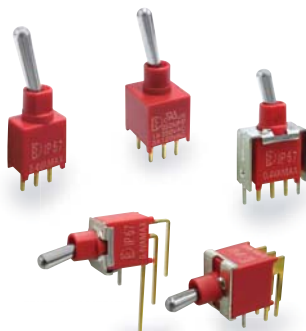


2A Series

Sealed Sub-Miniature Toggle Switches

2A
Toggle Switches



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

C_{UL} US
E 187490

RoHS
compliant

Pb
lead-free

SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See Page 34.

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

CONTACT RESISTANCE: 20 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 & BUSHING: Glass filled nylon 6/6, flame retardant,
heat stabilized (UL94v-0).

ACTUATOR: Brass, chrome plated, internal O-ring seal.
Standard for all actuators.

SWITCH SUPPORT: Brass, tin plated.

CONTACT / TERMINALS: Copper alloy with Silver or gold plated.
(See Page 34)

HOW TO ORDER

MODEL NO.	ACTUATOR	BUSHING	TERMINATIONS	TERMINAL PLATING	SEAL	RoHS SOLDERING
					E	
Model NO.	Actuator	Bushing	Terminations	Terminal plating	Seal	RoHS soldering
2AS1 SP ON-NONE-ON	T1 10.16 high	A1 SP 4.65 high	M2 PC thru-hole	Q Gold flash over silver	E EPOXY (std)	S RoHS & Lead Free
2AS2 SP ON-NONE-(ON)	T2 6.10 high	A2 DP 4.50 high	M5 Wire wrap	R Gold		
2AS3 SP ON-OFF-ON	T3 8.13 high	A3 SP 5.00 high	M6 Right angle, PC thru-hole	C Gold over silver		
2AS4 SP (ON)-OFF-(ON)	T4 13.97 high		M6N Right angle, snap-in, PC thru-hole			
2AS5 SP ON-OFF-(ON)	TA Plastic, Black		M7 Vertical right angle, PC thru-hole			
2AS6 SP OFF-NONE-ON	TB Plastic, Black		M7N Vertical right angle, snap-in, PC thru-hole			
2AD1 DP ON-NONE-ON			VS2 9.30 high V-bracket			
2AD2 DP ON-NONE-(ON)			V2N 9.30 high Snap-in V-bracket			
2AD3 DP ON-OFF-ON						
* 2AS6 model type not applicable to M6/M6N/M7/M7N terminations						

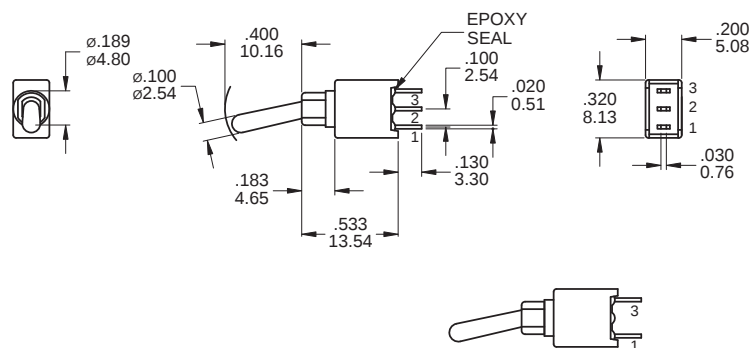
SWITCH FUNCTION

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	Q22A11	2AS1	ON	NONE	ON	2-3 	N/A	2-1
	Q22A12	2AS2	ON	NONE	(ON)		OPEN	
	Q22A13	2AS3	ON	OFF	ON			
	Q22A14	2AS4	(ON)	OFF	(ON)	OPEN	N/A	3-1
	Q22A15	2AS5	ON	OFF	(ON)			
	Q22A16	2AS6	OFF	NONE	ON	OPEN	N/A	3-1
DP	Q22A21	2AD1	ON	NONE	ON	2-3,5-6 	N/A	2-1,5-4
	Q22A22	2AD2	ON	NONE	(ON)		OPEN	
	Q22A23	2AD3	ON	OFF	ON			

