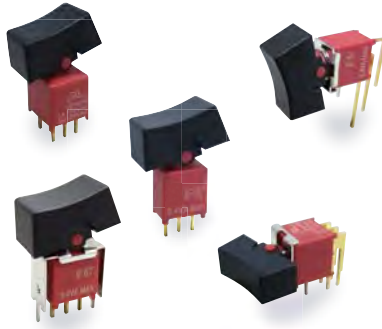


4A Series

Sealed Sub-Miniature Rocker Switches



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

C US
E 187490

RoHS
compliant

Pb
lead-free

SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See Page 74.

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: -40°C to 85°C.

MATERIALS

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

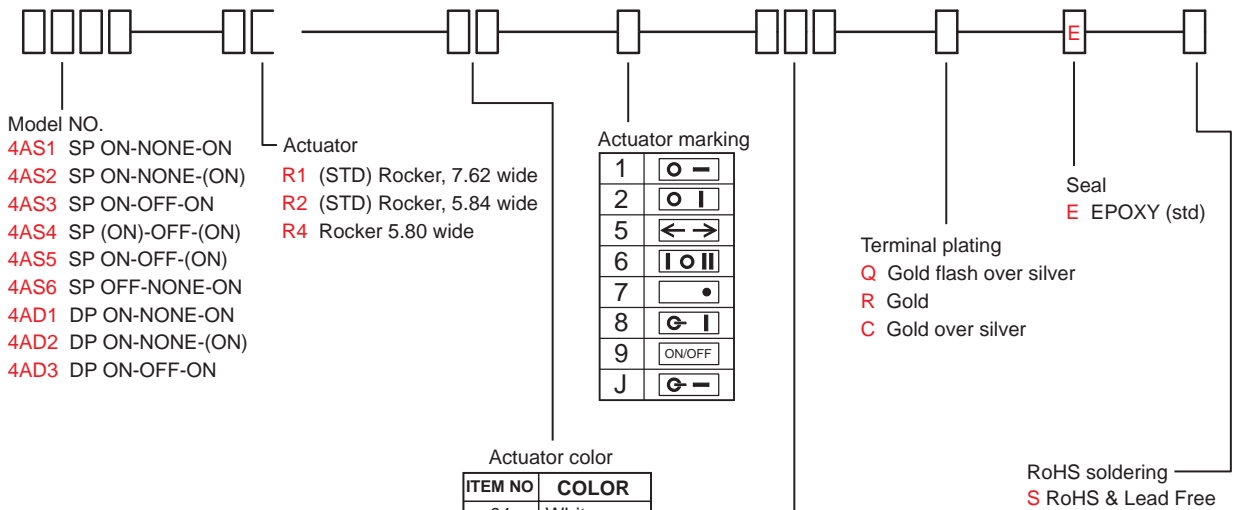
ACTUATOR: Nylon, black std. Internal O-ring seal standard with all actuators.

SWITCH SUPPORT: Brass or steel, tin plated.

TERMINAL/CONTACT: Silver or gold plated copper alloy.
(See Page 74)

HOW TO ORDER

MODEL NO. ACTUATOR ACTUATOR COLOR ACTUATOR MARKING TERMINATIONS TERMINAL PLATING SEAL RoHS SOLDERING



Model NO.
4AS1 SP ON-NONE-ON
4AS2 SP ON-NONE-(ON)
4AS3 SP ON-OFF-ON
4AS4 SP (ON)-OFF-(ON)
4AS5 SP ON-OFF-(ON)
4AS6 SP OFF-NONE-ON
4AD1 DP ON-NONE-ON
4AD2 DP ON-NONE-(ON)
4AD3 DP ON-OFF-ON

Actuator
R1 (STD) Rocker, 7.62 wide
R2 (STD) Rocker, 5.84 wide
R4 Rocker 5.80 wide

Actuator marking

1	
2	
5	
6	
7	
8	
9	
J	

Actuator color

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

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

Terminal plating
Q Gold flash over silver
R Gold
C Gold over silver

Seal
E EPOXY (std)

RoHS soldering
S RoHS & Lead Free

Terminations

M1 Solder Lug
M2 PC thru-hole
M5 Wire wrap
M6 Right angle, PC thru-hole
M6N Right angle, snap-in, PC thru-hole
M7 Vertical right angle, PC thru-hole
M7N Vertical right angle, snap-in, PC thru-hole
VS2 8.94 high, V-bracket
V2N 8.94 high, snap-in V-bracket

