.C. MOUNTING**

**SPDT**

Part No. Shown : 5MS1S102AM6QES

**M6**

**P.C. MOUNTING**

**DPDT**

Part No. Shown : 5MD1S102AM6QES

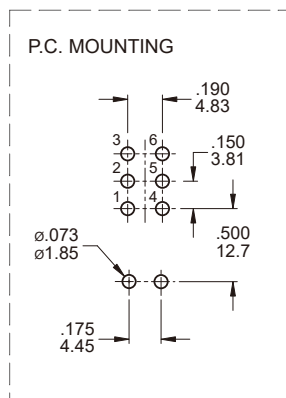
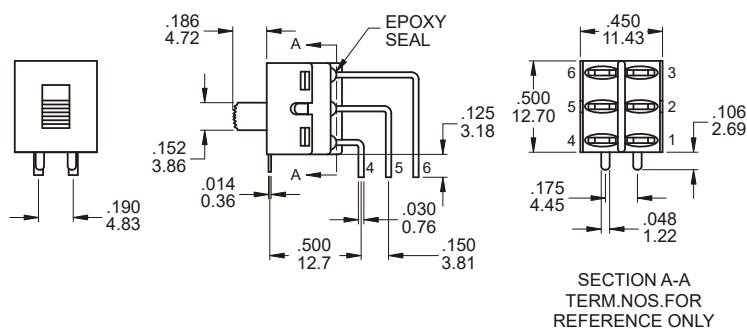
**M7**



**SPDT**

Part No. Shown : 5MS1S102AM7QES

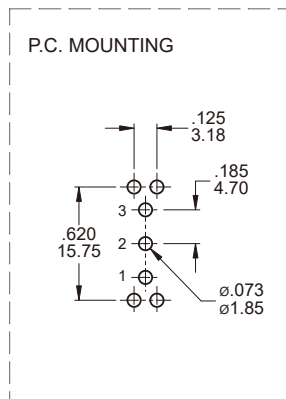
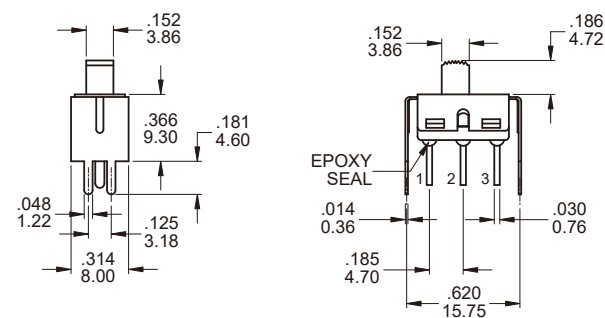
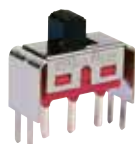
**M7**



**DPDT**

Part No. Shown : 5MD1S102AM7RES

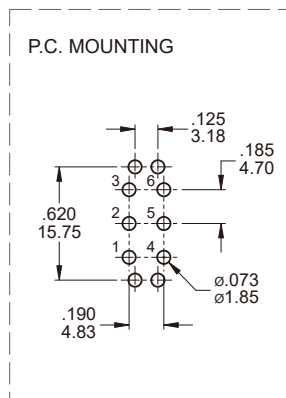
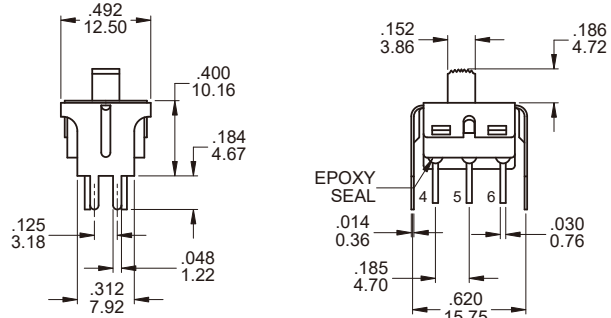
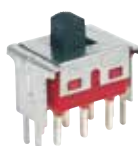
**VS2**



**SPDT**

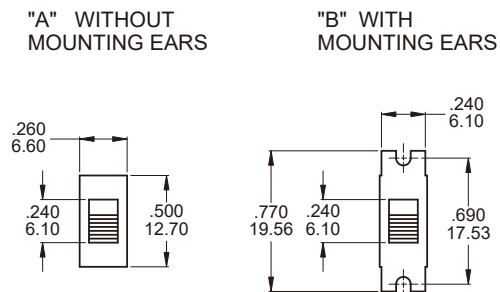
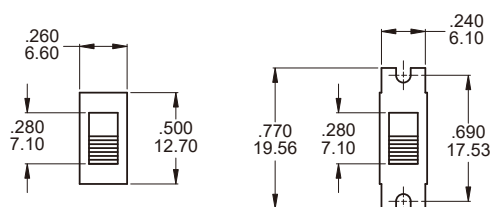
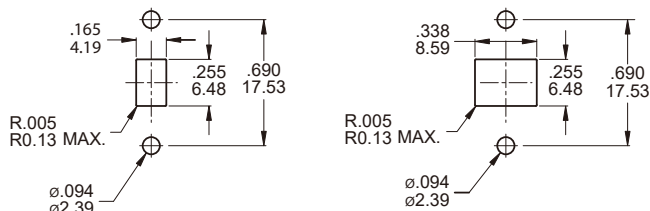
Part No. Shown : 5MS1S102AVS2QES

**VS2**



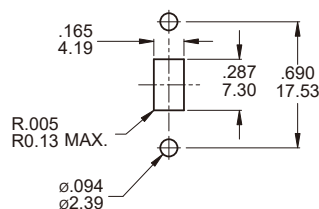
**DPDT**

Part No. Shown : 5MD1S102AVS2QES

**MOUNTING EARS / PANEL MOUNT**
**MOUNTING EARS**

**THREE POSITIONS ONLY**

**PANEL MOUNTING**


For S0,S1,S2,S3,S4 actuator

For S5 actuator only

**THREE POSITIONS ONLY**


For S0,S1,S2,S3,S4 actuator

**CONTACT MATERIAL OPTIONS**

	CONTACT PLATING	TERMINAL PLATING	RATINGS
<b>Q</b>	Silver	Silver	5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC
<b>C</b>	Gold over Silver	Gold over silver	
<b>R</b>	Gold	Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )

**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 : 270 ± 5°C

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