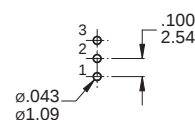
()=MOMENTARY

POLE OPTIONS

M2



P.C. MOUNTING

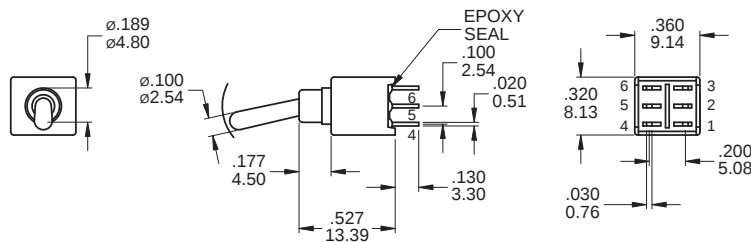


SPDT

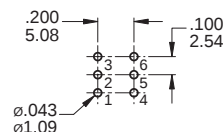
2AS6 Models : Omit 2nd terminal

Part No. Shown : 2AS1T1A1M2RES

M2



P.C. MOUNTING



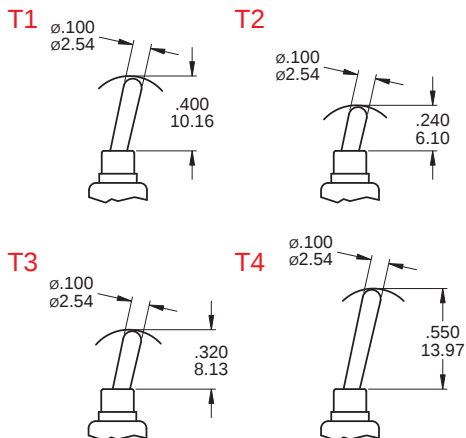
DPDT

Part No. Shown : 2AD1T1A2M2QES

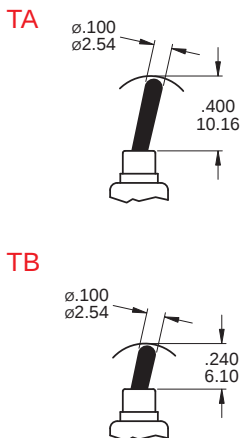
2A Series

Sealed Sub-Miniature Toggle Switches

ACTUATOR OPTIONS

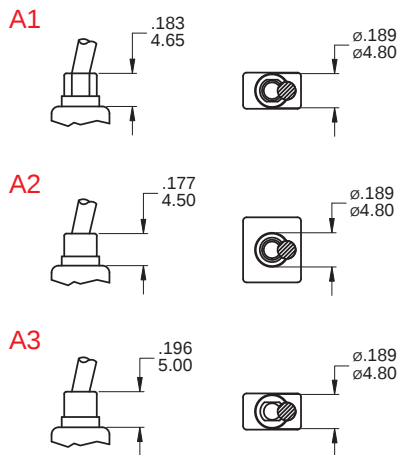


Actuator shown with A1 Bushing,
sub .020 (0.50) for A3 Bushing.



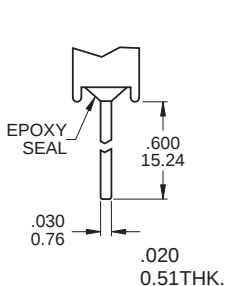
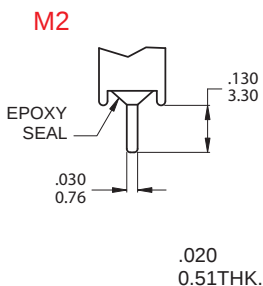
PLASTIC ACTUATOR

