

Pushbutton Switches

Sub-Miniature



Specifications:

Contact rating	: Dependent upon contact material
Mechanical life	: 50,000 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)
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 Number	Switch Function		Connected Terminals / Schematic	
		Position 1	Position 2	Position 1	Position 2
SP	8BS8	ON	MOM	2-1 	2-3
	8BS9	OFF	MOM	Open	1-3
DP	8MD9	OFF	MOM	Open	1-3, 4-6

MOM = Momentary

Pushbutton Switches

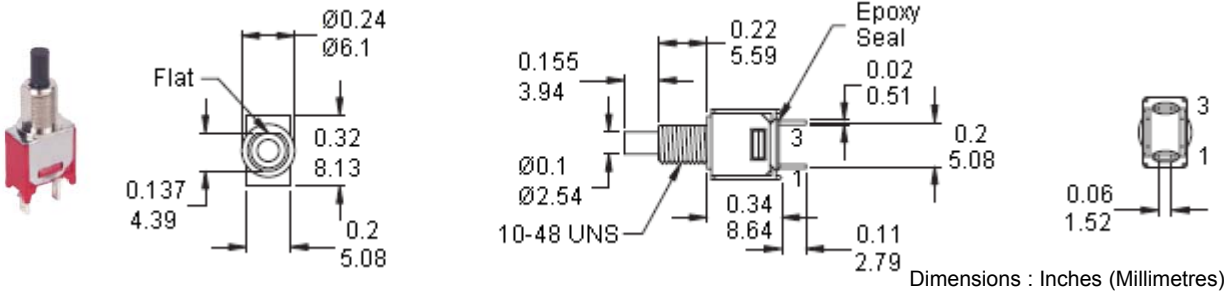


Sub-Miniature

Pole Options

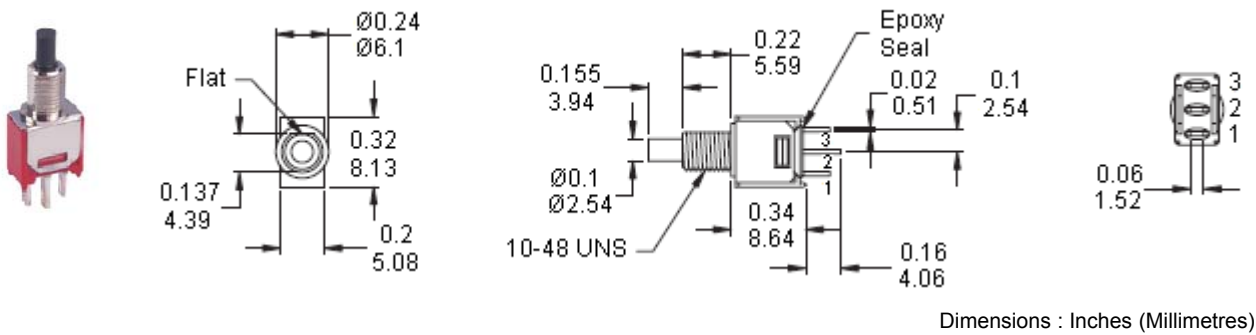
SPDT

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SPDT

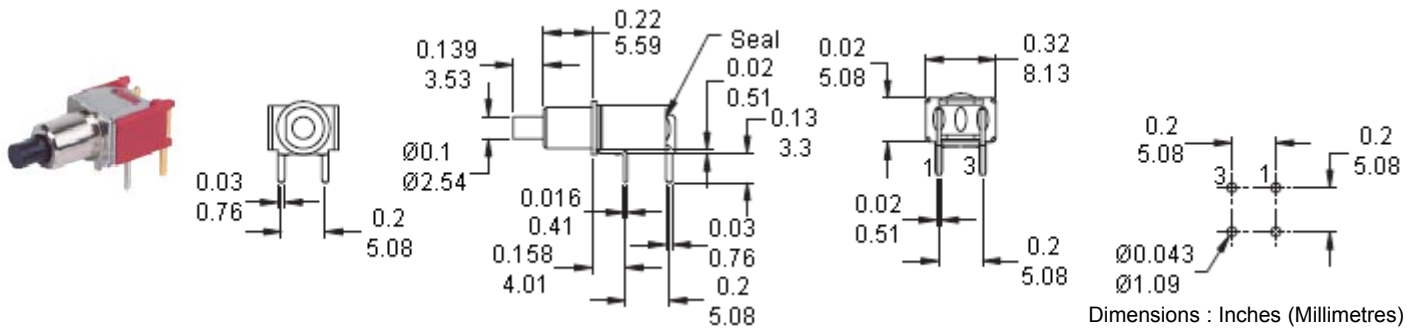
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SPST

