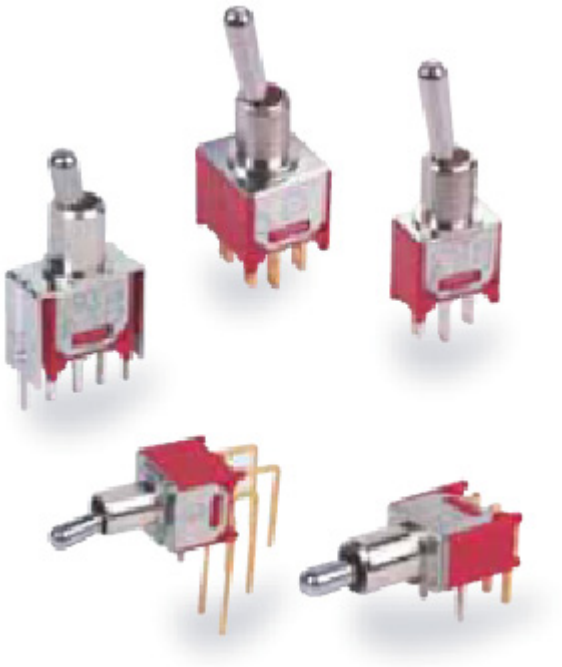
Toggle Switches

Sub-Miniature



RoHS Compliant

Specifications:

Contact rating	: Dependent upon content material.
Mechanical life	: 30,000 make and break cycles.
Maximum contact resistance	: 20 mΩ initial at 2-4 V dc 100 mA for both silver and gold plated contacts.
Minimum insulation resistance	: 1,000 MΩ.
Dielectric strength	: 1,000 V rms at sea level.
Operating temperature	: -30°C to 85°C.

Materials:

Case	: Diallyl phthalate (DAP).
Actuator	: Brass, chrome plated.
Bushing	: Brass, nickel plated.
Housing	: Stainless steel.
Switch support	: Brass, tin plated.
Terminal / contact	: Silver or gold plated.

Model No	Actuator	Bushing	Terminations	Contact Material	Seal
2 M S 1	T 1	B 2	M 2	R	E

Model No

2MS1 SP On-None-On
2MS2 SP On-None-Mom.
2MS3 SP On-Off-On
2MD1 DP On-None-On
2MD3 DP On-Off-On

Actuator

T1 9.40 high
T2 5.33 high

Bushing

B2 5.59 high, flat (NON-THD)
B5 7.87 high, flat (THD)

Terminations

M2 PC thru-hole
M6 Right angle, PC thru-hole

Contact Material

R Gold

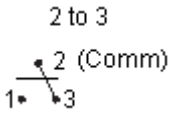
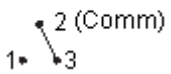
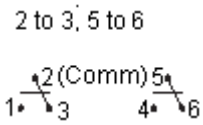
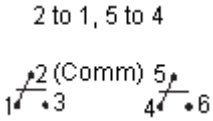
Seal

E Epoxy (std)

