

# Pushbutton Switches

## Sub-Miniature

**multicomp** PRO

**RoHS  
Compliant**

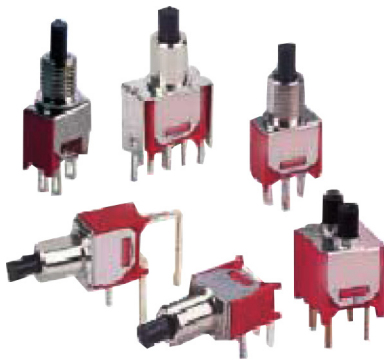
### Specifications

Contact Rating : Dependent upon contact material  
 Mechanical Life : 50,000 make-and-break cycles  
 Max. Contact Resistance : 20mΩ initial at 2V DC ~ 4V DC  
 100mA for both silver and gold plated contacts

Min. Insulation Resistance : 1,000MΩ  
 Dielectric Strength : 1,000V rms at sea level  
 Operating Temperature : -30°C to 85°C

#### Materials:

Case : Diallyl phthalate (DAP)  
 Plunger : Thermoplastic Polyester-black  
 Bushing : Brass, nickel plated  
 Housing : Stainless steel  
 Contact : Silver or gold plated  
 Terminal : Brass, silver plated  
 Terminal support : Brass, tin plated



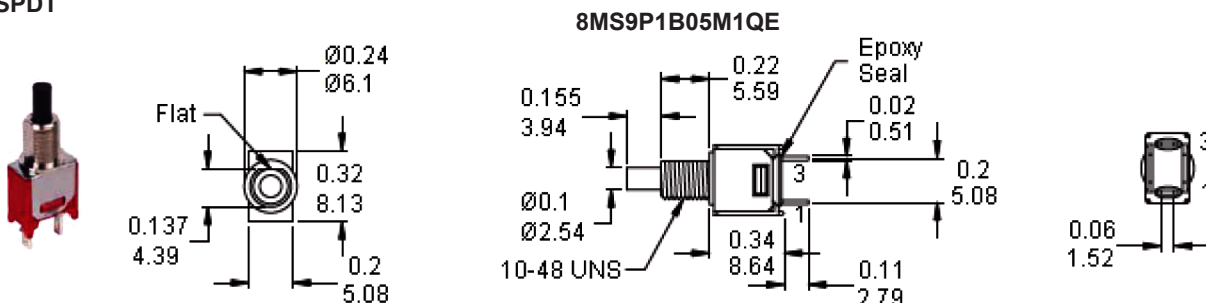
### Switch Function

Number of Poles	Model Numbers	Switch Function		Connected Terminals/Schematic	
		Position 1	Position 2	Position 1	Position 2
SP	8BS8	ON	MOM		
	8BS9	OFF	MOM	Open	
DP	8MD9	OFF	MOM	Open	

MOM = Momentary

### Pole Options

SPDT



Dimensions : Inches (Millimetres)

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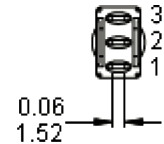
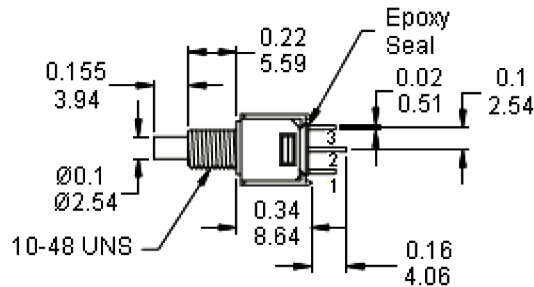
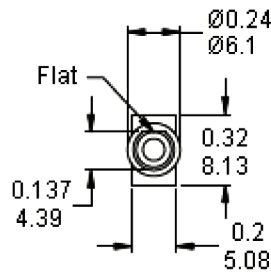
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SPDT