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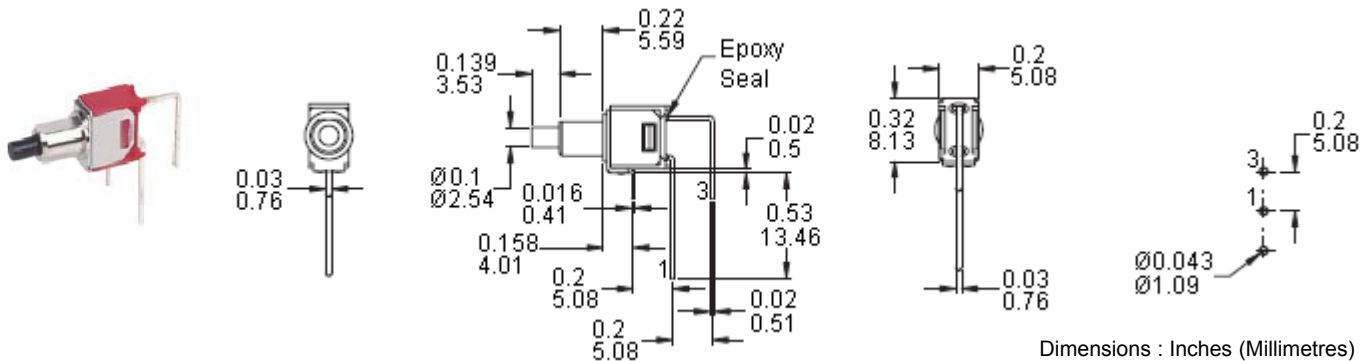
PC Mounting



SPST

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PC Mounting

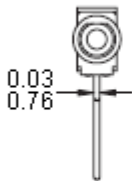


Pushbutton Switches

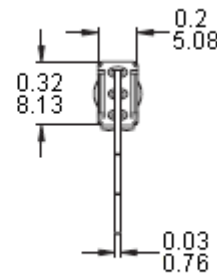
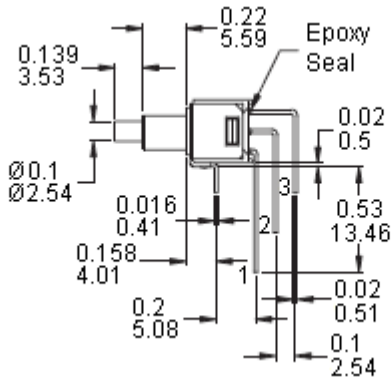
Sub-Miniature



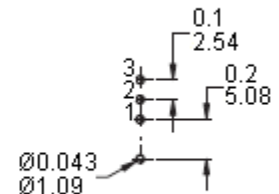
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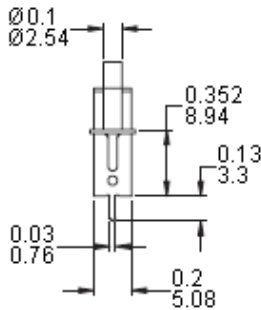


PC Mounting

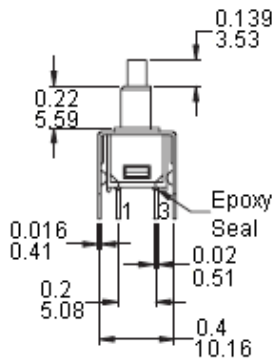


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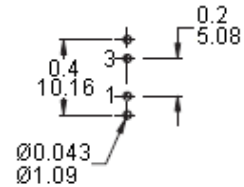
SPST



