

4A Series

Sealed Sub-Miniature Rocker Switches



IP 67
ACCORDING TO
EN 60529:1991+A1:2001
IEC 60929:2001

cUL 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: -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.

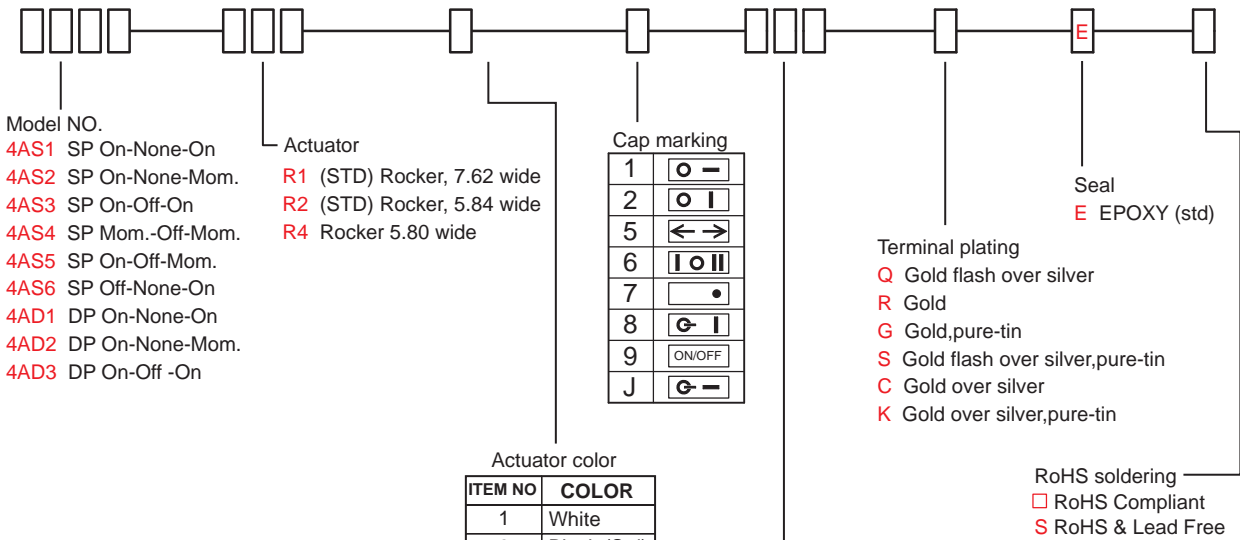
SWITCH SUPPORT: Brass or steel, tin plated.

TERMINAL/CONTACT: Silver or gold plated copper alloy.

(See Page 74)

HOW TO ORDER

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



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

Terminations

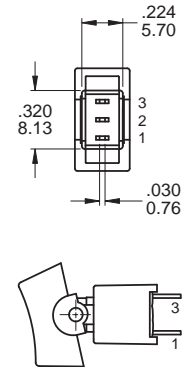
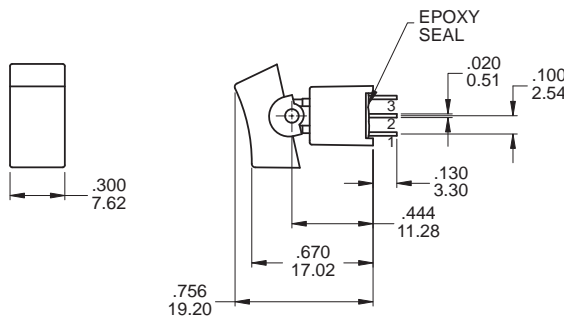
- M1** Solder Lug
- M2** PC thru-hole
- M5** wire wrap
- M6** Right angle, PC thru-hole
- M6N** Right angle, snap-in, PC thru-hole
- M7** Vertical right angle, PC thru-hole
- M7N** Vertical right angle, snap-in, PC thru-hole
- VS2** 8.94 high, V-bracket
- V2N** 8.94 high, snap-in V-bracket