BUSHING OPTIONS



A1, A3 FOR SPDT / A2 FOR DPDT

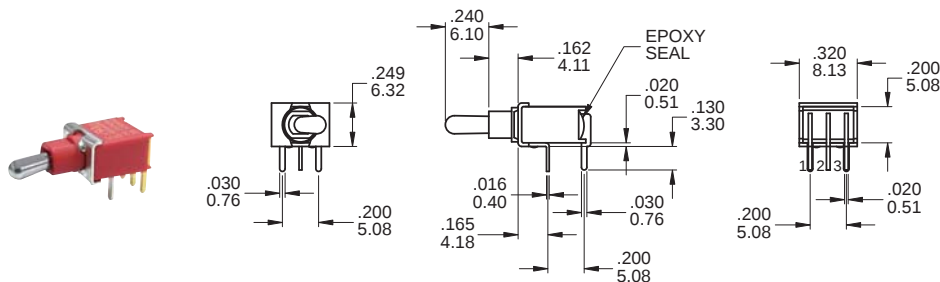
TERMINATION OPTIONS



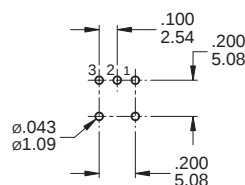
OTHER TERMINATION OPTIONS

- M6** Right angle P.C. Mount
- M6N** Right angle P.C. Mount
Snap-in bracket
- M7** Vertical right angle P.C. Mount
- M7N** Vertical right angle P.C. Mount
Snap-in bracket
- VS2** Vertical bracket P.C. Mount