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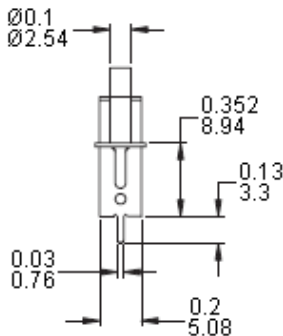


PC Mounting

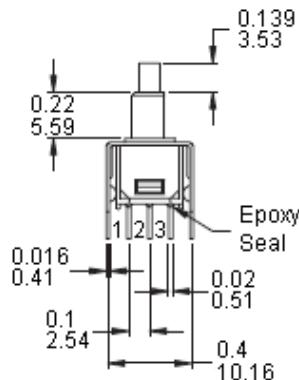


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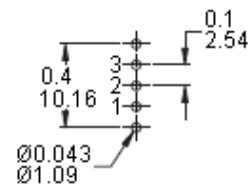
SPDT



8MS8P1B06VS2QES



PC Mounting



Dimensions : Inches (Millimetres)

Switch Function

Number of Poles	Model Number	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

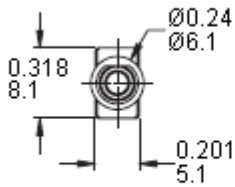
Pushbutton Switches



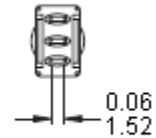
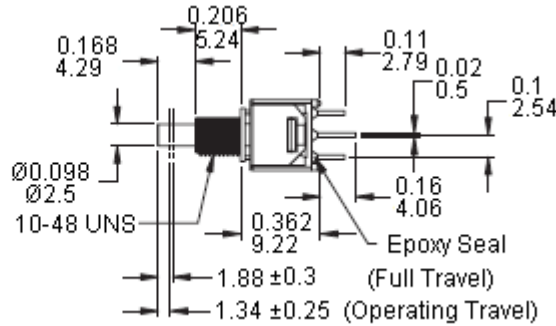
Sub-Miniature

Pole Options

SPDT

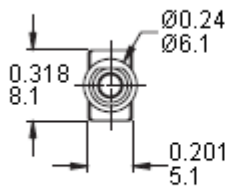


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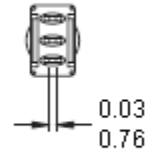
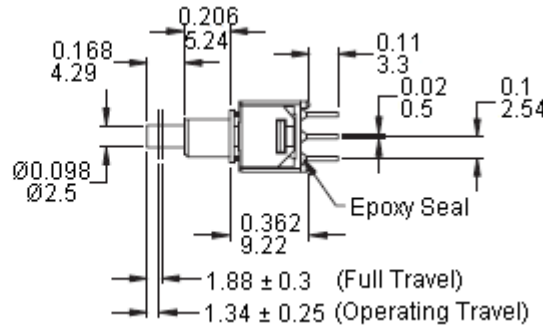


Dimensions : Inches (Millimetres)

SPDT

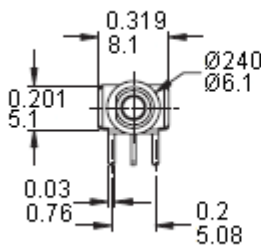


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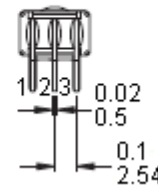
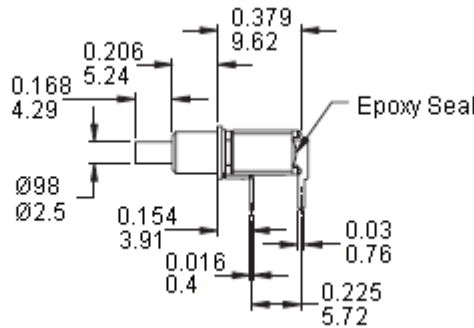