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			

MOM=MOMENTARY

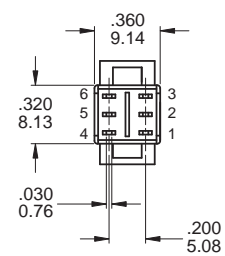
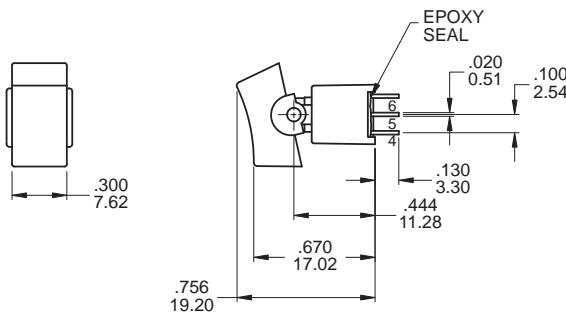
POLE OPTIONS



SPDT

Part No. Shown : 4AS1R102M2RE

4AS6 Models : Omit 2nd terminal



DPDT

Part No. Shown : 4AD1R102M2QE

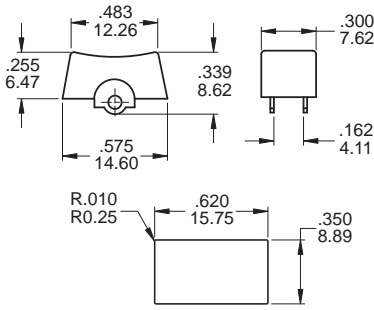


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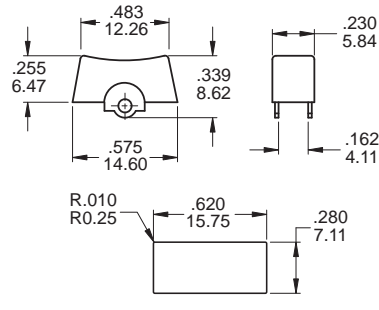
ACTUATOR OPTIONS - PANEL MOUNT

