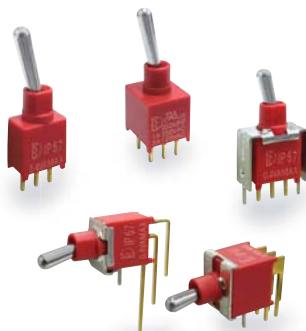


2A Series

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. 2AS1 SP ON-NONE-ON 2AS2 SP ON-NONE-(ON) 2AS3 SP ON-OFF-ON 2AS4 SP (ON)-OFF-(ON) 2AS5 SP ON-OFF-(ON) 2AS6 SP OFF-NONE-ON 2AD1 DP ON-NONE-ON 2AD2 DP ON-NONE-(ON) 2AD3 DP ON-OFF-ON	Actuator T1 10.16 high T2 6.10 high T3 8.13 high T4 13.97 high TA Plastic, Black 10.16 high TB Plastic, Black 6.10 high	Bushing A1 SP 4.65 high A2 DP 4.50 high A3 SP 5.00 high	Terminations 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 9.30 high V-bracket V2N 9.30 high Snap-in V-bracket	Terminal plating Q Gold flash over silver R Gold C Gold over silver	Seal E EPOXY (std)	RoHS soldering S RoHS & Lead Free
* 2AS6 model type not applicable to M6/M6N/M7/M7N terminations						

