

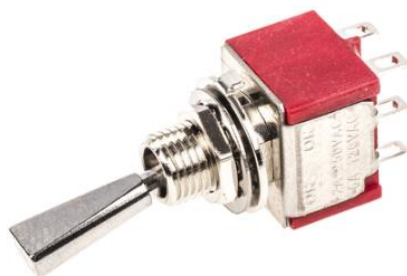


ENGLISH

Datasheet

Stock No: 394-419

# RS Pro Toggle Switch DPDT On-On, 5 A, Panel Mount



## Product Details

### Miniature Flat Lever Toggle Switches

Epoxy sealed terminals prevent contamination during soldering

Chrome Plated Brass actuator

Diallyl Phthalate (DAP) case (UL94V-0)

Silver contacts

### Approvals

UL E187490

### Toggle Switches

<b>Momentary function</b> (spring-loaded return):	The switch or contact breaker returns to its original position when the load is removed. E.g. bell push)
<b>Stay-put function:</b>	The switch or contact breaker remains (stop) in the new position after the load has been removed.









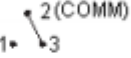
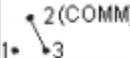

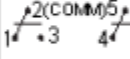
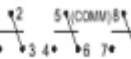
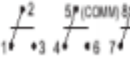
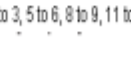
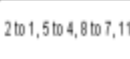
### Specifications:

Contact rating	: Dependent upon contact material.
Mechanical life	: 40,000 make and break cycles.
Maximum contact resistance	: 10m $\Omega$ .
Initial voltage	: 2 to 4V dc.
Current	: 10mA for both silver and gold plated contacts.
Minimum Insulation resistance:	: 1,000M $\Omega$ .
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			
	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	MOM				
3P	Q1131	1M31	On	None	On	2 to 3, 5 to 6, 8 to 9 	N/A	2 to 1, 5 to 4, 8 to 7 
4P	Q1141	1M41				2 to 3, 5 to 6, 8 to 9, 11 to 12 		2 to 1, 5 to 4, 8 to 7, 11 to 10 

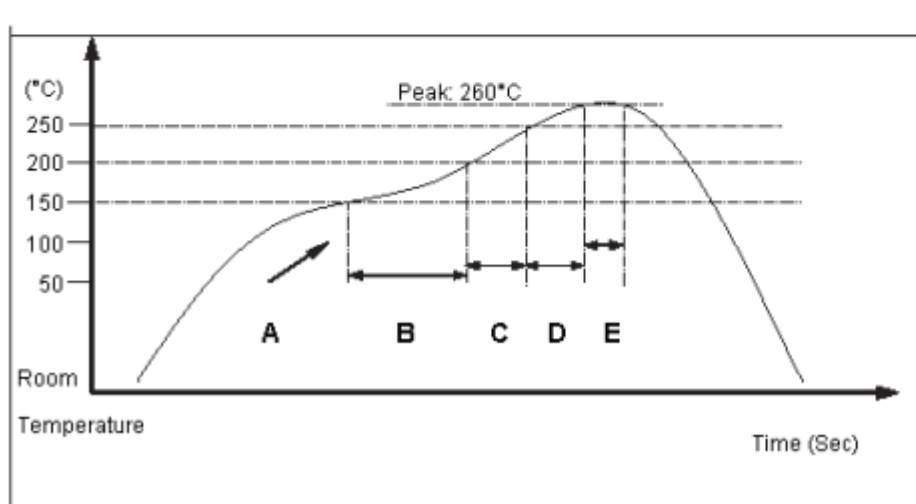
## Soldering Process:

- 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



Model No	Actuator	Bushing	Terminations	Contact Material	Seal
1 M S 1	T 2	B 4	V 2	R	E
Model No	Actuator	Bushing	Terminations	Contact Material	Seal
1MS1 SP On-None-On	T1 10.41 high	B1 8.89 high, keyway (thd std)	M1 Solder Lug	Q Silver	E EPOXY (std)
1MS2 SP On-None-Mom	T2 5.08 high	B2 8.89 high, keyway (non-thd)	M2 PC thru-hole	R Gold	N NO EPOXY
1MS3 SP On-Off-On	T3 13.97 high	B3 7.10 high, keyway (thd)	M3 Quick Connect	G Gold, pure-tin	
1MS4 SP Mom-Off-Mom	T4 16.26 high	B4 7.10 high, keyway (non-thd)	M5-1 18.70 high, wire wrap	S Silver, pure-tin	
1MS5 SP On-Off-Mom	T5 21.34 high	B5 7.52 high, flat (torque)	M5-2 24.20 high, wire wrap	C Gold over silver	
1MD1 DP On-None-On	T6 Flatted, anti-rotation	B6 8.00 high, keyway (torque)	M5-3 10.55 high, wire wrap	K Gold over silver, pure-tin	
1MD2 DP On-None-Mom	12.30 high	B7 8.89 high, flat (thd std)	M5-4 26.97 high, wire wrap		
1MD3 DP On-Off-On	T81 Flatted, anti-rotation	B8 8.89 high, keyway (metric thd)	M6 Right angle, PC thru-hole		
1MD4 DP Mom-Off-Mom	21.0 high	B11 7.52 high, flat (splash proof)	M6N Right angle, snap-in, PC thru-hole		
1MD5 DP On-Off-Mom	T82 Lower Handle with Cap	B12 7.55 high, keyway (thd std)	M7 Vertical right angle, PC thru-hole		
1MD6 DP On-On-On	13.49 high	B13 11.38 high, keyway (15/32 bushing)	VS2 11.68 high, V-bracket		
1MD7 DP Mom-On-Mom	T83 Flatted, anti-rotation	B14 11.90 high, flat (splash proof)	V2N 11.68 high, snap-in V-bracket		
1MD8 DP On-On-Mom	6.35 high	B15 7.55 high, flat (thd std)	VS3 16.00 high, V-bracket		
1M31 3P On-Non-On	T7 12.37 high, 15/32 bushing	B16 7.55 high, flat (non-thd)	VS4 11.68 high, V-bracket		
1M32 3P On-Non-Mom	T8 17.56 high, 15/32 bushing	B17 3.50 high, keyway	VS5 16.00 high, V-bracket		
1M33 3P On-Off-On	T9 Plastic, 21.3 high	B18 11.38 high, keyway (15/32 bushing)			
1M34 3P Mom-Off-Mom	TA 26.30 high level handle with cap, 15/32 Bushing	B20 11.38 high, keyway (15/32 bushing)			
1M35 3P On-Off-Mom		B25 8.00 high, keyway, locking lever (thd)			
1M41 4P On-Non-On	T11 Plastic, 12.2 high	B26 8.00 high, keyway, locking lever (non-thd)			
1M42 4P On-Non-Mom	TL1 Locking lever 16.00 high				
1M43 4P On-Off-On	TL2 Locking lever 16.26 high				
1M44 4P Mom-Off-Mom	TL3 Locking lever 17.28 high				
1M45 4P On-Off-Mom					
1M48 4P On-On-On					
1M47 4P Mom-On-Mom					
1M48 4P On-On-Mom					

**Pole Options**  
**DPDT**

