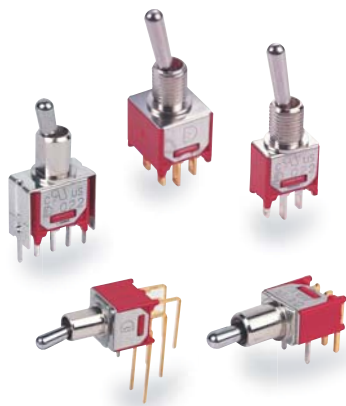


2M Series

Sub-Miniature Toggle Switches

2M
Toggle Switches



SPECIFICATIONS

CONTACT RATING: Dependent upon contact material See Page 29.

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: Diallyl phthalate (DAP) (UL94v-0).

ACTUATOR: Brass, chrome plated.

BUSHING: Brass or zinc, nickel plated.

HOUSING: Stainless Steel.

SWITCH SUPPORT: Brass,tin plated.







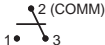
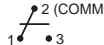
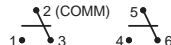
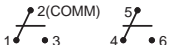

TERMINAL/CONTACT: Brass or copper alloy,with Silver or gold plated.(See Page 29)

HOW TO ORDER

MODEL NO.	ACTUATOR	BUSHING	TERMINATIONS	TERMINAL PLATING	SEAL	RoHS SOLDERING
<div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div></div>	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Model NO.	Actuator		Terminations	Terminal plating	Seal	RoHS soldering
2MS1 SP On-None-On	T1 9.40 high		M1 Solder Lug	Q Silver	E EPOXY (std)	
2MS2 SP On-None-Mom.	T2 5.33 high		M2 PC thru-hole	R Gold	N NO EPOXY	
2MS3 SP On- Off -On	T3 7.37 high		M51 15.24 high, wire wrap	C Gold over silver		
2MS4 SP Mom.-Off-Mom.	T4 10.41 high		M52 6.00 high, wire wrap			
2MS5 SP On- Off -Mom.	T5 5.59 high		M6 Right angle, PC thru-hole			
2MS6 SP Off- None -On.	TL1 Locking lever		M6N Right angle, snap-in, PC thru-hole			
2MD1 DP On-None-On	TL2 Locking lever		M7 Vertical right angle, PC thru-hole			
2MD2 DP On-None-Mom.			M7N Vertical right angle, snap-in, PC thru-hole			
2MD3 DP On- Off -On.			VS2 V-bracket			
2MD6 DP On- On -On.			V2N Snap-in V-bracket			
			VS3 V-bracket			
			V3N Snap-in V-bracket			
Bushing						RoHS soldering
B1 5.59 high,flat (thd)						S RoHS & Lead Free
B2 5.59 high,flat (non-thd)						
B3 5.59 high,keyway (thd)						
B4 5.59 high,keyway (non-thd)						
B5 7.87 high,flat (thd)						
B6 7.87 high,flat (non-thd)						
B7 6.60 high,keyway (thd)						
B8 6.60 high,keyway (non-thd)						
B25 8.00 high,keyway,locking lever (thd)						

* 2MS6 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	Q2211	2MS1	ON	NONE	ON	2-3 	N/A	2-1 
	Q2212	2MS2	ON	NONE	MOM		OPEN	
	Q2213	2MS3	ON	OFF	ON			
	Q2214	2MS4	MOM	OFF	MOM	OPEN	N/A	3-1
	Q2215	2MS5	ON	OFF	MOM			
	Q2216	2MS6	OFF	NONE	ON			
DP	Q2221	2MD1	ON	NONE	ON	2-3,5-6 	N/A	2-1,5-4 
	Q2222	2MD2	ON	NONE	MOM		OPEN	
	Q2223	2MD3	ON	OFF	ON	2-3,5-6		
		Q2226	2MD6	ON	ON	ON	2-3,5-6	2-3,5-4