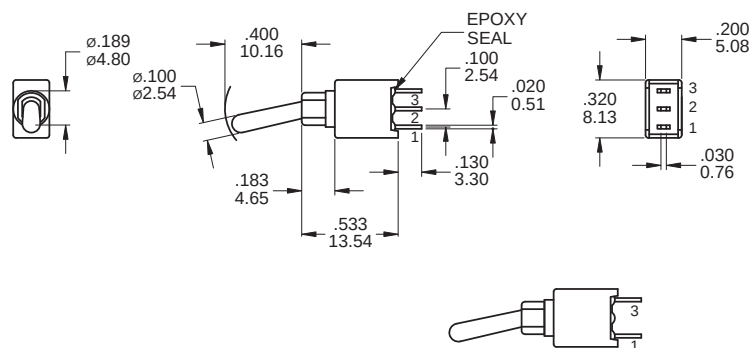
SWITCH FUNCTION

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			

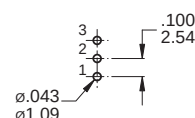
()=MOMENTARY

POLE OPTIONS

M2



P.C. MOUNTING

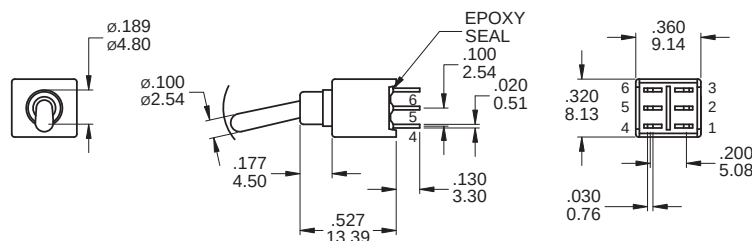


SPDT

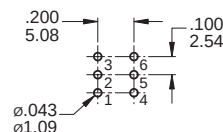
2AS6 Models : Omit 2nd terminal

Part No. Shown : 2AS1T1A1M2RES

M2



P.C. MOUNTING



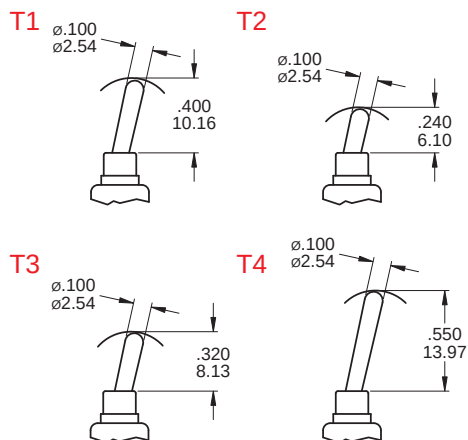
DPDT

Part No. Shown : 2AD1T1A2M2QES

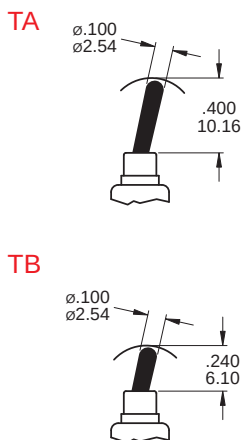
2A Series

Sealed Sub-Miniature Toggle Switches

ACTUATOR OPTIONS

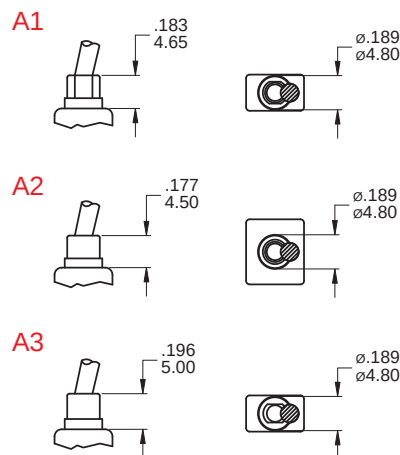


Actuator shown with A1 Bushing,
sub .020 (0.50) for A3 Bushing.



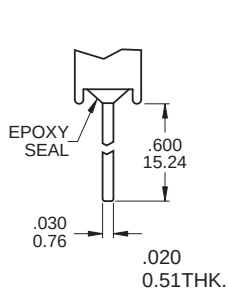
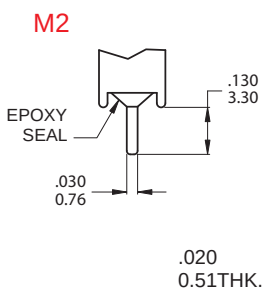
PLASTIC ACTUATOR

