

SPECIFICATIONS

- CONTACT RATING:** Dependent upon contact material.
- MECHANICAL LIFE:** 30,000 make-and-break cycles.
- CONTACT RESISTANCE:** 20mΩ max. initial @ 2-4VDC
100mA for both silver and gold plated contacts.
- INSULATION RESISTANCE:** 1,000MΩ min.
- DIELECTRIC STRENGTH:** 1,000 V RMS@sea level.
- OPERATING TEMPERATURE:** -30°C to 85°C.

MATERIALS

- CASE:** Diallyl phthalate (DAP) (UL94v-0).
- ACTUATOR:** Nylon, black std.
- BUSHING:** Brass, nickel plated.
- HOUSING:** Stainless Steel.
- SWITCH SUPPORT:** Brass, tin plated.
- TERMINAL/CONTACT:** Silver or gold .(See Page 73)

HOW TO ORDER

MODEL NO.	ACTUATOR	ACTUATOR COLOR See below	CAP MARKING	TERMINATIONS	CONTACT MATERIAL	SEAL	ROHS SOLDERING																																																				
<table border="1"> <tr><th>MODEL NO.</th></tr> <tr><td>4MS1</td></tr> <tr><td>4MS2</td></tr> <tr><td>4MS3</td></tr> <tr><td>4MS4</td></tr> <tr><td>4MS5</td></tr> <tr><td>4MS6</td></tr> <tr><td>4MD1</td></tr> <tr><td>4MD2</td></tr> <tr><td>4MD3</td></tr> <tr><td>4MD6</td></tr> </table>	MODEL NO.	4MS1	4MS2	4MS3	4MS4	4MS5	4MS6	4MD1	4MD2	4MD3	4MD6	<table border="1"> <tr><th>ACTUATOR</th></tr> <tr><td>R1</td></tr> <tr><td>R2</td></tr> <tr><td>R3</td></tr> </table>	ACTUATOR	R1	R2	R3	<table border="1"> <tr><th>ACTUATOR COLOR</th></tr> <tr><td>See below</td></tr> </table>	ACTUATOR COLOR	See below	<table border="1"> <tr><th>CAP MARKING</th></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>5</td></tr> <tr><td>6</td></tr> <tr><td>7</td></tr> <tr><td>8</td></tr> <tr><td>9</td></tr> <tr><td>F</td></tr> </table>	CAP MARKING	1	2	5	6	7	8	9	F	<table border="1"> <tr><th>TERMINATIONS</th></tr> <tr><td>M1</td></tr> <tr><td>M2</td></tr> <tr><td>M5</td></tr> <tr><td>M6</td></tr> <tr><td>M6N</td></tr> <tr><td>M7</td></tr> <tr><td>M7N</td></tr> <tr><td>VS2</td></tr> <tr><td>V2N</td></tr> <tr><td>VS3</td></tr> <tr><td>V3N</td></tr> </table>	TERMINATIONS	M1	M2	M5	M6	M6N	M7	M7N	VS2	V2N	VS3	V3N	<table border="1"> <tr><th>CONTACT MATERIAL</th></tr> <tr><td>Q</td></tr> <tr><td>R</td></tr> <tr><td>G</td></tr> <tr><td>S</td></tr> <tr><td>C</td></tr> <tr><td>K</td></tr> </table>	CONTACT MATERIAL	Q	R	G	S	C	K	<table border="1"> <tr><th>SEAL</th></tr> <tr><td>E</td></tr> <tr><td>N</td></tr> </table>	SEAL	E	N	<table border="1"> <tr><th>ROHS SOLDERING</th></tr> <tr><td>□</td></tr> <tr><td>S</td></tr> <tr><td>F</td></tr> </table>	ROHS SOLDERING	□	S	F
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ITEM NO	COLOR
1	White
2	Black (Std)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray

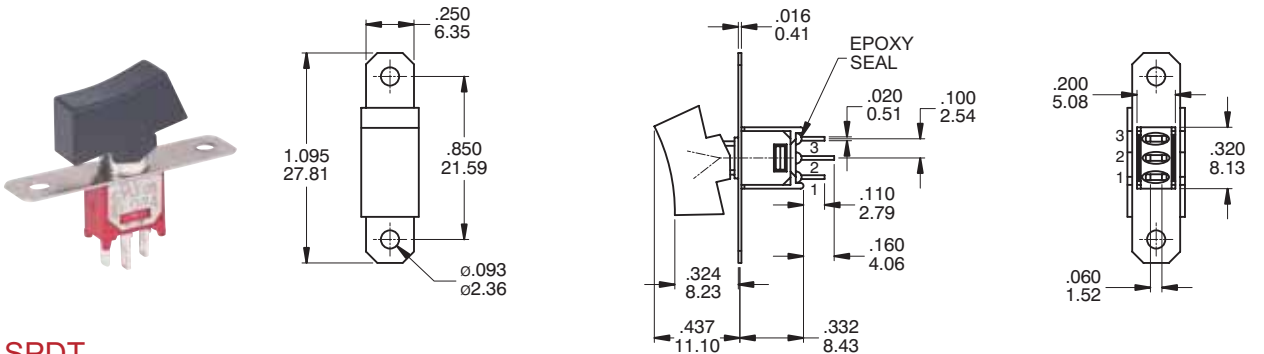
SWITCH FUNCTION

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	3-1
	Q2416	4MS6	OFF	NONE	ON			
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	
	▲ Q2426	4MD6	ON	ON	ON			

MOM=MOMENTARY

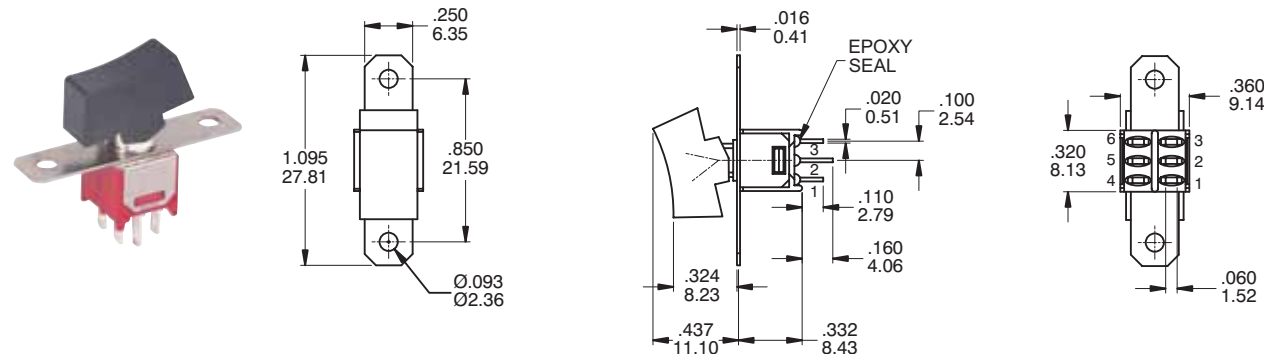
▲ Please check the availability in advance before order

POLE OPTIONS



SPDT

Part No. Shown : 4MS1R12M1QE

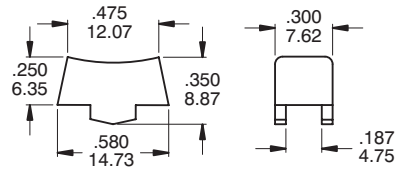
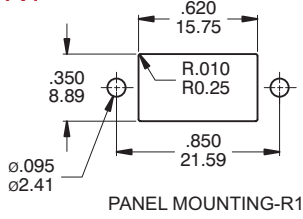


DPDT

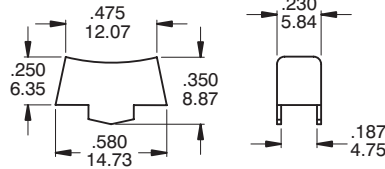
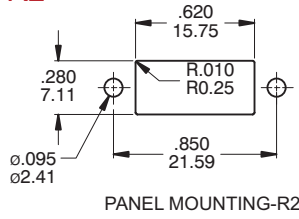
Part No. Shown : 4MD1R12M1QE

ACTUATOR OPTIONS - PANEL MOUNT

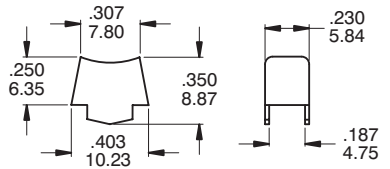
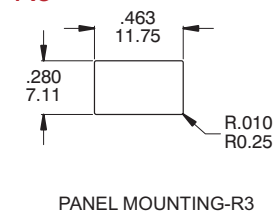
R1



R2

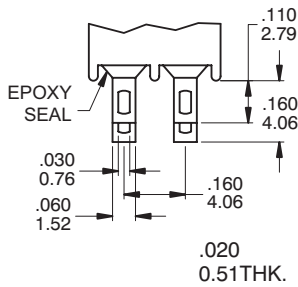
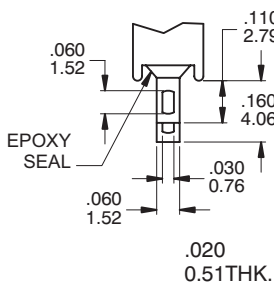