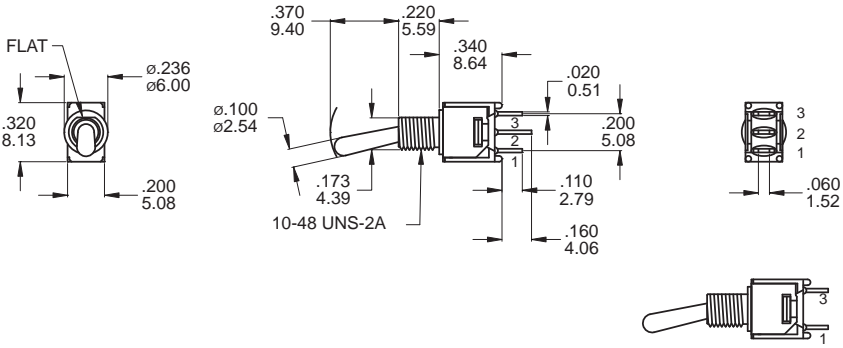


2M
Toggle Switches

MOM=MOMENTARY

▲ Please check the availability in advance before order

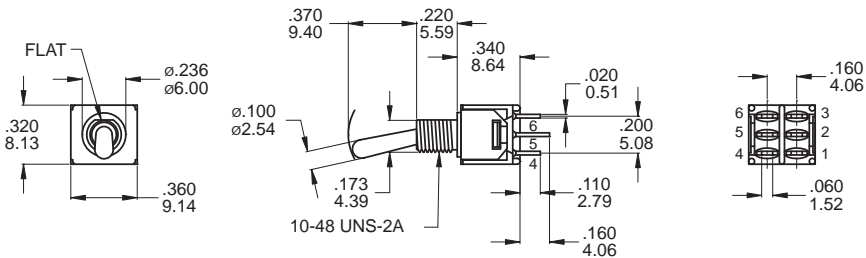
POLE OPTIONS



SPDT

2MS6 Models : Omit 2nd terminal

Part No. Shown : 2MS1T1B1M1QES



DPDT

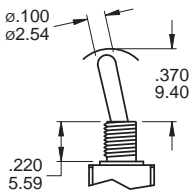
Part No. Shown : 2MD1T1B1M1RES

2M Series

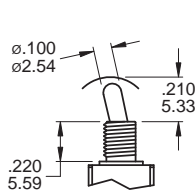
Sub-Miniature Toggle Switches

ACTUATOR OPTIONS

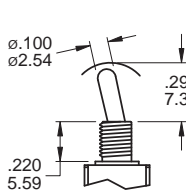
T1



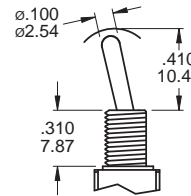
T2



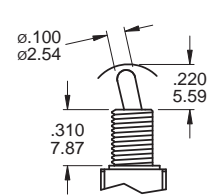
T3



T4



T5

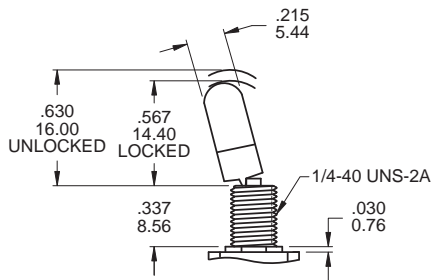


NONE: T1,T2,T3 Actuator shown with B1 to B4 bushing, subtract 0.09 (2.29) for B5 bushing, subtract 0.04 (1.02) for B7 bushing.

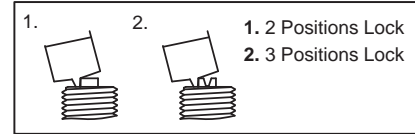
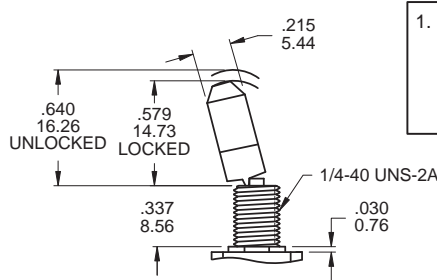
T4,T5 Actuator shown with B5,B6 bushing, add 0.09 (2.29) for B1 to B3 bushing, add 0.05 (1.27) for B7 bushing.

