

SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See Page 73.

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: 1,000 MΩ min.

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

OPERATING TEMPERATURE: -30°C to 85°C.

MATERIALS

CASE & BUSHING : Glass filled nylon 6/6, flame retardant, heat stabilized (UL94V-0).

ACTUATOR: Nylon, black std. Internal O-ring seal standard with all actuators.

SWITCH SUPPORT: Brass or steel, tin plated.

TERMINAL/CONTACT: Silver or gold plated copper alloy.
(See Page 73)

IP 67
ACCORDING TO
EN 60529:1991+A1:2001
IEC 60529:2001

CUL
E 187490

RoHS
compliant

Pb
lead-free

HOW TO ORDER

MODEL NO. ACTUATOR ACTUATOR COLOR CAP MARKING TERMINATIONS TERMINAL MATERIAL SEAL RoHS SOLDERING

<p>Model NO.</p> <p>4AS1 SP On-None-On</p> <p>4AS2 SP On-None-Mom.</p> <p>4AS3 SP On-Off-On</p> <p>4AS4 SP Mom.-Off-Mom.</p> <p>4AS5 SP On-Off-Mom.</p> <p>4AS6 SP Off-None-On</p> <p>4AD1 DP On-None-On</p> <p>4AD2 DP On-None-Mom.</p> <p>4AD3 DP On-Off -On</p> <p>4AD6 DP On-On-On</p>	<p>Actuator</p> <p>R1 (STD) Rocker, 7.62 wide</p> <p>R2 (STD) Rocker, 5.84 wide</p> <p>R4 Rocker 5.80 wide</p>	<p>Cap marking</p> <table border="1"> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>5</td><td></td></tr> <tr><td>6</td><td></td></tr> <tr><td>7</td><td></td></tr> <tr><td>8</td><td></td></tr> <tr><td>9</td><td></td></tr> <tr><td>J</td><td></td></tr> </table>	1		2		5		6		7		8		9		J		<p>Terminal material</p> <p>Q Gold flash over silver</p> <p>R Gold</p> <p>G Gold, pure-tin</p> <p>S Gold flash over silver, pure-tin</p> <p>C Gold over silver</p> <p>K Gold over silver, pure-tin</p>	<p>Seal</p> <p>E EPOXY (std)</p>	<p>RoHS soldering</p> <p>□ Rohs Compliant</p> <p>S Rohs & Lead Free</p> <p>F Halogen Free+RoHS</p>		
1																							
2																							
5																							
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		<p>Actuator color</p> <table border="1"> <thead> <tr> <th>ITEM NO</th> <th>COLOR</th> </tr> </thead> <tbody> <tr><td>1</td><td>White</td></tr> <tr><td>2</td><td>Black (Std)</td></tr> <tr><td>3</td><td>Red</td></tr> <tr><td>4</td><td>Orange</td></tr> <tr><td>5</td><td>Yellow</td></tr> <tr><td>6</td><td>Green</td></tr> <tr><td>7</td><td>Blue</td></tr> <tr><td>8</td><td>Brown</td></tr> <tr><td>9</td><td>Gray</td></tr> </tbody> </table>	ITEM NO	COLOR	1	White	2	Black (Std)	3	Red	4	Orange	5	Yellow	6	Green	7	Blue	8	Brown	9	Gray	<p>Terminations</p> <p>M1 Solder Lug</p> <p>M2 PC thru-hole</p> <p>M5 wire wrap</p> <p>M6 Right angle, PC thru-hole</p> <p>M6N Right angle, snap-in, PC thru-hole</p> <p>M7 Vertical right angle, PC thru-hole</p> <p>M7N Vertical right angle, snap-in, PC thru-hole</p> <p>VS2 8.94 high, V-bracket</p> <p>V2N 8.94 high, snap-in V-bracket</p>
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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	Q24A11	4AS1	ON	NONE	ON	2-3	N/A	2-1
	Q24A12	4AS2	ON	NONE	MOM			
	Q24A13	4AS3	ON	OFF	ON		OPEN	
	Q24A14	4AS4	MOM	OFF	MOM			
	Q24A15	4AS5	ON	OFF	MOM	OPEN	N/A	3-1
	Q24A16	4AS6	OFF	NONE	ON			
DP	Q24A21	4AD1	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4
	Q24A22	4AD2	ON	NONE	MOM			
	Q24A23	4AD3	ON	OFF	ON		OPEN	
	Q24A26	4AD6	ON	ON	ON			