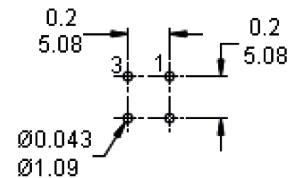
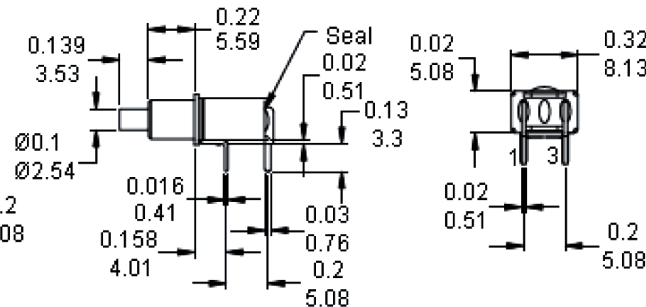
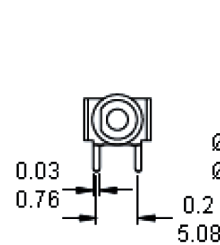
8MS8P1B05M1QES



SPST

8MS9P1B06M6RES

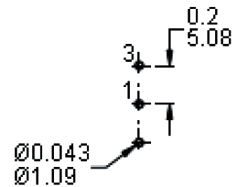
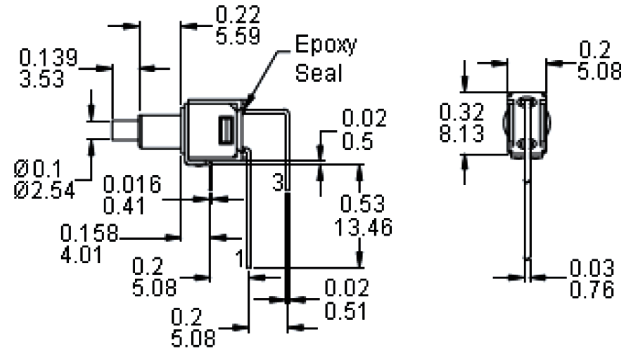
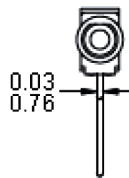
PC Mounting



SPST

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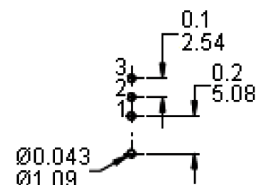
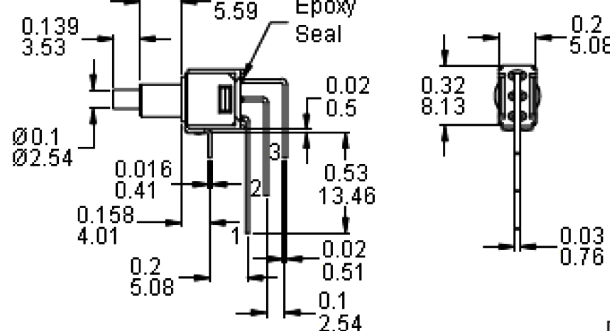
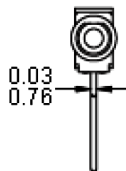
PC Mounting



SPDT

8MS8P1B06M7QES

PC Mounting



Dimensions : Inches (Millimetres)

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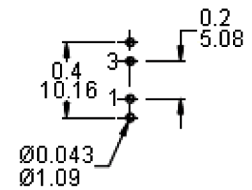
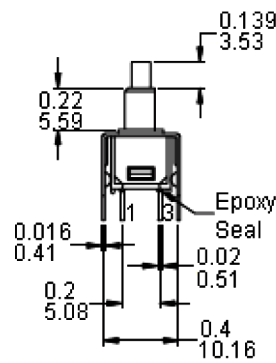
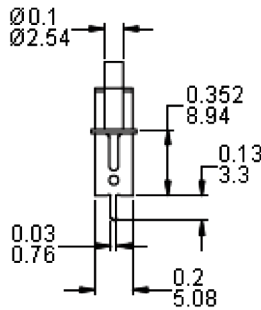
## Sub-Miniature