Std for M1,M2 Terminal sub .016(.040) for M6,M7,VXS

TL1B25

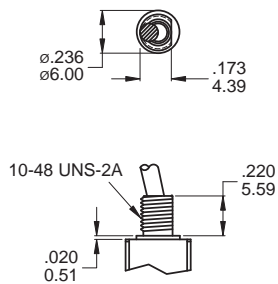


TL2B25

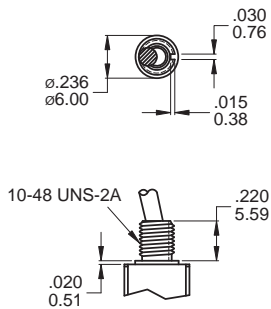


BUSHING OPTIONS

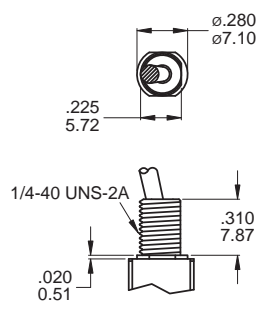
B1 THD
B2 NON-THD



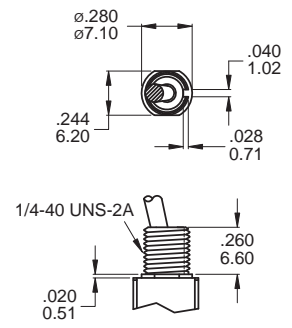
B3 THD
B4 NON-THD



B5 THD
B6 NON-THD

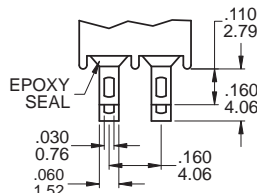
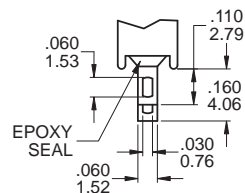


B7 THD
B8 NON-THD



TERMINATION OPTIONS

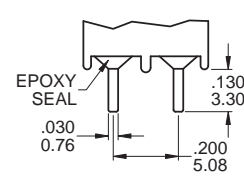
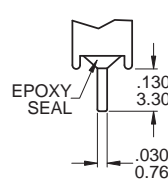
M1 Solder lug



Double Pole

.020(0.51) THK.

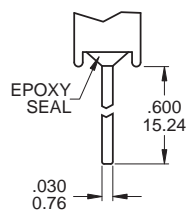
M2 PC Thru-hole



Double Pole

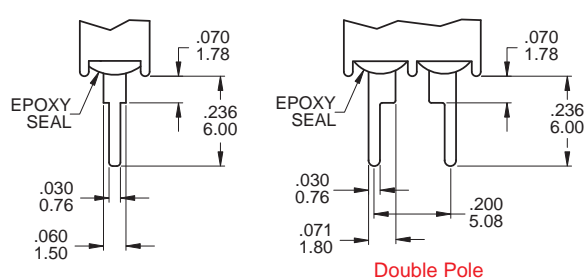
.020(0.51) THK.

M51 Wire Wrap



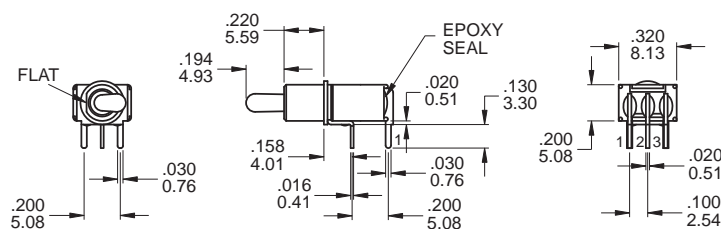
.020(0.51) THK.