MOM=MOMENTARY

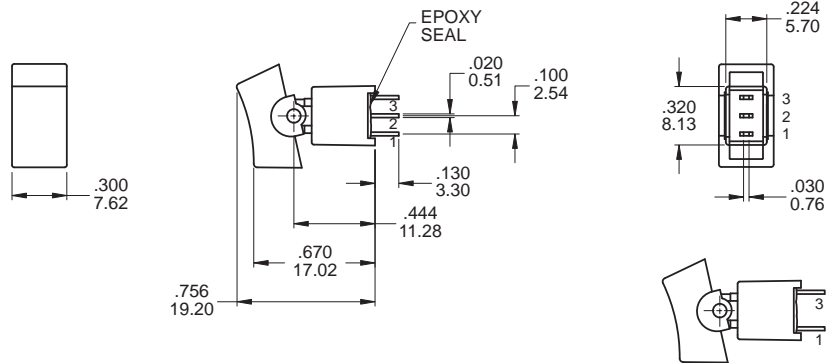
▲ Please check the availability in advance before order

POLE OPTIONS



SPDT

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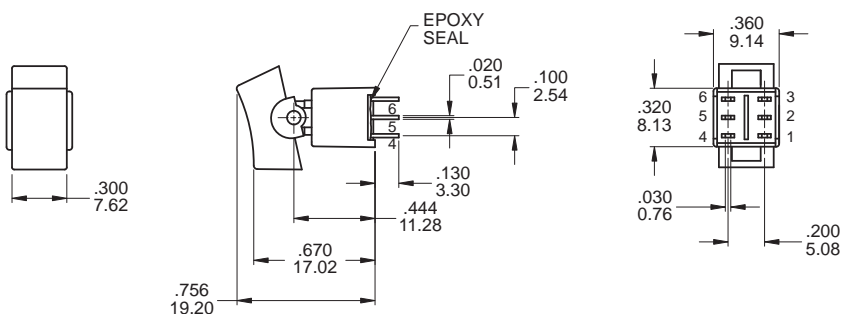


4AS6 Models : Omit 2nd terminal



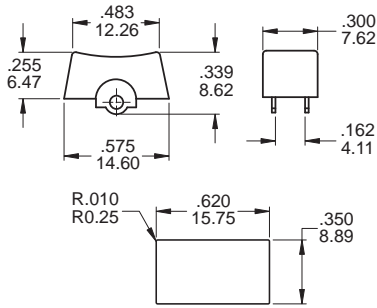
DPDT

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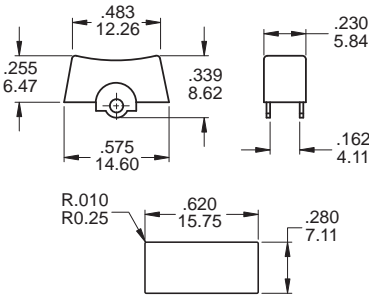
ACTUATOR OPTIONS - PANEL MOUNT