* 4AS6 model type not applicable to M6/M6N/M7/M7N terminations

SWITCH FUNCTION

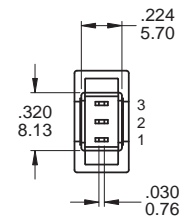
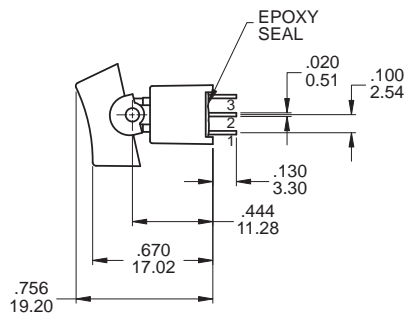
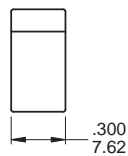
NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
SP	Q24A11	4AS1	ON	NONE	ON	2-3	N/A	2-1
	Q24A12	4AS2	ON	NONE	(ON)			
	Q24A13	4AS3	ON	OFF	ON		OPEN	
	Q24A14	4AS4	(ON)	OFF	(ON)			
	Q24A15	4AS5	ON	OFF	(ON)			
	Q24A16	4AS6	OFF	NONE	ON	OPEN	N/A	3-1
DP	Q24A21	4AD1	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4
	Q24A22	4AD2	ON	NONE	(ON)			
	Q24A23	4AD3	ON	OFF	ON		OPEN	

()=MOMENTARY



4A
Rocker Switches

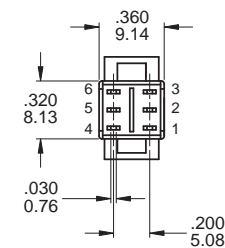
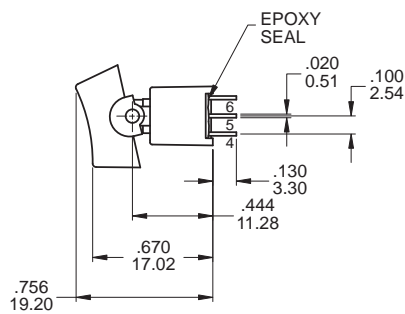
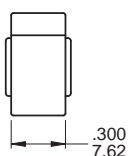
POLE OPTIONS