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SPST

8MS9P1B06VS2QES

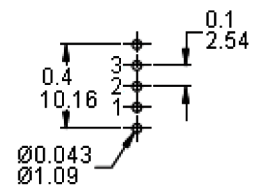
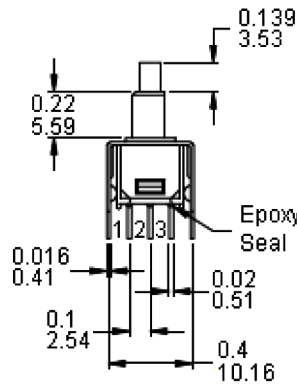
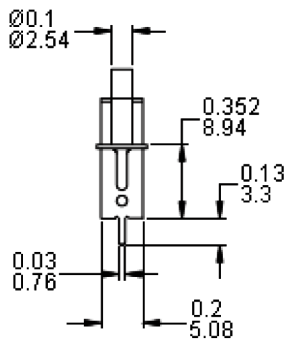
PC Mounting



SPDT

8MS8P1B06VS2QES

PC Mounting



Dimensions : Inches (Millimetres)

### Switch Function

Number of Poles	Model Numbers	Switch Function		Connected Terminals/Schematic	
		Position 1	Position 2	Position 1	Position 2
SP	8MSL	ON	ON	2-1 NC 1 • 2 (Comm) • 3 NO	2-3 NC 1 • 2 (Comm) • 3 NO

MOM = Momentary

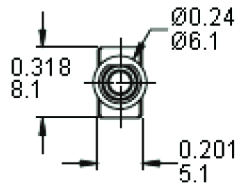
# Pushbutton Switches

## Sub-Miniature

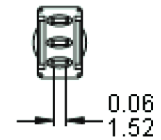
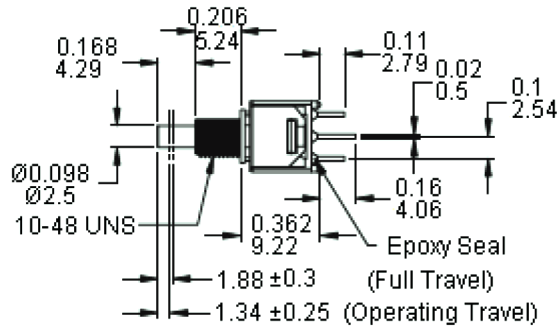
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### Pole Options

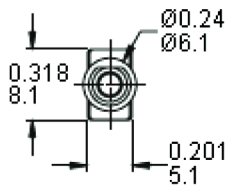
#### SPDT



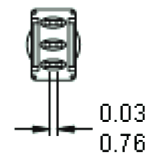
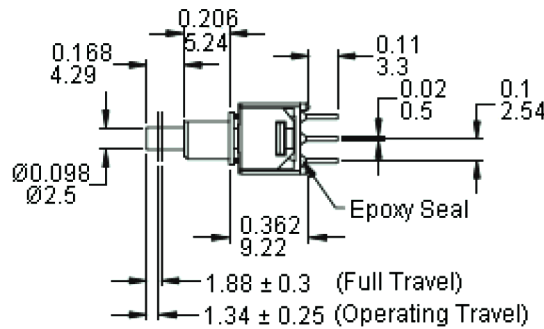
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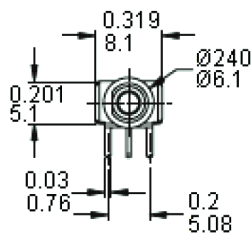
#### SPDT