M52 Wire Wrap

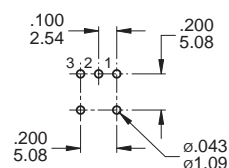


.020(0.51) THK.

M6



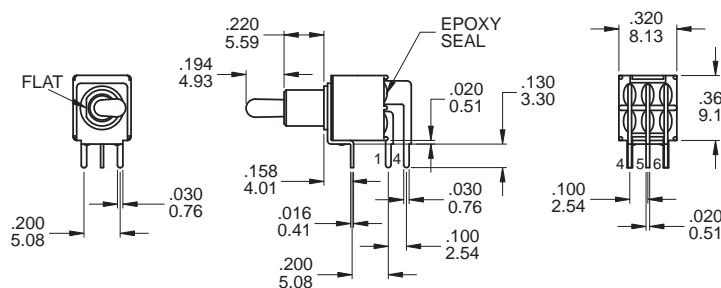
P.C. MOUNTING



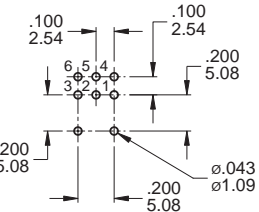
SPDT

Part No. Shown : 2MS1T2B2M6RES

M6



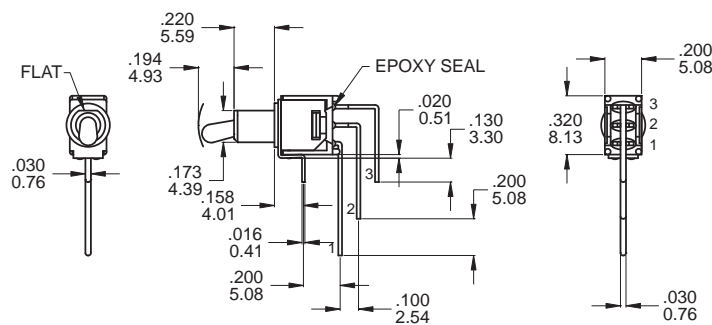
P.C. MOUNTING



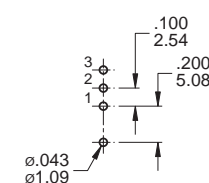
DPDT

Part No. Shown : 2MD1T2B2M6QES

M7



P.C. MOUNTING

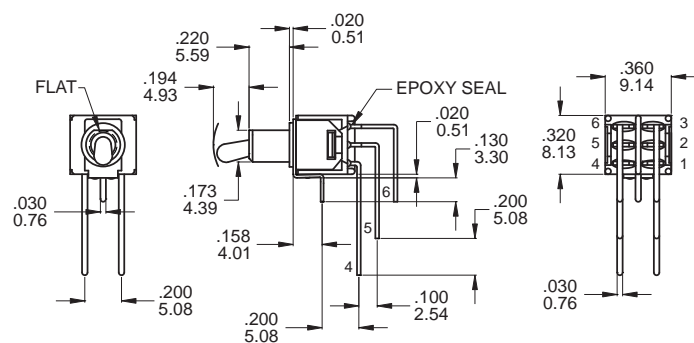



SPDT

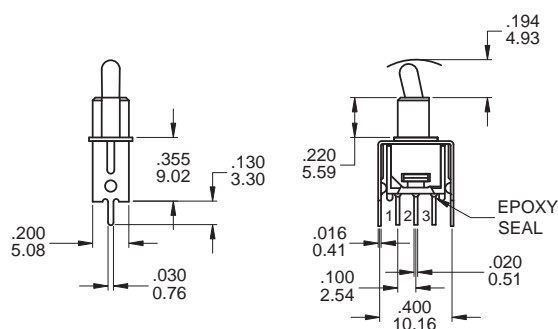
Part No. Shown : 2MS1T2B2M7RES

Sub-Miniature Toggle Switches

2M Toggle Switches

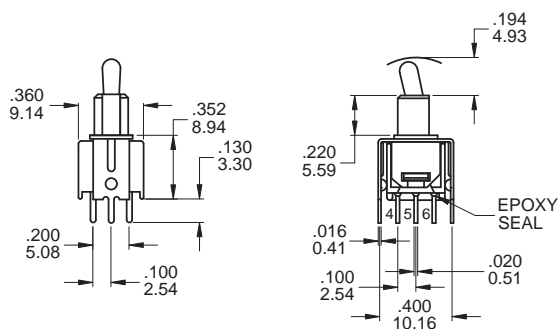


Part No. Shown : 2MD1T2B2M7RES



VS3

Part No. Shown : 2MS1T2B2VS2QES

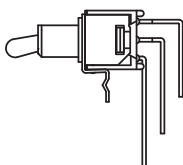
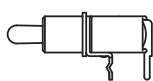


VS3

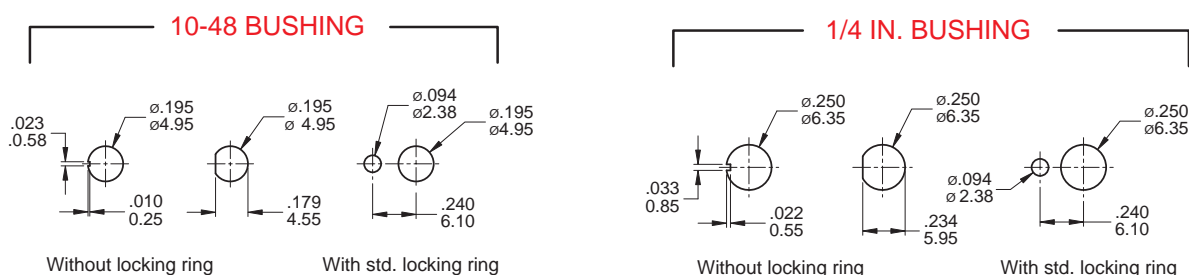