SPDT

Part No. Shown : 4AS1R102M2RES

4AS6 Models : Omit 2nd terminal



DPDT

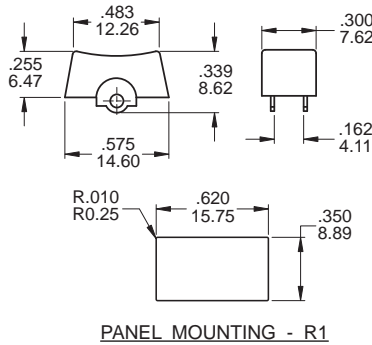
Part No. Shown : 4AD1R102M2QES

4A Series

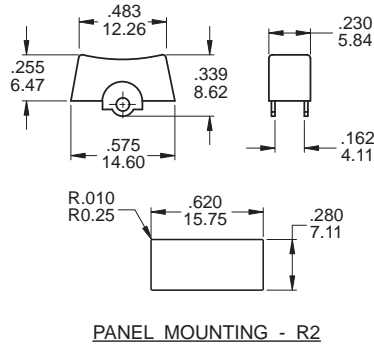
Sealed Sub-Miniature Rocker Switches

ACTUATOR OPTIONS - PANEL MOUNT

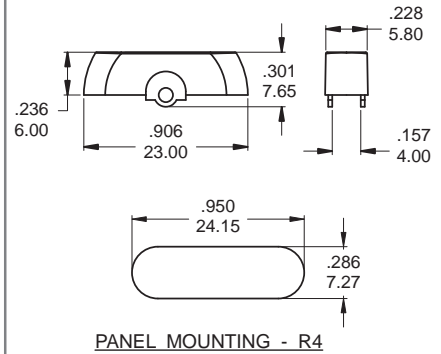
R1



R2

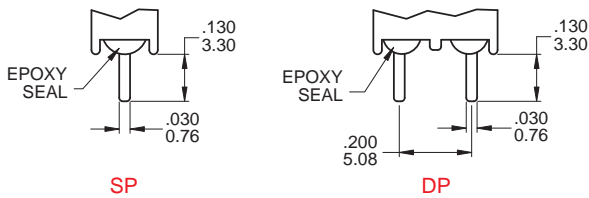


R4

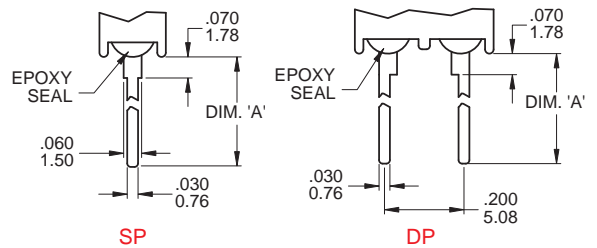


TERMINATION OPTIONS

M2 PC Thru-hole



M5 Wire Wrap

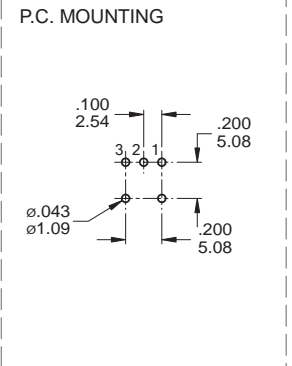
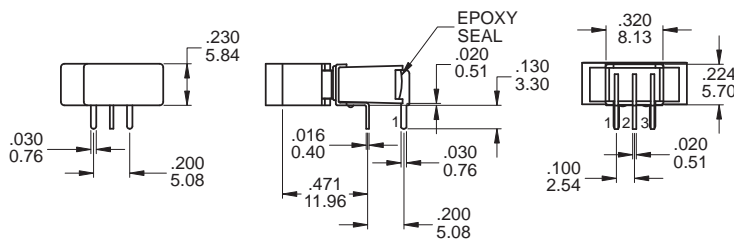


OTHER TERMINATION OPTIONS

- M6** Right angle P.C. Mount
- M6N** Right angle P.C. Mount with snap-in bracket
- M7** Right angle P.C. Mount
- M7N** Right angle P.C. Mount with snap-in bracket
- VS2** Vertical bracket P.C. Mount
- V2N** Vertical bracket P.C. Mount with snap-in bracket

OPTION CODE	DIM. 'A'
M51	.614 (15.60)
M52	.236 (6.00)

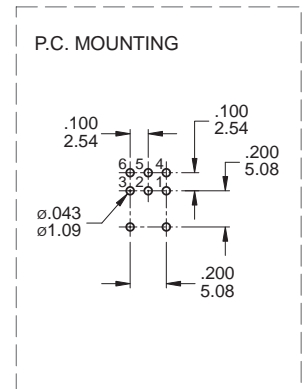
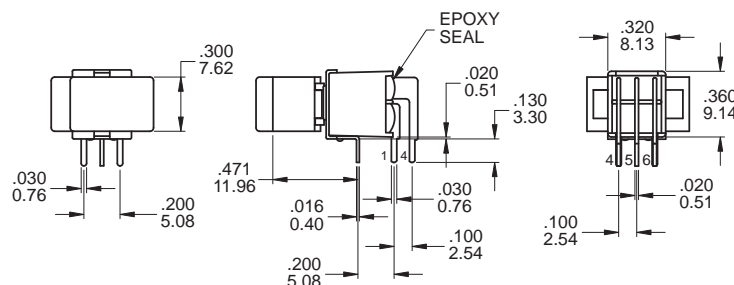
M6



SPDT

Part No. Shown : 4AS1R202M6QES

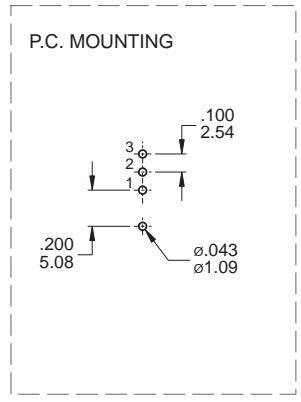
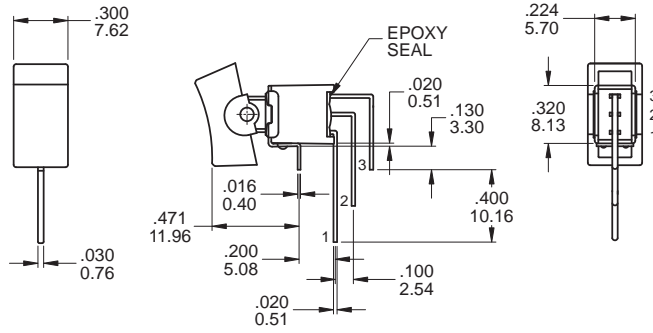
M6