R1



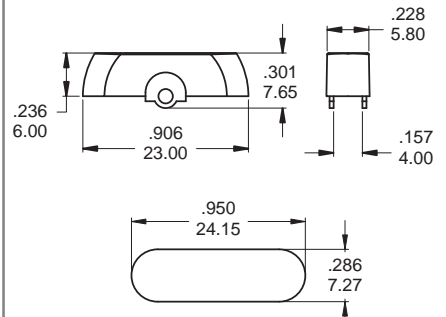
PANEL MOUNTING - R1

R2



PANEL MOUNTING - R2

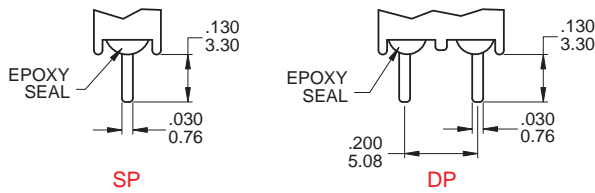
R4



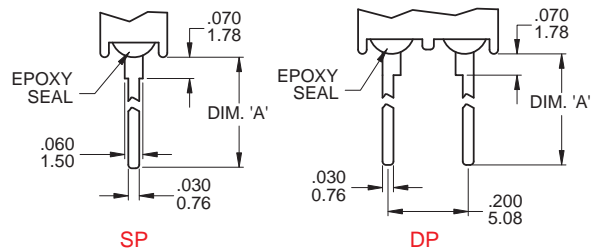
PANEL MOUNTING - R4

TERMINATION OPTIONS

M2 PC Thru-hole



M5 Wire Wrap

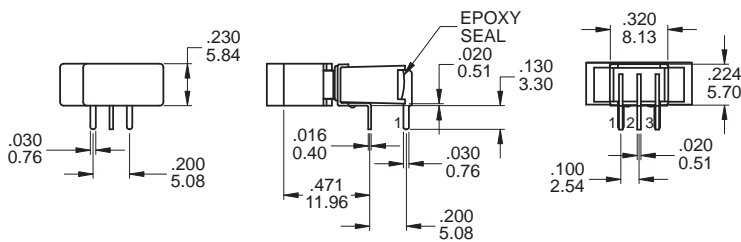
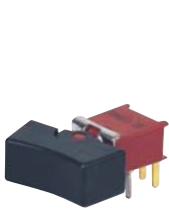


OTHER TERMINATION OPTIONS

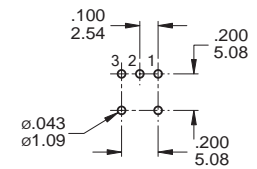
- M6 RIGHT ANGLE P.C. MOUNT
- M7 RIGHT ANGLE P.C. MOUNT
- VS2 VERTICAL BRACKET P.C. MOUNT
- VS3 VERTICAL BRACKET P.C. MOUNT

OPTION CODE	DIM. 'A'
M5-1	.614 (15.60)
M5-2	.236 (6.00)

M6



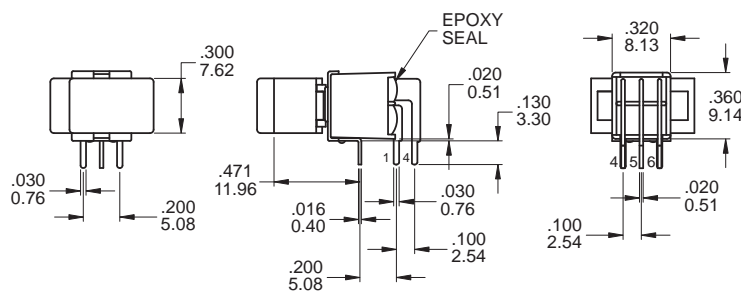
P.C. MOUNTING



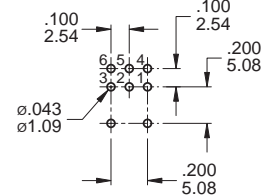
SPDT

Part No. Shown : 4AS1R202M6QE

M6



P.C. MOUNTING



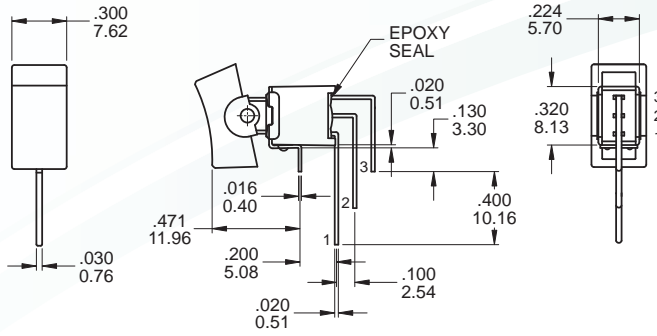
DPDT

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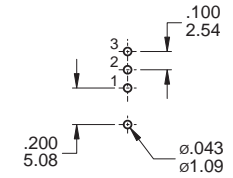




