

# 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 and bushing	: Glass filled nylon 4/6, flame retardant, heat stabilized
Plunger	: Thermoplastic Polyester with internal O-ring seal
Switch support	: Brass tin plated
Contact / terminals	: Silver or gold plated copper alloy

### 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 NC 1 * 2 (Comm) * 3 NO	2-3 NC 1 * 2 (Comm) * 3 NO
	8BS9	OFF	MOM	Open	1-3 

MOM = Momentary

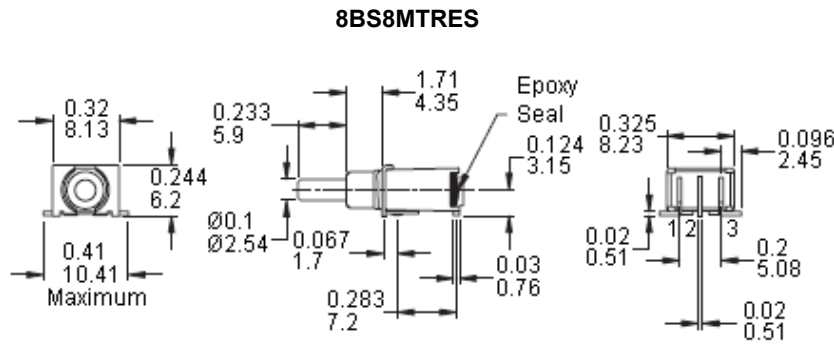
# Pushbutton Switches



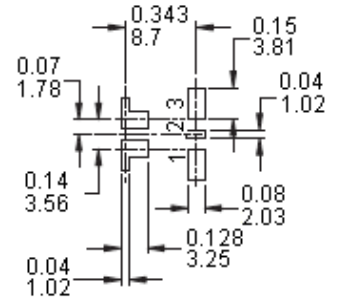
## Sub-Miniature

### Pole Options

#### SPDT

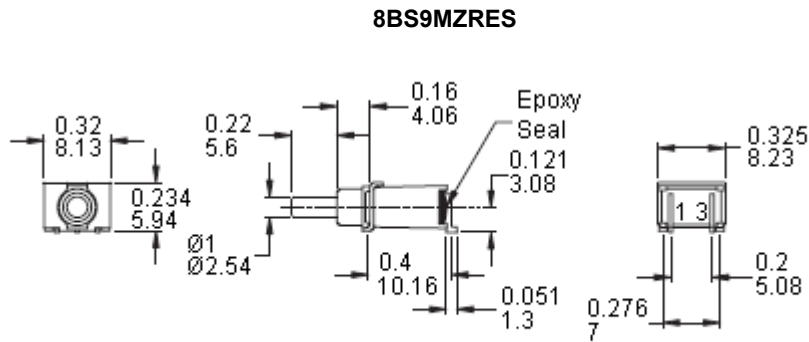


#### PC Mounting

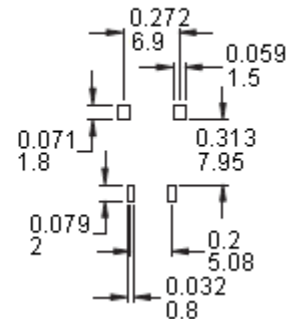


Dimensions : Inches (Millimetres)

#### SPST



#### PC Mounting



Dimensions : Inches (Millimetres)

### Contact Material Options

	Contact Plating	Terminal Plating	Ratings
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 and IR-reflow soldering can be applied

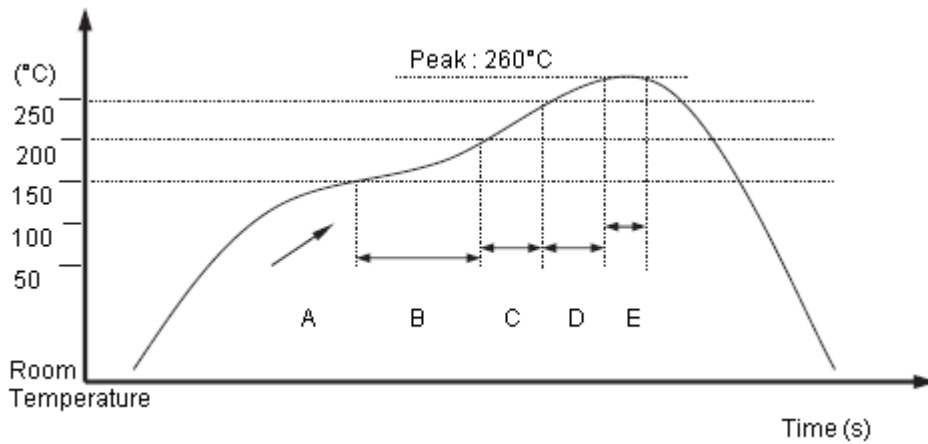
### Temperature Profile

Zone	Room Temperature	Time (s)
Pre-heat (A)	150°C	Min. 120 s
Soak (B)	180°C to 200°C	Min. 150 s
Peak (C)	200°C to 235°C	Min. 30 s
Peak (D)	235°C to 260°C	Min. 40 s
Peak (E)	260°C	Max. 5 s

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### Temperature Profile



### Part Number Table

Description	Part Number
Switch, SPDT, On-MOM, SMD, Sealed	8BS8MTRES
Switch, SPST, On-MOM, SMD, Right / Angle, Sealed	8BS9MZRES

### Part Number Explanation:

**8BS8**

Model  
Number

**MT**

Terminations

**R**

Contact  
Material

**E**

Seal

**S**

RoHS  
Soldering

- Model Number** : 8BS8 = On-Mom, 8BS9 = On-Mom  
**Terminations** : MT = (STD) Right angle, surface mount, MZ = (STD)  
**Contact Material** : R = Gold  
**Seal** : E = Epoxy (std)  
**RoHS Soldering** : S = RoHS and Lead Free

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