Toggle Switches

Sub-Miniature

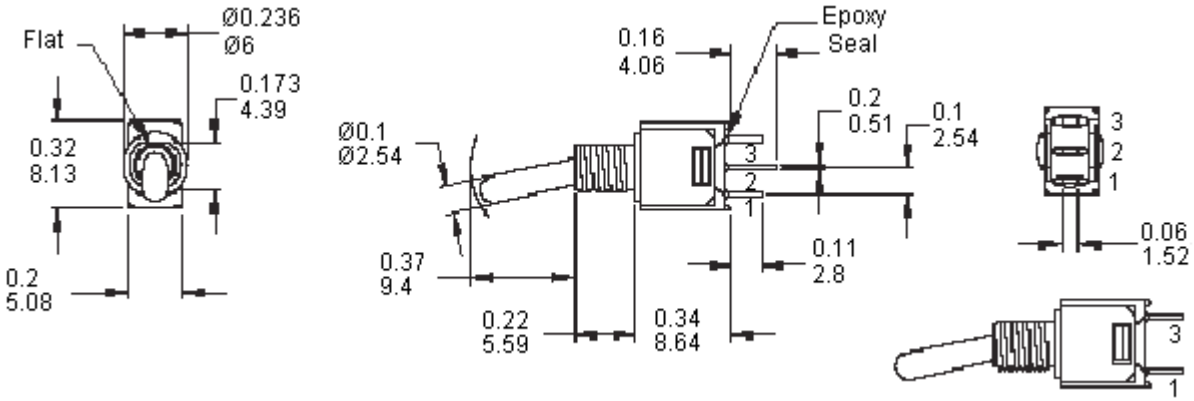
Switch Function

Number of Poles	UL / CSA Model Number	Model Number	Switch Function			Connected Terminals / Schematic		
			Position 1	Position 2	Position 3	Position 1	Position 2	Position 3
								
SP	Q2211	2MS1	On	None	ON		N/A	
	Q2212	2MS2			MOM			
	Q2213	2MS3		Off	ON		Open	
DP	Q2221	2MD1	On	None			N/A	
	Q2223	2MD3		Off			Open	

MOM = Momentary

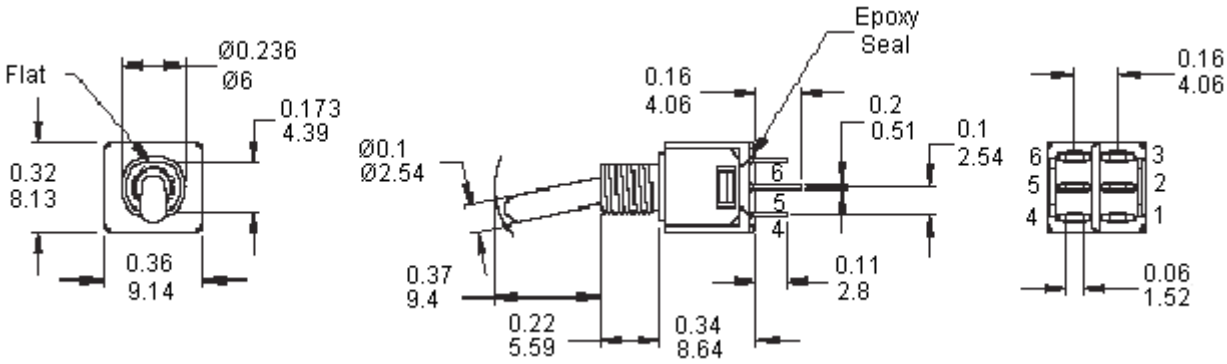
Pole Options

SPDT



2MS6 Models : Omit 2nd terminal

DPDT

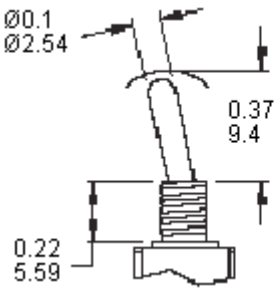


Toggle Switches

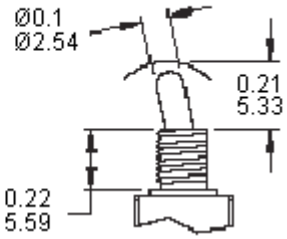
Sub-Miniature

Actuator Options

T1



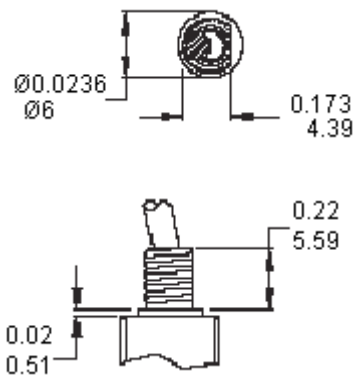
T2



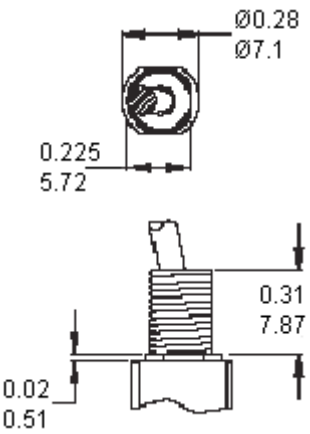
T1, T2, Actuator shown with B2 bushing, subtract 0.09 (2.29) for B5 bushing, subtract 0.04 (1.02) for B5 bushing, add 0.09 (2.29) Std for M2 terminal sub 0.016 (0.04) for M2 terminals sub. 016 (0.04) for M6.