BUSHING OPTIONS



A1, A3 FOR SPDT / A2 FOR DPDT

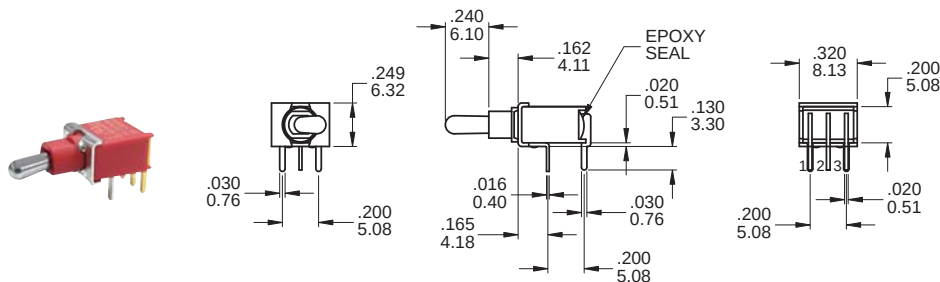
TERMINATION OPTIONS



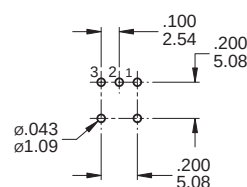
OTHER TERMINATION OPTIONS

- 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



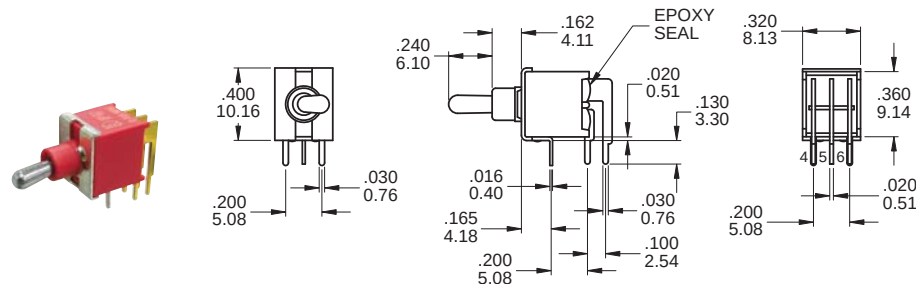
P.C. MOUNTING



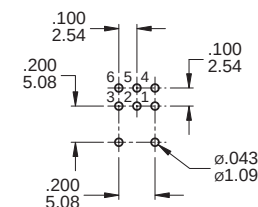
SPDT

Part No. Shown : 2AS1T2A1M6QES

M6



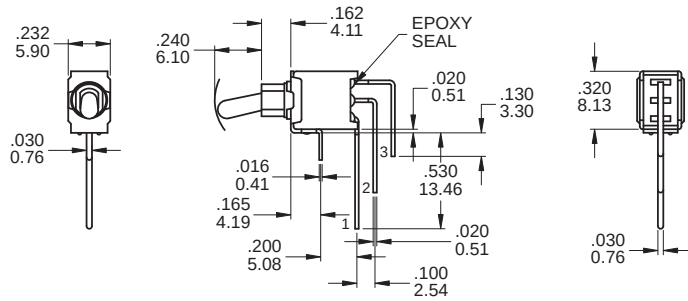
P.C. MOUNTING



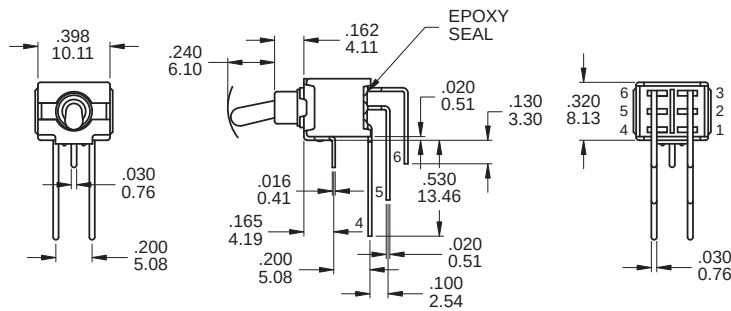
DPDT

Part No. Shown : 2AD1T2A2M6RES

Sealed Sub-Miniature Toggle Switches



Part No. Shown : 2AS1T2A1M7RES



Part No. Shown : 2AD1T2A2M7QES

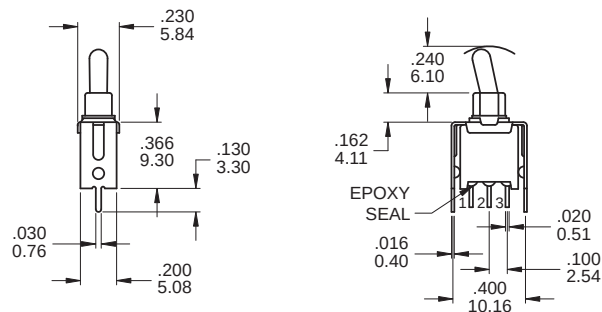
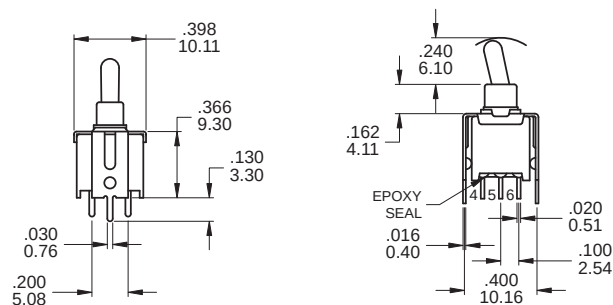


Figure 1 shows a schematic diagram of a four-point bending test. A beam of length 10.16 inches and thickness 0.400 inches is supported at two points, 2.54 inches apart. A load is applied at the center, 3 inches from each support. The beam is instrumented with strain gauges at the top and bottom surfaces, with a gauge length of 0.109 inches and a gauge width of 0.043 inches.

Part No. Shown : 2AS1T2A1VS2RES



Technical drawing of a 3-hole punch showing dimensions in inches and millimeters. The drawing includes a side view and a top view. Dimensions include hole diameter (ø.043), hole spacing (10.16 mm), and overall width (5.08 mm).

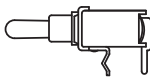
Part No. Shown : 2AD1T2A2VS2QES

2A Series

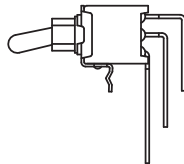
Sealed Sub-Miniature Toggle Switches

SNAP-IN TERMINATION OPTIONS

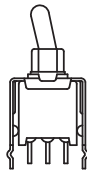
M6N



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)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Dailywell:

[2AS1T1A01M7QES](#) [2AS1T2A01M6QES](#)