DPDT

Part No. Shown : 4AD1R102M6QES

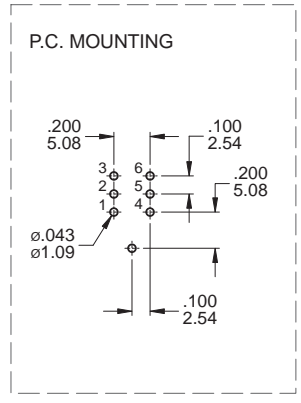
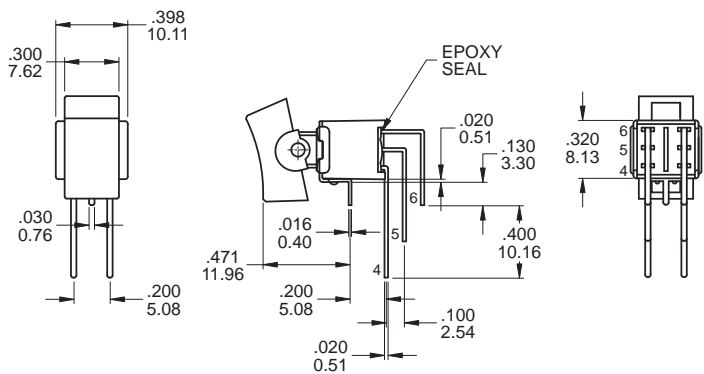
M7



SPDT

Part No. Shown : 4AS1R102M7RES

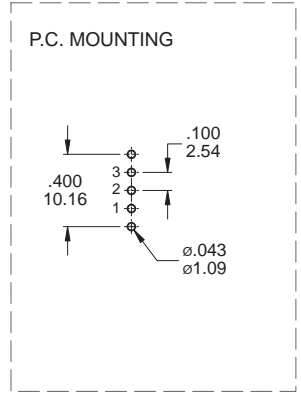
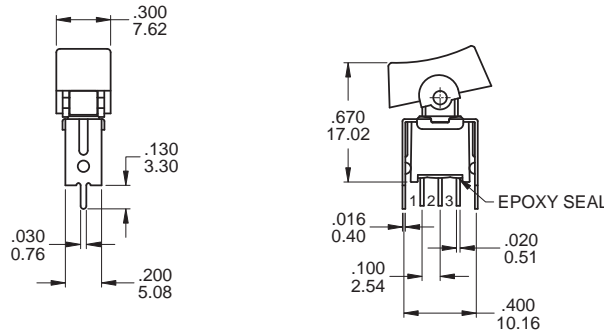
M7



DPDT

Part No. Shown : 4AD1R102M7RES

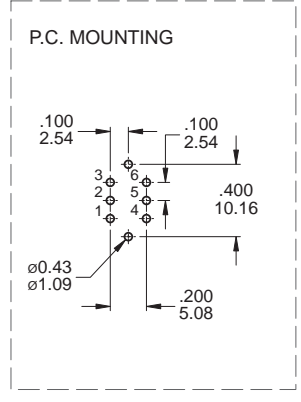
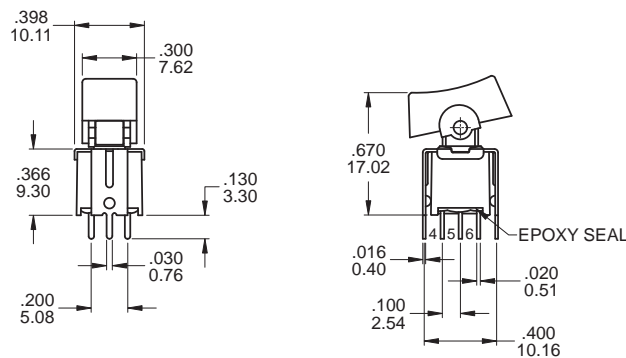
VS2



SPDT

Part No. Shown : 4AS1R102VS2RES

VS2



DPDT

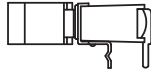
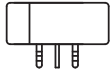
Part No. Shown : 4AD1R102VS2QES

4A Series

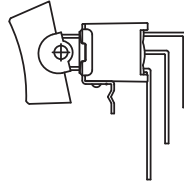
Sealed Sub-Miniature Rocker Switches

SNAP-IN TERMINATION OPTIONS

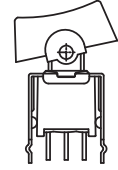
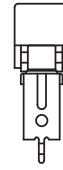
M6N



M7N



V2N



CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Gold flash over silver	3 Amps with resistant load @ 120VAC or 28VDC
C	Gold over Silver	Gold over silver	1 Amps with resistant load @ 250VAC
R	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 5 sec. (PCB is 1.6mm in thickness)