Bushing Options

B2 NON-THD

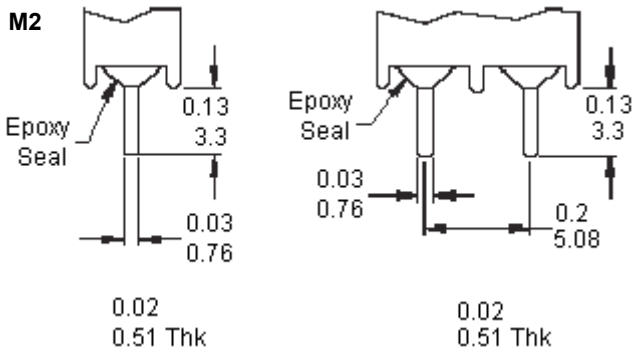


B5 THD



Termination Options

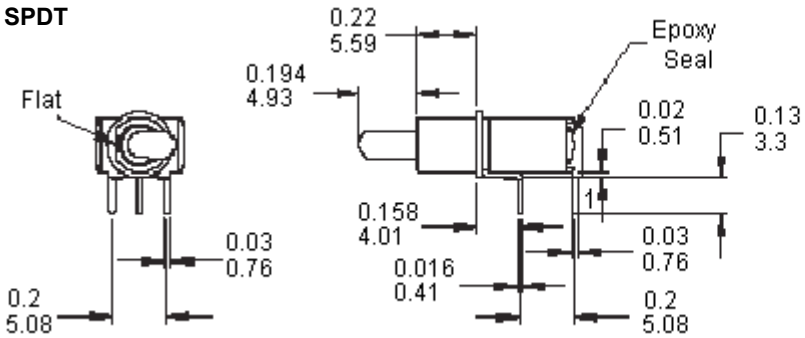
M2

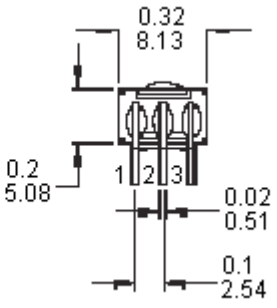


Double Pole

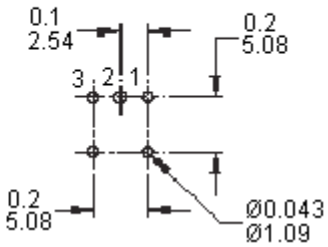
M6, SPDT

SPDT



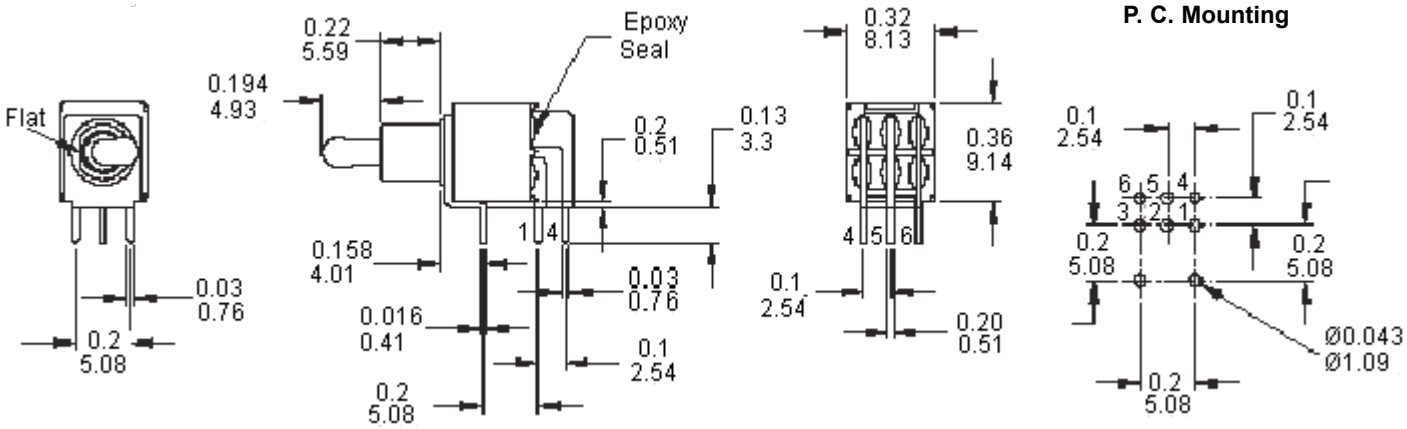


P. C. Mounting

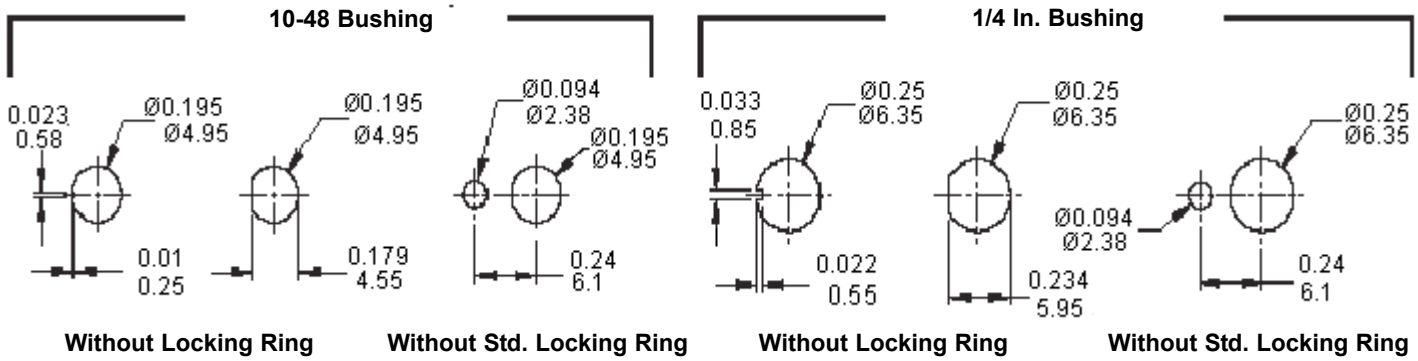


M6, DPDT

DPDT

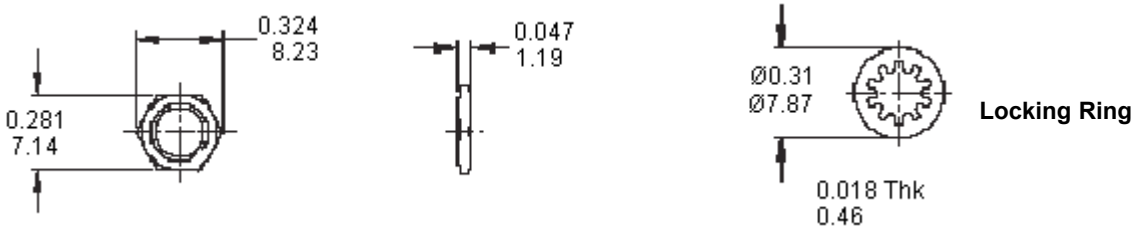


Panel Mounting



Without Locking Ring | **Without Std. Locking Ring** | **Without Locking Ring** | **Without Std. Locking Ring**

Hardware



Contact Material Options

	Contact Plating	Terminal Plating	Ratings
R	Gold	R = Gold	0.4 Volt - Amperes (VA) maximum at 20 V maximum (AC or DC)

Soldering Process:

Manual soldering : Use soldering iron of 30 watts, controlled at 350°C approximately 5 s while applying solder.
Wave soldering : Recommended soldering temperature : 260 ±5°C.
: Duration of solder immersion : Maximum 5 s (PCB is 1.6 mm in thickness).

Soldering : Vapour phase