R3

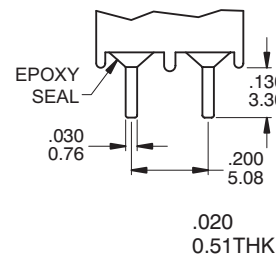
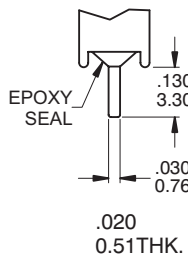


TERMINATION OPTIONS

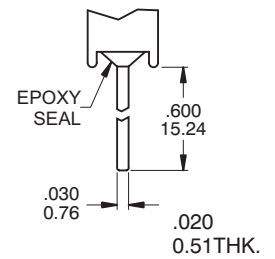
M1 SOLDER LUG



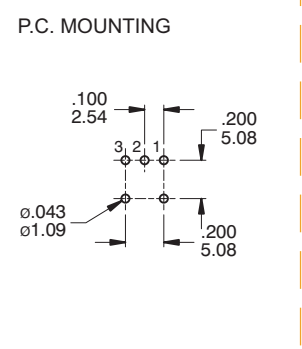
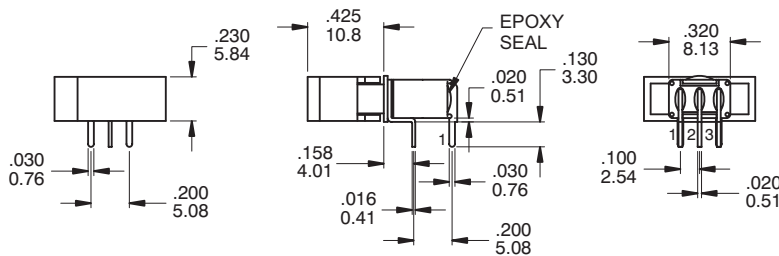
M2 P.C. MOUNT



M5 P.C. MOUNT



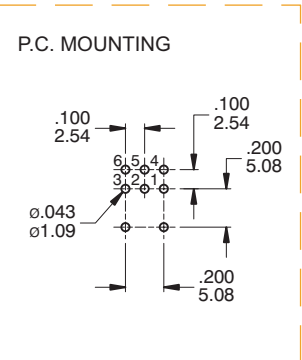
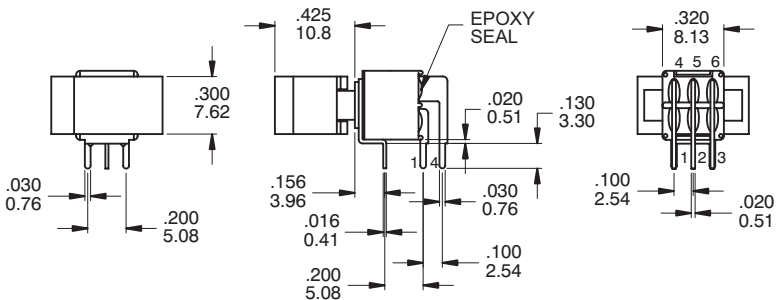
M6



SPDT

Part No. Shown : 4MS1R22M6QE

M6



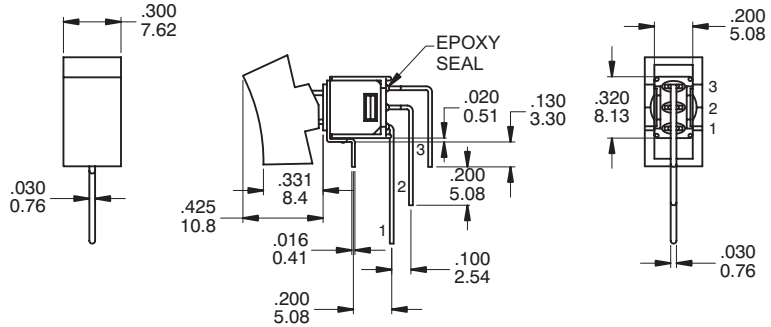
DPDT

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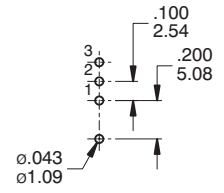
Sub-Miniature Rocker Switches **4M SERIES**