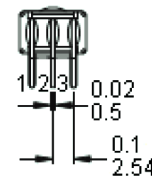
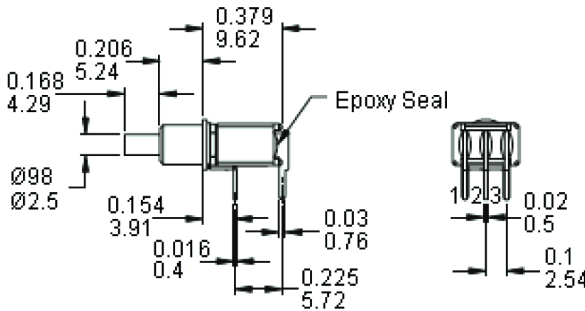
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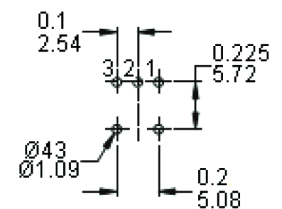
#### SPDT



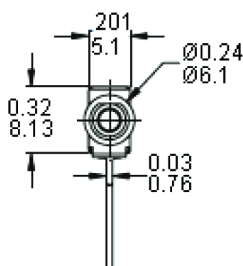
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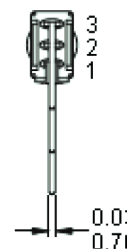
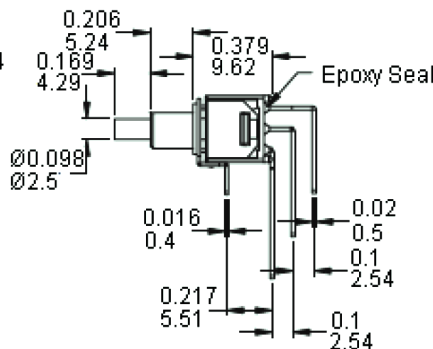
#### PC Mounting



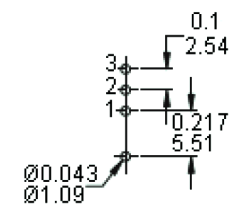
#### SPDT



#### 8MSLP1B06M7QES



#### PC Mounting



Dimensions : Inches (Millimetres)

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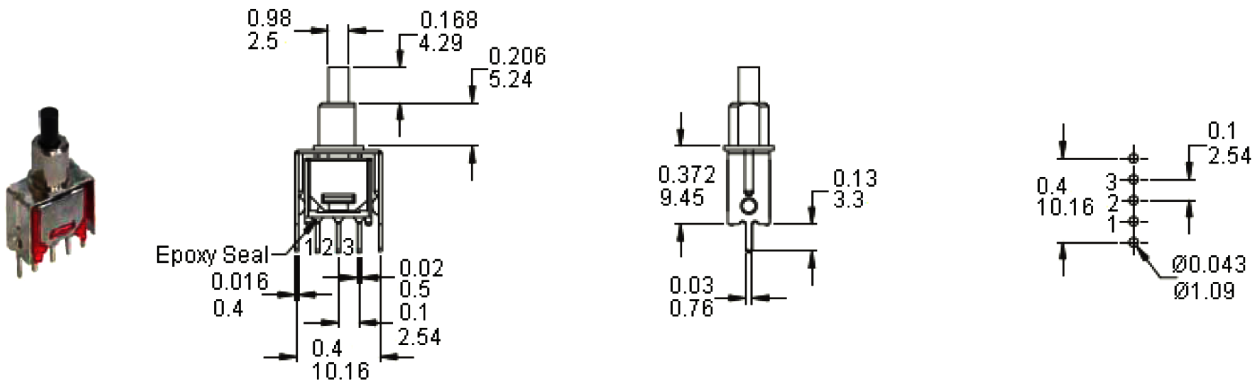
## Sub-Miniature