M7



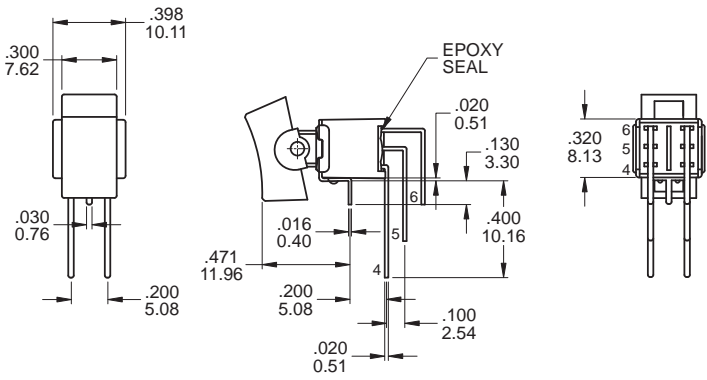
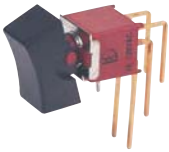
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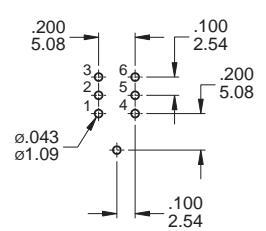
SPDT

Part No. Shown : 4AS1R102M7RE

M7



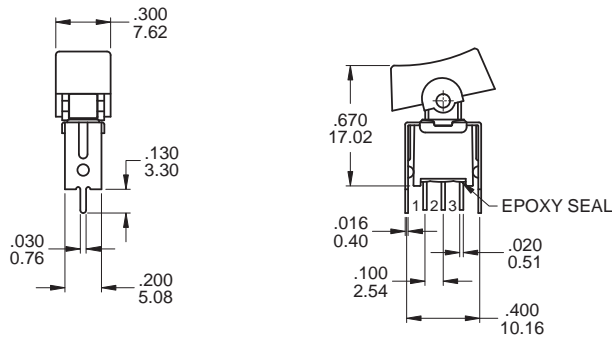
P.C. MOUNTING



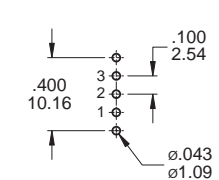
DPDT

Part No. Shown : 4AD1R102M7RE

VS2



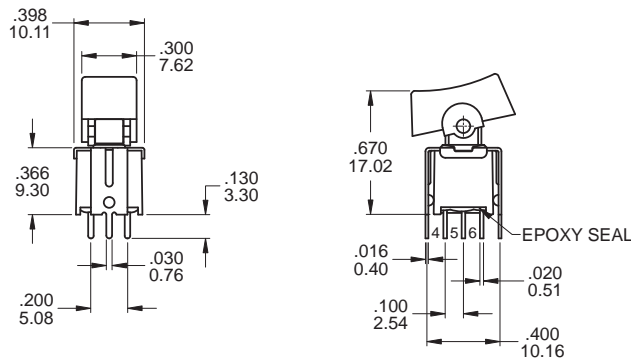
P.C. MOUNTING



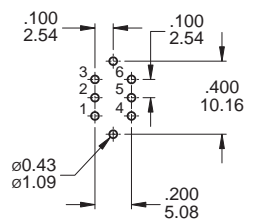
SPDT

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VS2



P.C. MOUNTING

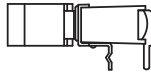
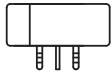


DPDT

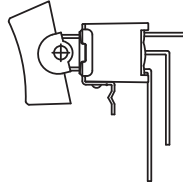
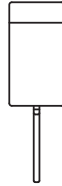
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SNAP-IN TERMINATION OPTIONS

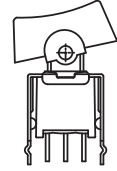
M6N



M7N



V2N



CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Q = Gold flash over silver	3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC
S		S = Gold flash over 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 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)

