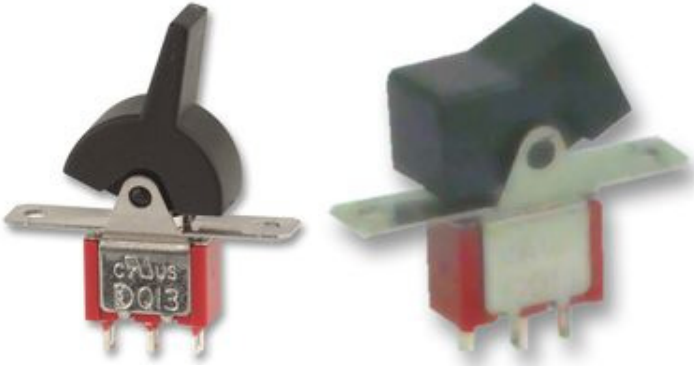


Miniature Rocker and Paddle Switches



R2

R1



Specifications:

Contact rating : 5A with resistant load at 120V ac or 28V dc
 : 2A with resistant load at 250V ac.
 Mechanical life : 40,000 make-and-break cycles.
 Maximum contact resistance : 10mΩ initial at 2 to 4V dc 100mA for silver plated contacts.
 Minimum insulation resistance : 1000MΩ.
 Dielectric strength : 1000Vrms at sea level.
 Operating temperature : -30°C to 85°C.

Materials

Case : Diallyl phthalate (DAP).
 Actuator : Nylon, black standard.
 Bushing : Brass, nickel plated.
 Housing : Stainless steel.
 Switch support : Brass, tin-plated.
 Terminal/contact : Brass with silver plated.

Switch Function

Number of Poles	Model Number	Switch Function			Connected Terminals/Schematic		
		Position 1	Position 2	Position 3	Position 1	Position 2	Position 3
SP	3MS1	On	None	On		N/A	2 - 1
	3MS2			MOM			
	3MS3		On				
	3MS4	MOM	Off	2 (Comm)		Open	
	3MS5	On					
DP	3MD1	On	None	On		N/A	2 - 1, 5 - 4
	3MD2			MOM			
	3MD3		On				
	3MD4	MOM	Off	2 (Comm)		Open	
	3MD5	On					

