

Datasheet

Miniature Toggle Switches

RS Stock number [401-670](#)









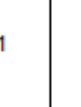
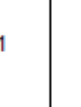


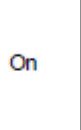
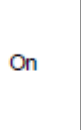
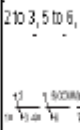
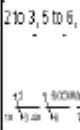
Specifications:

Contact rating	: Dependent upon contact material.
Mechanical life	: 40,000 make and break cycles.
Maximum contact resistance	: 10mΩ.
Initial voltage	: 2 to 4V dc.
Current	: 10mA for both silver and gold plated contacts.
Minimum Insulation resistance:	: 1,000MΩ.
Dielectric strength	: 1,000Vrms at sea level.
Operating temperature	: -30°C to 85°C.

Materials:

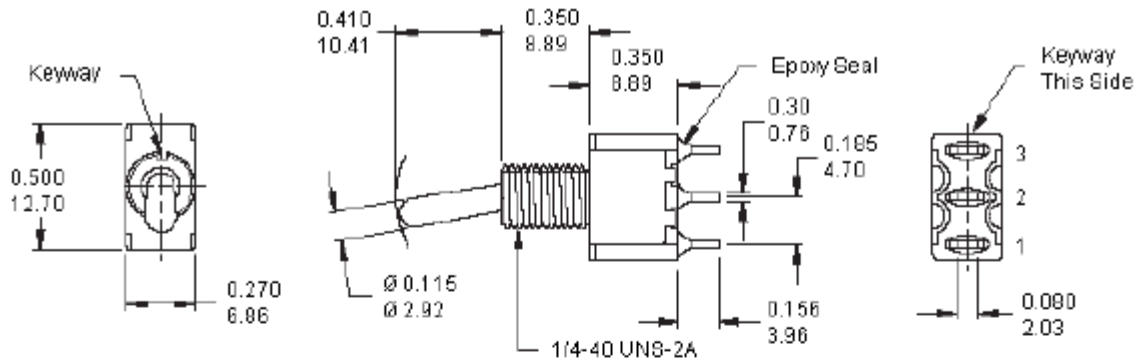
Case	: Diallyl phthalate (DAP) (UL94v-0).
Actuator	: Brass, chrome plated.
Bushing	: Brass, nickel plated.
Housing	: Stainless steel.
Switch support	: Brass, tin plated.
Terminal/contact	: Silver or gold plated.

Switch Function

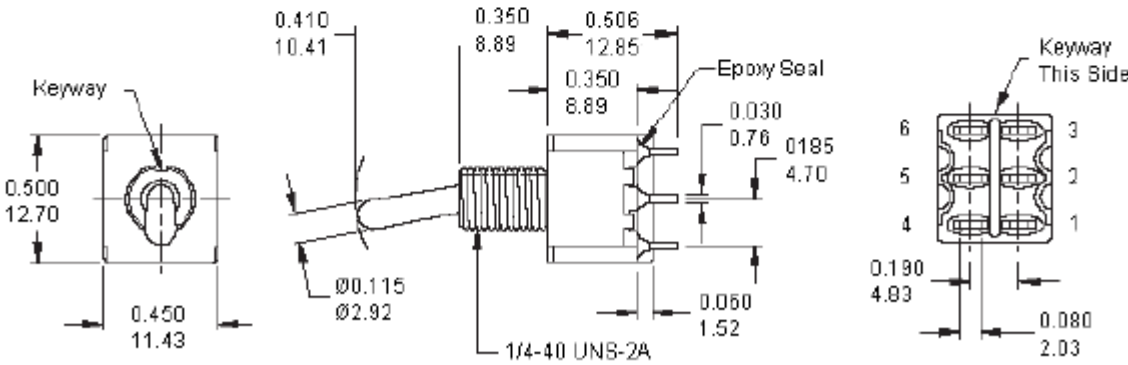
Number of Poles	UL/CSA Model Numbers	Model Number	Switch Function			Connected Terminals/Schematic			
			Position 1	Position 2	Position 3	Position 1	Position 2	Position 3	
									