Rocker Switches

M7



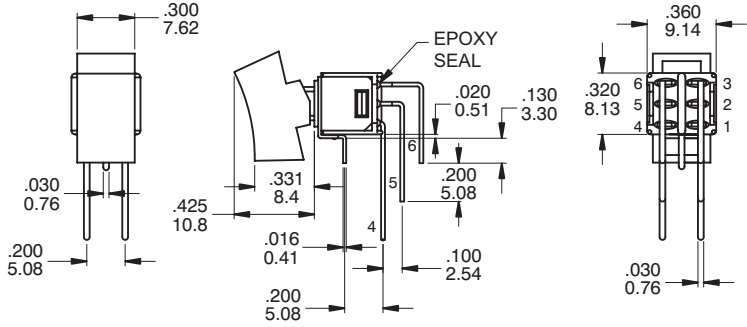
P.C. MOUNTING



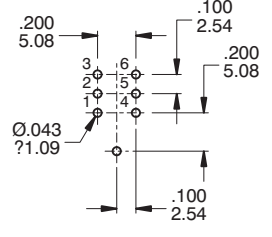
SPDT

Part No. Shown : 4MS1R12M7QE

M7



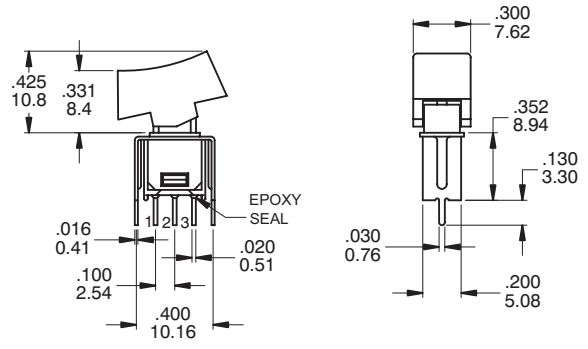
P.C. MOUNTING



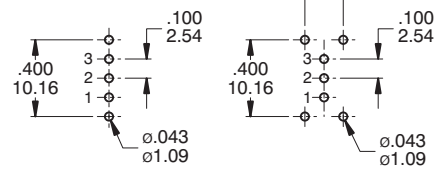
DPDT

Part No. Shown : 4MD1R12M7QE

VS2 - VS3



P.C. MOUNTING



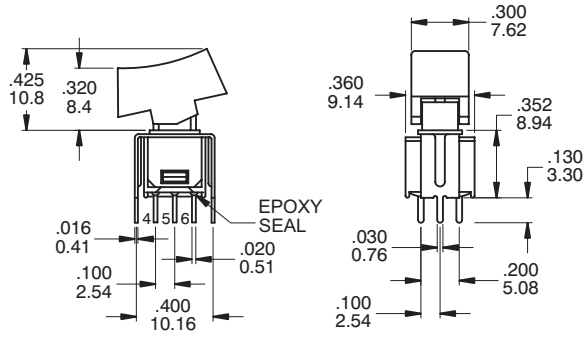
VS2

VS3

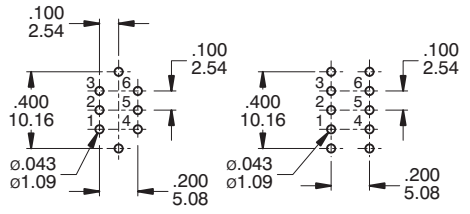
SPDT

Part No. Shown : 4MS1R12VS2QE

VS2 - VS3



P.C. MOUNTING



VS2

VS3

DPDT

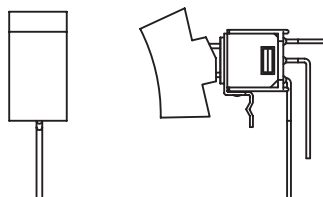
Part No. Shown : 4MD1R12VS2QE

SNAP-IM TERMINATION OPTIONS

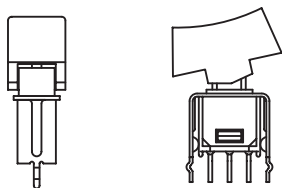
M6N



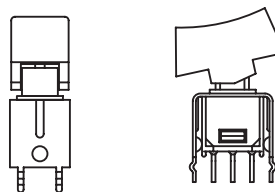
M7N



V2N



V3N



Rocker Switches

CONTACT MATERIAL OPTIONS

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



SOLDERING PROCESSES

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

WAVE SOLDERING : Recommended Soldering Temperature : 260 ± 5°C
Duration of Solder Immersion : 5 ± 1 seconds
(PCB is 1.6mm in thickness)

SOLDERING : Vapor phase