R1



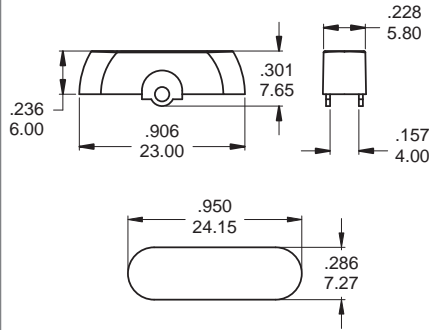
PANEL MOUNTING - R1

R2



PANEL MOUNTING - R2

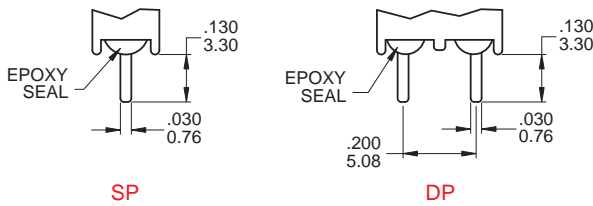
R4



PANEL MOUNTING - R4

TERMINATION OPTIONS

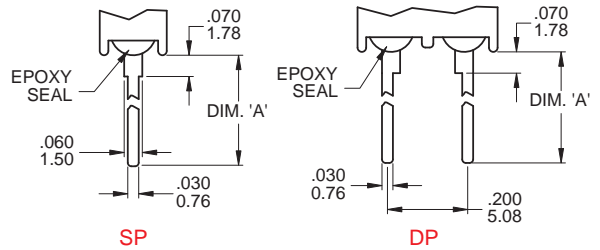
M2 PC Thru-hole



SP

DP

M5 Wire Wrap



SP

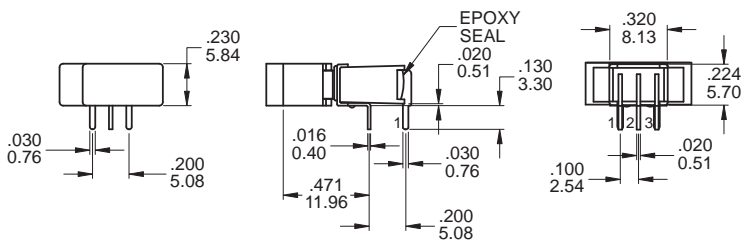
DP

OTHER TERMINATION OPTIONS

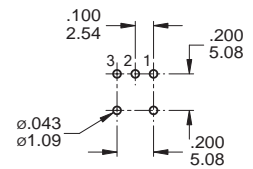
- M6** Right angle P.C. Mount
- M7** Right angle P.C. Mount
- VS2** Vertical bracket P.C. Mount

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

M6



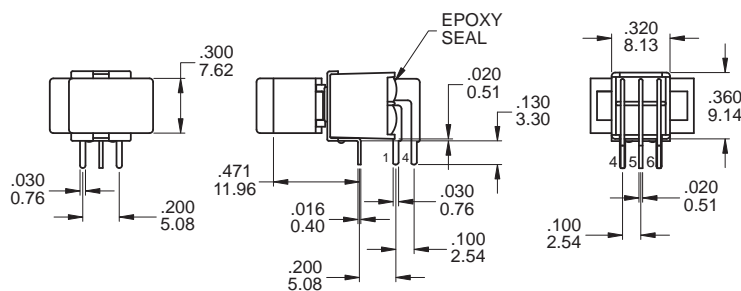
P.C. MOUNTING



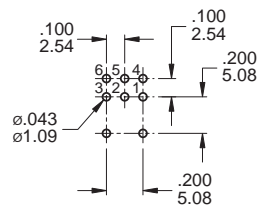
SPDT

Part No. Shown : 4AS1R202M6QE

M6



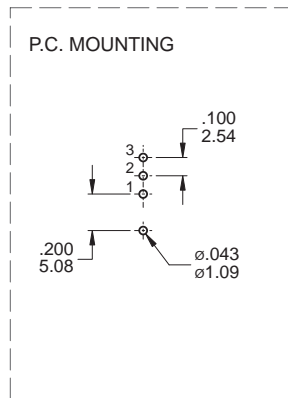
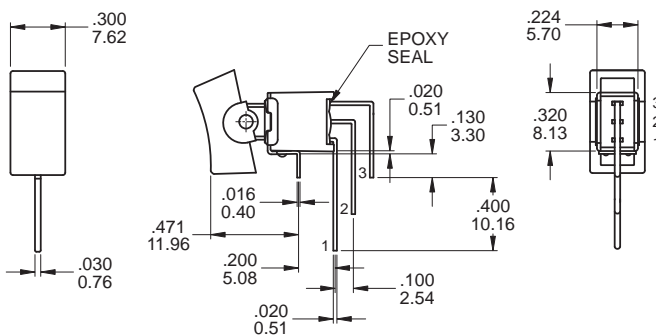
P.C. MOUNTING