M6



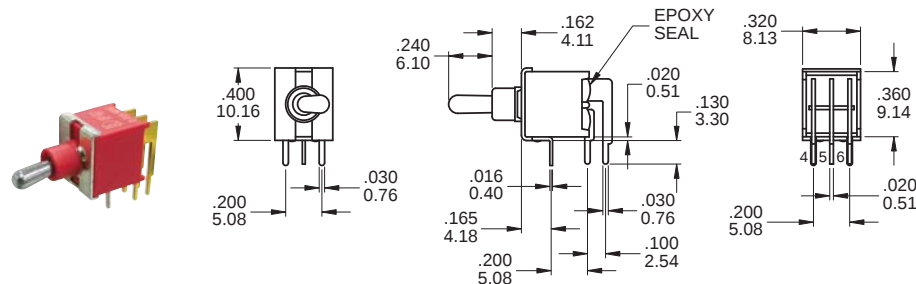
P.C. MOUNTING



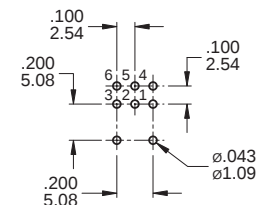
SPDT

Part No. Shown : 2AS1T2A1M6QES

M6



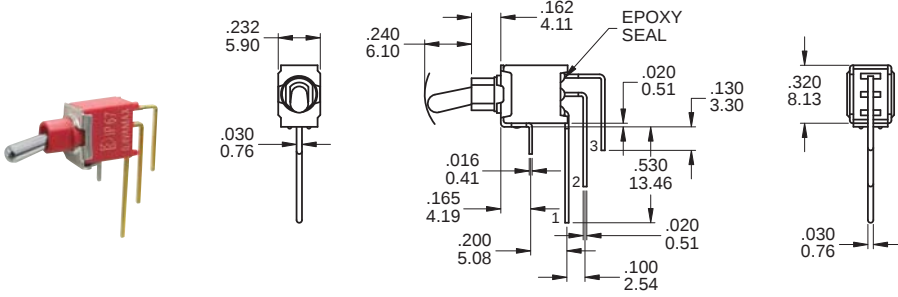
P.C. MOUNTING



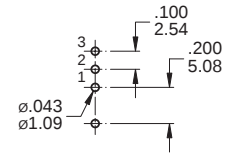
DPDT

Part No. Shown : 2AD1T2A2M6RES

M7



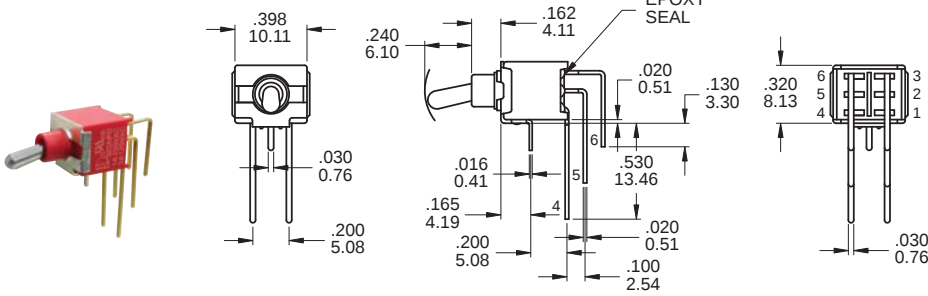
P.C. MOUNTING



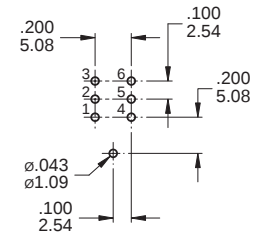
SPDT

Part No. Shown : 2AS1T2A1M7RES

M7



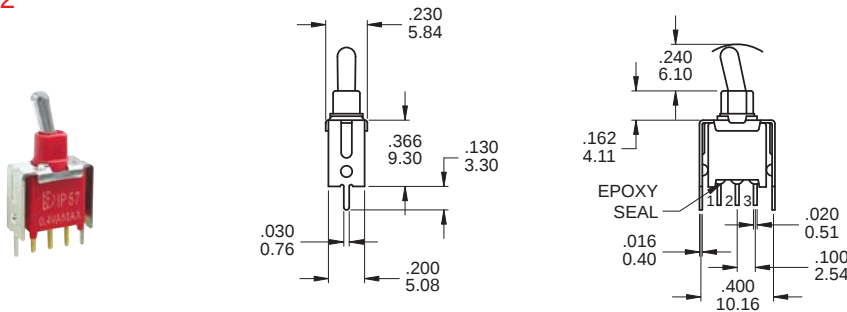
P.C. MOUNTING



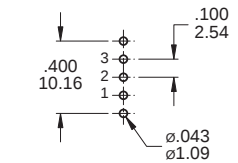
DPDT

Part No. Shown : 2AD1T2A2M7QES

VS2



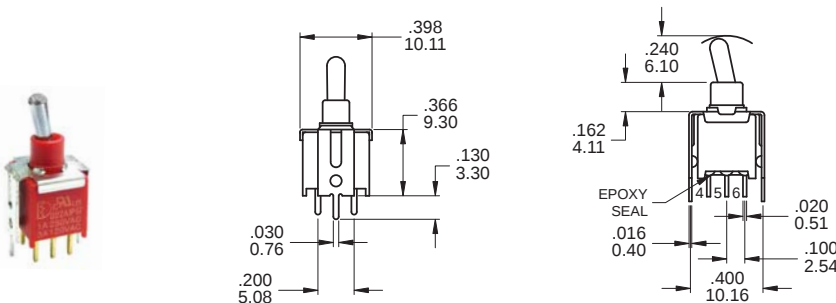
P.C. MOUNTING



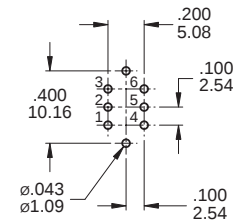
SPDT

Part No. Shown : 2AS1T2A1VS2RES

VS2



P.C. MOUNTING



DPDT

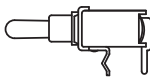
Part No. Shown : 2AD1T2A2VS2QES

2A Series

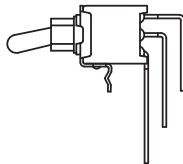
Sealed Sub-Miniature Toggle Switches

SNAP-IN TERMINATION OPTIONS

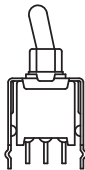
M6N



M7N



V2N



CONTACT MATERIAL OPTIONS

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