SP	Q1111	1MS1	On	None	ON	2 to 3	N/A	2 to 1	
	Q1112	1MS2		None	MOM				
	Q1113	1MS3	MOM	Off	ON		Open		
	Q1114	1MS4			MOM				
	Q1115	1MS5			MOM				
DP	Q1121	1MD1	On	None	ON	2 to 3, 5 to 8	N/A	2 to 1, 5 to 4	
	Q1122	1MD2		None	MOM				
	Q1123	1MD3	MOM	Off	ON		Open		
	Q1124	1MD4			MOM				
	Q1125	1MD5			MOM				
	DP	Q1126	1MD6	On	On	On	2 to 3, 5 to 6	2 to 3, 5 to 4	2 to 1, 5 to 4
		Q1127	1MD7	MOM	On	MOM			
		Q1128	1MD8	MOM	On	MOM			
3P	Q1131	1M31	On	None	On		N/A		
4P	Q1141	1M41				On			

Pole Options
SPDT

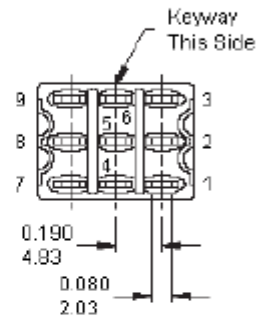
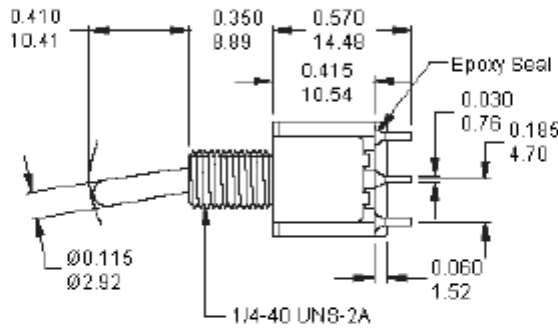
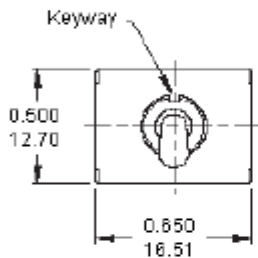




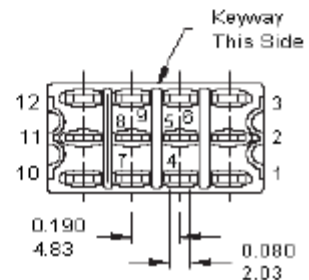
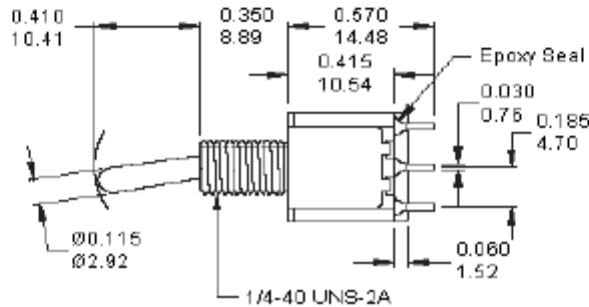
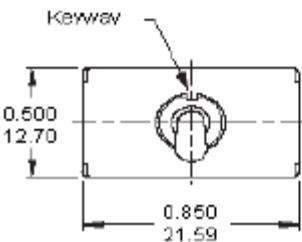
Pole Options
DPDT



**Pole Options
3PDT**



**Pole Options
4PDT**



Soldering Process:

- 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 : 5 ±1 seconds. (PCB is 1.6mm in thickness).

Soldering : Vapour Phase

Temperature Profile

Zone	Room Temperature	Time (seconds)
Pre-heat (A)	150°C	Minimum 120 seconds
Soak (B)	180°C to 200°C	Minimum 150 seconds
Peak (C)	200°C to 235°C	Minimum 30 seconds
Peak (D)	235°C to 260°C	Minimum 40 seconds
Peak (E)	260°C	Maximum 10 seconds