DPDT

Part No. Shown : 4AD1R102M6QE

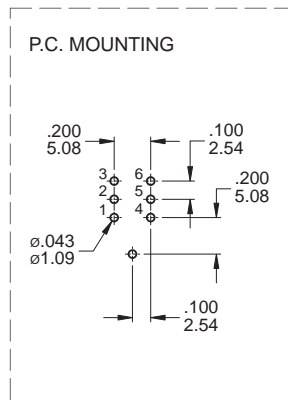
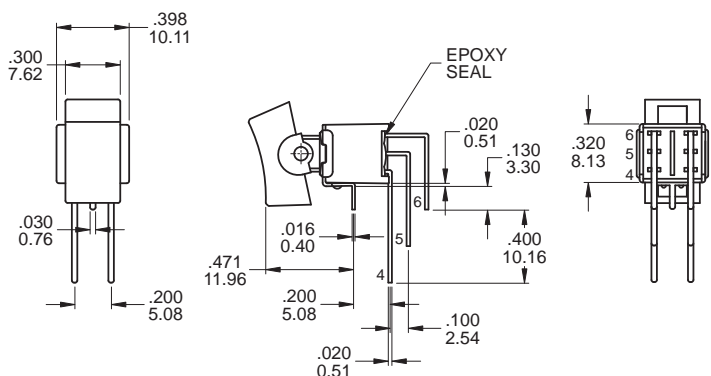
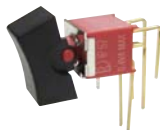
M7



SPDT

Part No. Shown : 4AS1R102M7RE

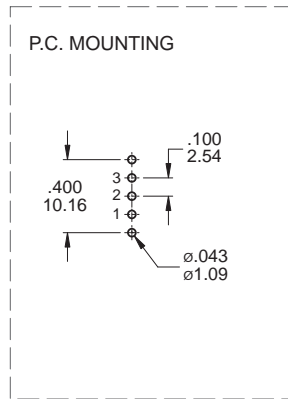
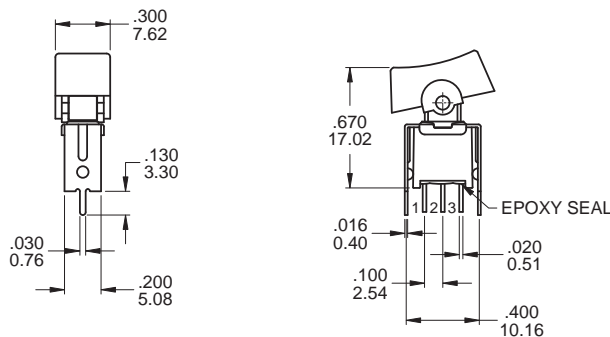
M7



DPDT

Part No. Shown : 4AD1R102M7RE

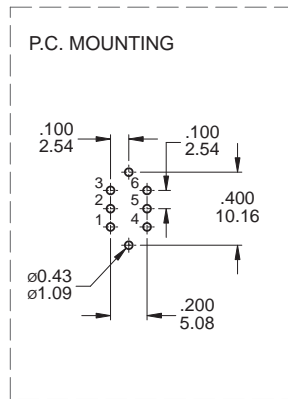
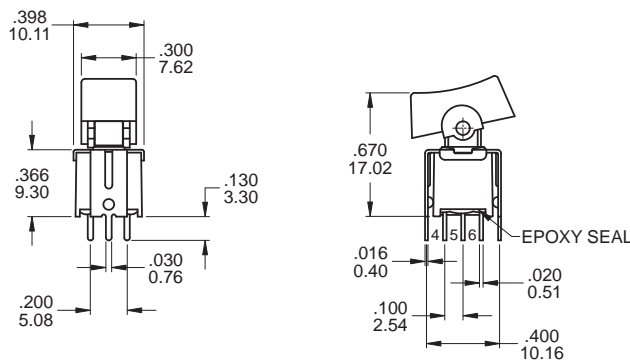
VS2



SPDT

Part No. Shown : 4AS1R102VS2RE

VS2



DPDT

Part No. Shown : 4AD1R102VS2QE

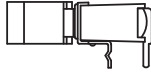
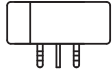


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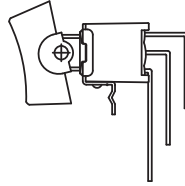
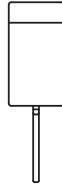
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SNAP-IN TERMINATION OPTIONS

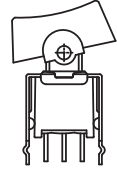
M6N



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)