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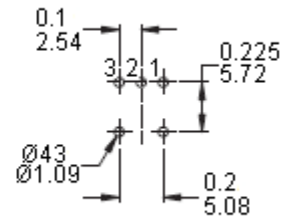
SPDT



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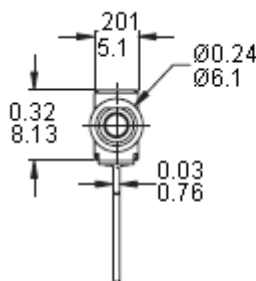


PC Mounting

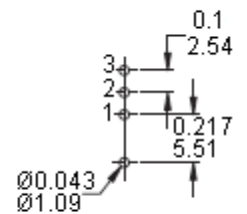
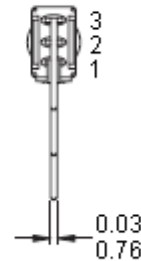
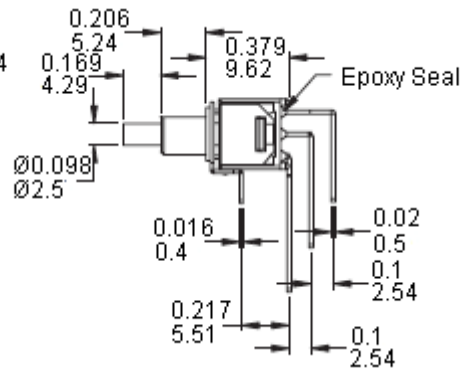


Dimensions : Inches (Millimetres)

SPDT



8MSLP1B06M7QES



Dimensions : Inches (Millimetres)

Pushbutton Switches

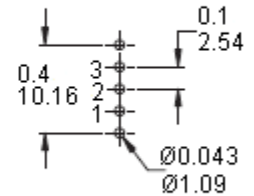
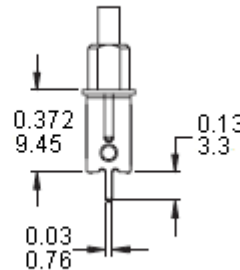
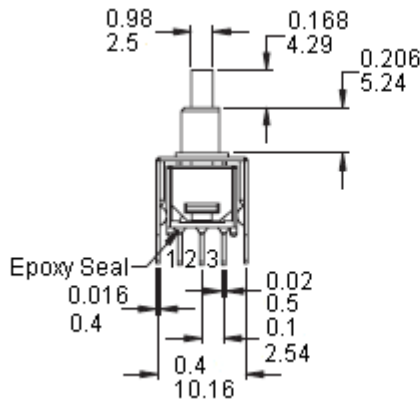
Sub-Miniature



SPDT

8MSLP1B06VS2QES

PC Mounting



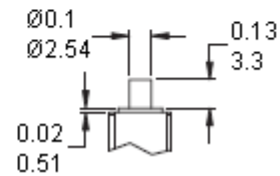
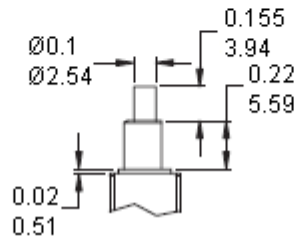
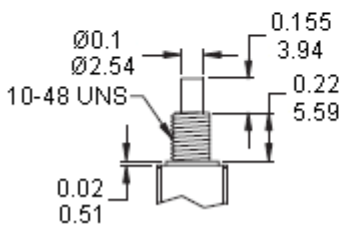
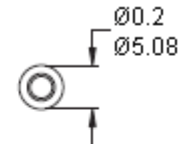
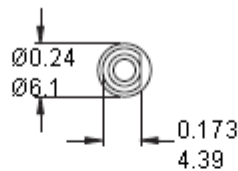
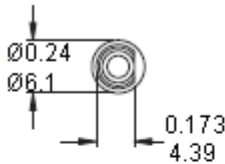
Dimensions : Inches (Millimetres)