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SPDT

8MSLP1B06VS2QES

PC Mounting

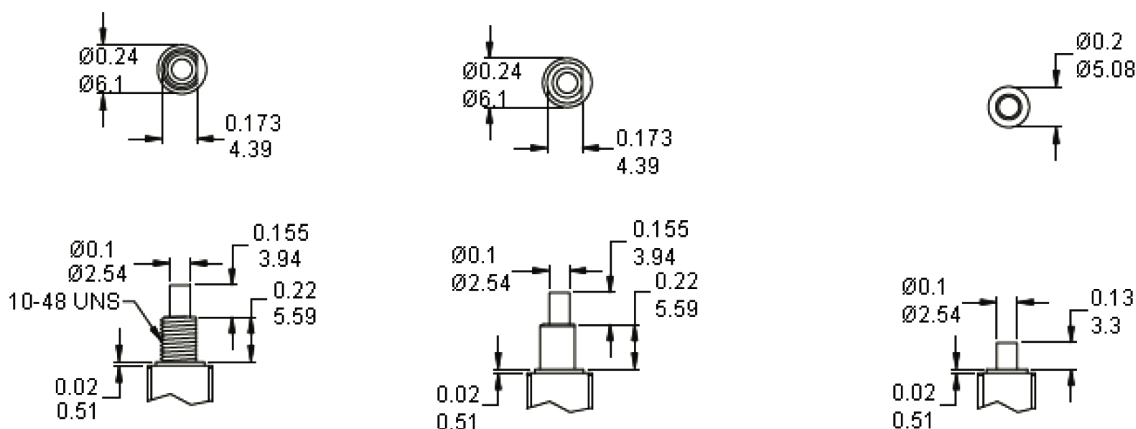


### Bushing Options

B05 THD

B06 NON-THD

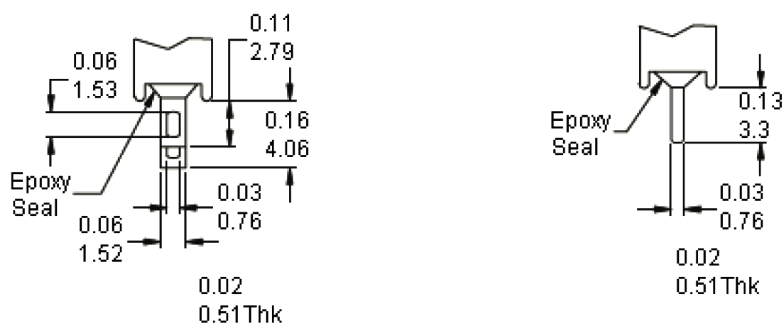
B10



### Termination Options

M1 Solder LUG

M2 PC Mounting



### Other Termination Options

M6 = Right Angle PC Mount

M7 = Right Angle PC Mount

VS2 = Vertical Bracket PC Mount

Dimensions : Inches (Millimetres)

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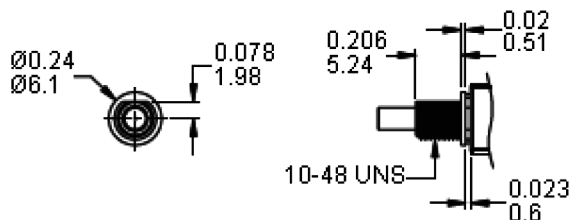
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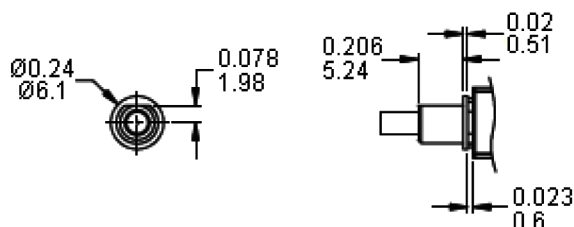
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### Bushing Options

**B05 THD**

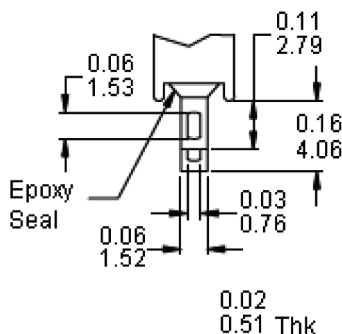


**B06 NON-THD**

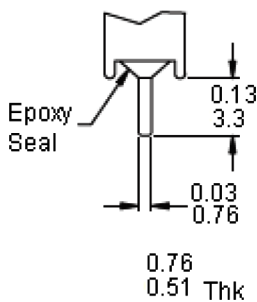


### Termination Options

**M1 Solder LUG**



**M2 PC Mounting**



Dimensions : Inches (Millimetres)