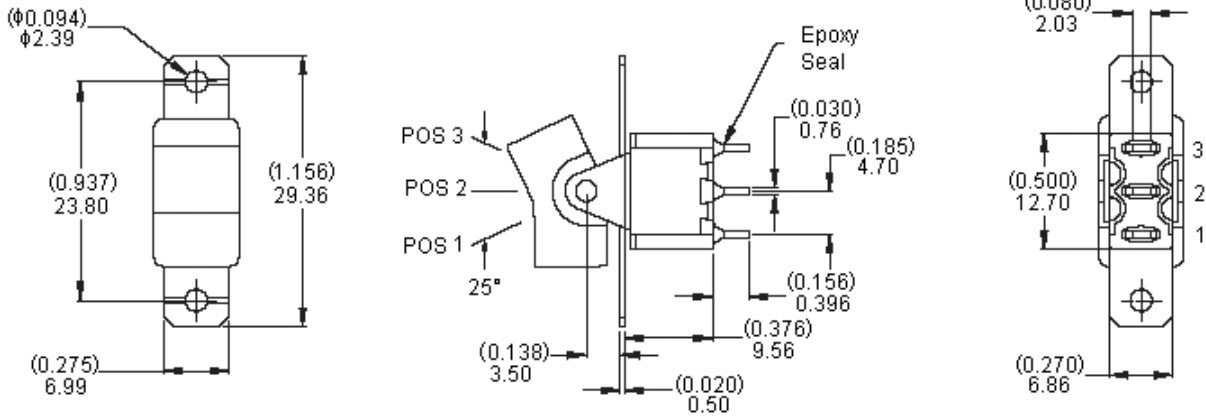
MOM = Momentary

Miniature Rocker and Paddle Switches



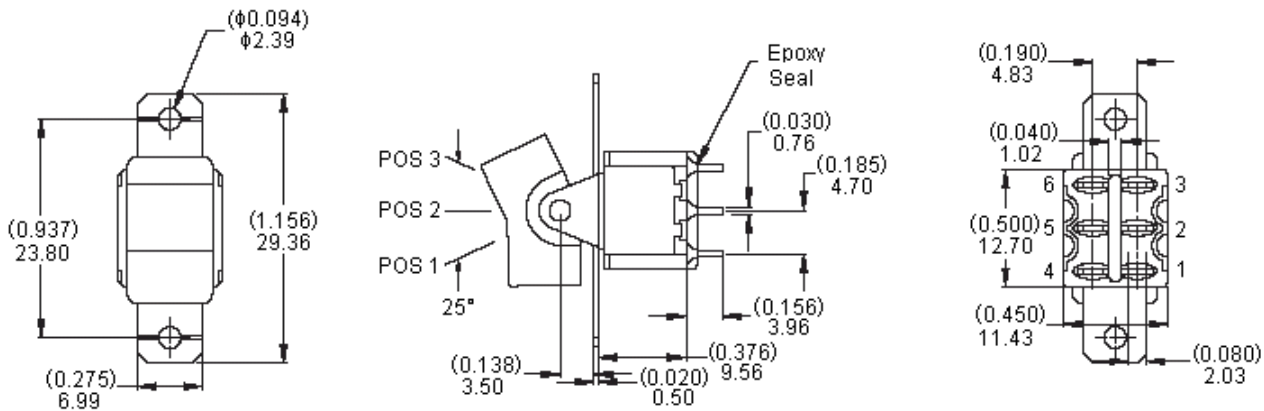
Pole Options

3MS1



Dimensions: Millimetres (Inches)

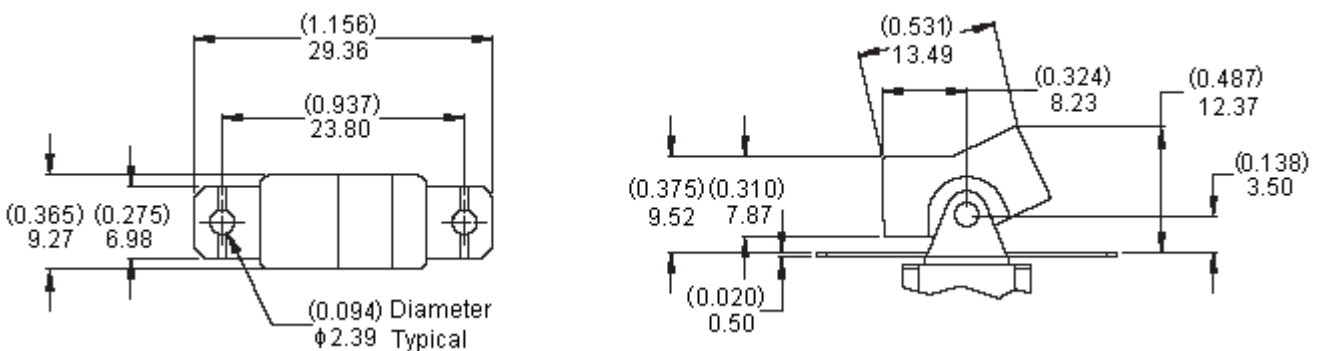
3MD1



Dimensions: Millimetres (Inches)

Actuator Options for Panel Mount Only

R1



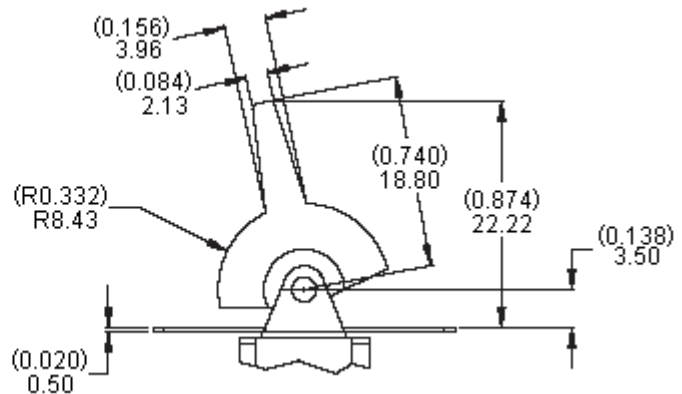
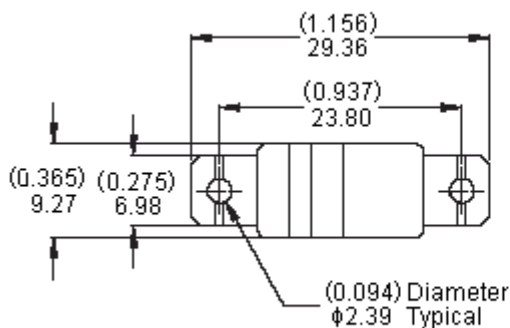
Dimensions: Millimetres (Inches)

Miniature Rocker and Paddle Switches



Actuator Options for Panel Mount Only

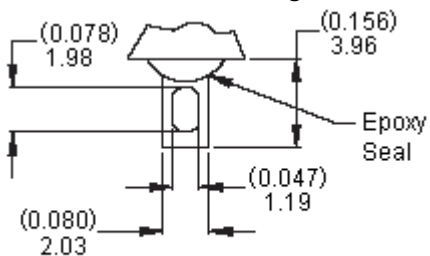
R2



Dimensions: Millimetres (Inches)