Bushing Options

B05 THD

B06 NON-THD

B10

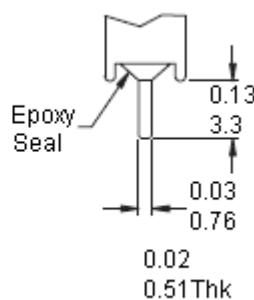
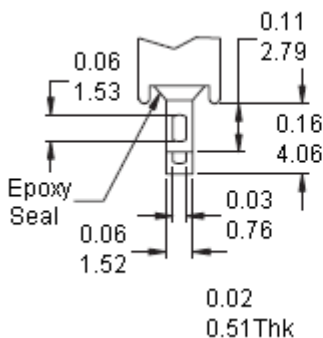


Dimensions : Inches (Millimetres)

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



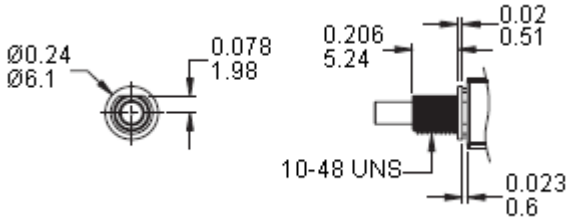
Pushbutton Switches



Sub-Miniature

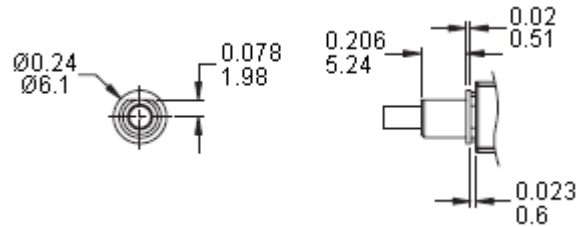
Bushing Options

B05 THD



Dimensions : Inches (Millimetres)

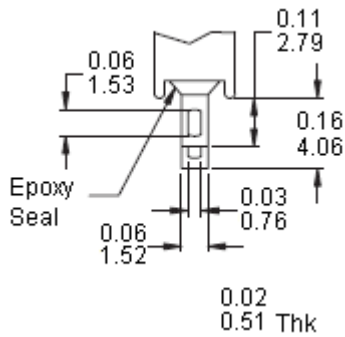
B06 NON-THD



Dimensions : Inches (Millimetres)

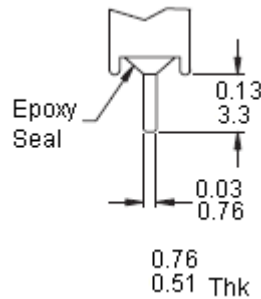
Termination Options

M1 Solder LUG



Dimensions : Inches (Millimetres)

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 120 V ac or 28 V dc 1 Ampere with resistant load at 250 V ac
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 seconds while applying solder
- Wave soldering : Recommended soldering temperature : 260 ±5°C
- Duration of solder immersion : Maximum 5 seconds (PCB is 1.6 mm in thickness)

Soldering : Vapour phase



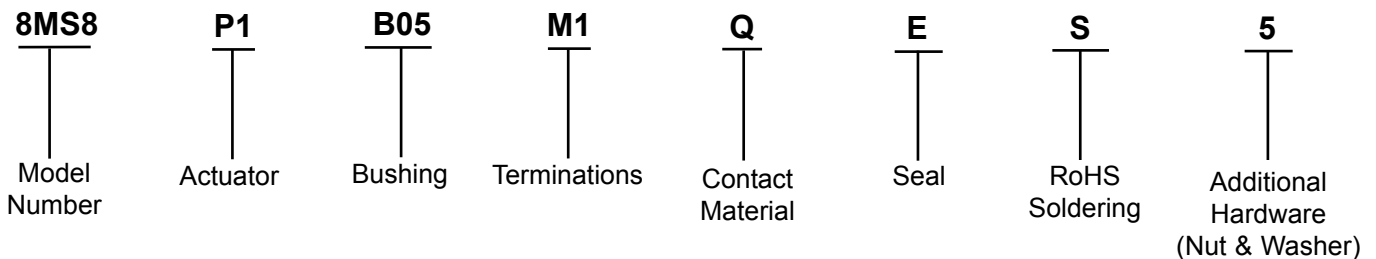
Pushbutton Switches

Sub-Miniature

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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