Part No. Shown : 2MD1T2B2VS2QES

SNAP-IN TERMINATION OPTIONS

V3N

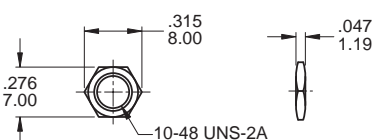


PANEL MOUNTING



HARDWARE

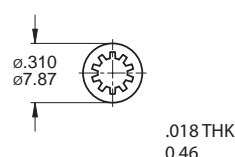
10-48 NUT



MNU-2M01

Supplied standard with
B1/ B3 bushing

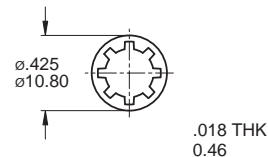
LOCKWASHER



MNU-2M03

Supplied standard with
B1 / B3 bushing

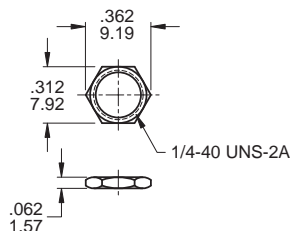
LOCKWASHER



MNU-1M03

Supplied standard with
B5 / B7 bushing

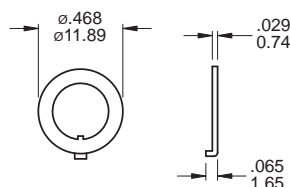
1/4 NUT



MNU-1M01A

Supplied standard with
B5/ B7 bushing

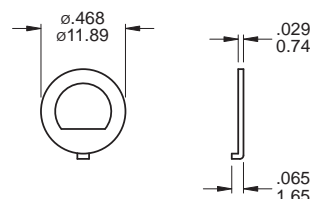
LOCKING RING



MNU-1M02

Supplied standard with B7 bushing

LOCKING RING



MNU-1M11

Supplied standard with B5 bushing

CONTACT MATERIAL OPTIONS

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