Termination Options

M1 Solder Lug



Thickness (0.030) 0.76

Dimensions: Millimetres (Inches)

Soldering Processes

Manual soldering : Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

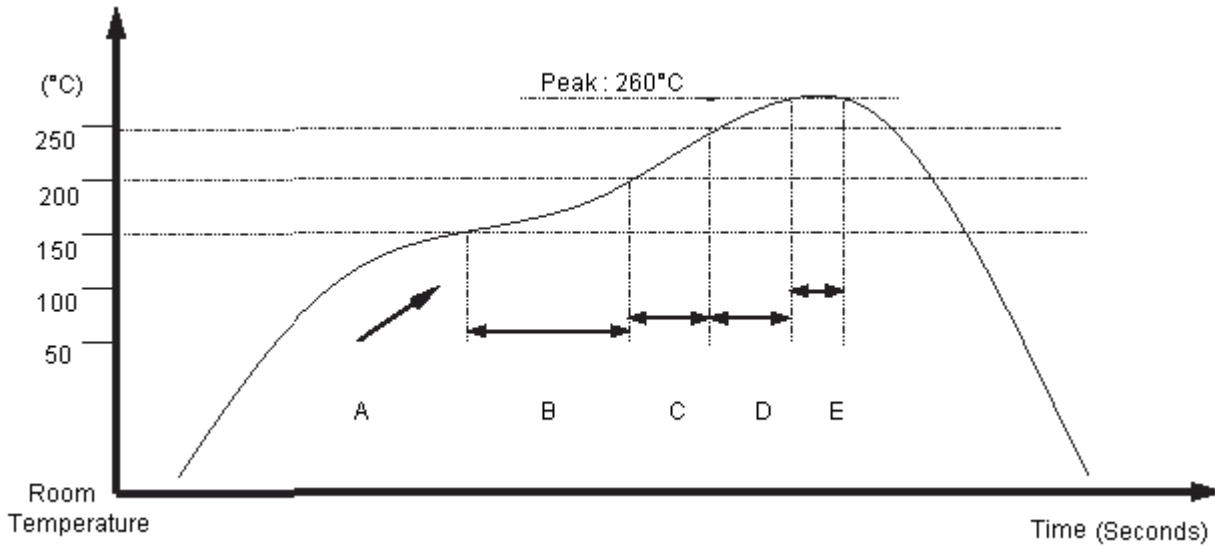
Wave soldering : Recommended soldering temperature : 260 ±5°C.
Duration of solder immersion : 5 ±1 seconds (PCB is 1.6mm in thickness).

Soldering : Vapour phase.

Temperature Profile

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

Miniature Rocker and Paddle Switches



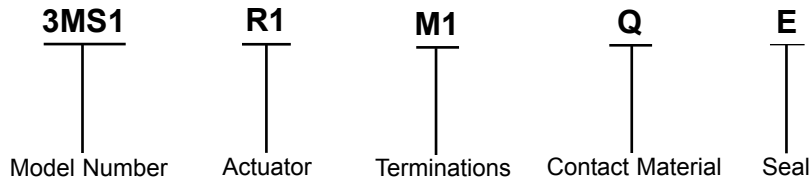
Part Number Table

Description	Part Number
Switch, SPDT	3MS1R1M1QE
Switch, DPDT	3MD1R1M1QE
Switch, SPDT	3MS1R2M1QE
Switch, DPDT	3MD1R2M1QE
Switch Body, SPDT	3MS1M1QE
	3MS3M1QE
	3MS4M1QE
	3MS5M1QE
	3MS2M1QE
Switch Body, DPDT	3MD1M1QE
	3MD3M1QE
	3MD4M1QE
	3MD5M1QE
	3MD2M1QE

Miniature Rocker and Paddle Switches



Part Number Explanation:



Model Number

: 3MS1 = SP On-None-On, 3MD1 = DP On-None-On, 3MS3 = SP On-Off-On, 3MS4 = SP MOM-Off-MOM, 3MS5 = SP On-Off-MOM, 3MS2 = SP On-None-MOM, 3MD3 = DP On-Off-On, 3MD4 = DP MOM-Off-MOM, 3MD5 = DP On-Off-MOM and 3MD2 = DP On-None-MOM.

Actuator

: R1 = 13.49 Long Rocker - Support and R2 = Lever - Support.

Terminations

: M1 = Solder Lug.

Contact Material

: Q = Silver.

Seal

: E = Epoxy (std).

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