### Other Termination Options

M6 = Right Angle PC Mount

M7 = Right Angle PC Mount

VS2 = Vertical Bracket PC Mount

### Contact Material Options

	Contact Plating	Terminal Plating	Ratings
Q	Silver	Q = Silver	3 Amperes with resistant load at 120V AC or 28V DC 1 Ampere with resistant load at 250V AC
R	Gold	R = Gold	0.4 Volt - Amperes (VA) maximum at 20V maximum (AC or DC)

### 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 : Maximum 5 seconds (PCB is 1.6mm in thickness)

Soldering : Vapour phase

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# Pushbutton Switches

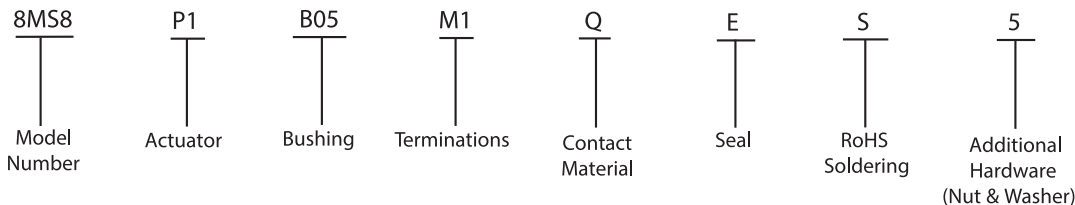
## Sub-Miniature

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### Part Number Table

Description	Part Number
Switch, SPDT, Off-MOM, Solder	8MS9P1B05M1QE
Switch, SPDT, On-MOM, Solder	8MS8P1B05M1QES
Switch, DPDT, Off-MOM, PCB	8MD9P1B10M2RES
Switch, SPST, Off-MOM, Right / Angle	8MS9P1B06M6RES
Switch, DPDT, Off-MOM, Right / Angle	8MD9P1B10M6RES
Switch, SPST, Off-MOM, Vert Right / Angle	8MS9P1B06M7QES
Switch, SPDT, On-MOM, Vert Right / Angle	8MS8P1B06M7QES
Switch, SPST, Off-MOM, V-Bracket	8MS9P1B06VS2QES
Switch, SPDT, On-MOM, V-Bracket	8MS8P1B06VS2QES
Switch, SPDT, Off-MOM, Solder	8MS9AP122M1QES
Switch, SPDT, On-On, Solder	8MSLP1B05M1QES-5
Switch, SPDT, On-On, PCB	8MSLP1B06M2QES
Switch, SPDT, On-On, Right / Angle	8MSLP1B06M6RES
Switch, SPDT, On-On, Vert Right / Angle	8MSLP1B06M7QES
Switch, SPDT, On-On, V-Bracket	8MSLP1B06VS2QES

### Part Number Explanation



- Model Number : 8MS8 = On-Mom, 8MS9 = Off-Mom and 8MSL = On-On
- Actuator : P1 = 3.94 high
- Bushing : B05 = 5.59 high, flat (thd), B06 = 5.59 high, flat (non-thd) and B10 = 3.30 high
- Frame Colour / Actuator Colour : 22 = Black (Standard)
- Terminations : M1 = Solder Lug, M2 = PC thru-hole, M6 = Right angle, PC thru-hole, M7 = Vertical right angle, PC thru-hole and VS2 = 8.94 high, V-bracket
- Contact Material : Q = Silver, R = Gold
- Seal : E = Epoxy (std)
- RoHS Soldering : S = RoHS and Lead Free

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