

# Pushbutton Switches

## Ultra Miniature



### Specifications:

Maximum contact rating	: 0.4 VA at 20 V AC or DC
Mechanical life	: 40,000 make-and-break cycles
Contact resistance	: Below 100mΩ typical initial at 2 to 4 V DC, 100mA
Minimum insulation resistance	: 500MΩ
Dielectric strength	: 500Vrms at sea level
Operating temperature	: -30°C to +85°C
Degree of protection	: IP67

### Materials:

Housing and Base	: Glass filled nylon 6/6 or 4/6, flame retardant, heat stabilized
Actuator	: Glass filled nylon 6/6, flame retardant, heat stabilized with standard internal o-ring seal
Switch Support	: Steel, white nickel plate
Contacts / Terminals	: Silver plate plated copper alloy

### Switch Function

Number of Poles	Model Number	Switch Function		Connected Terminals / Schematic	
		Position 1	Position 2	Position 1	Position 2
SP	MC8US8	ON	MOM	5-6 NC 4* → 5 (Comm) → 6 NO	5-4 NC 4* → 5 (Comm) → 6 NO
	MC8US9	OFF	MOM	Open	4-6 4 ↑ ↑ 6
DP	MC8UD8	ON	MOM	2-3, 5-6 NC 1* → 2 (Comm) → 3 NO NC 4* → 5 → 6 NO	2-1, 5-4 NC 1* → 2 (Comm) → 3 ND NC 4* → 5 → 6 NO
	MC8UD9	OFF	MOM	Open	1-3, 4-6 1 ↑ ↑ 3 4 ↑ ↑ 6

MOM = Momentary

# Pushbutton Switches



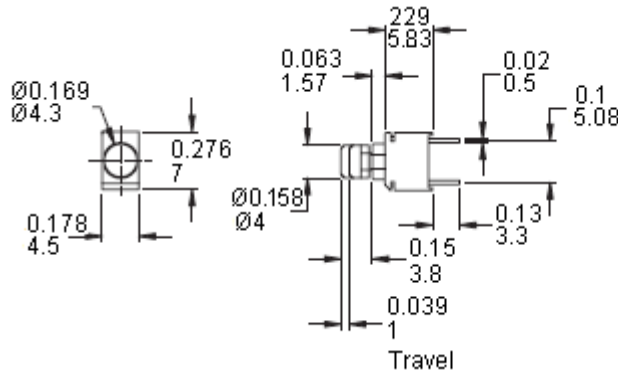
## Ultra Miniature

### Pole Options

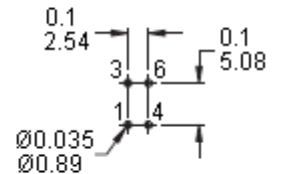
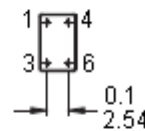
#### SPDT



MC8US9R2A2M2RES



PC Mounting

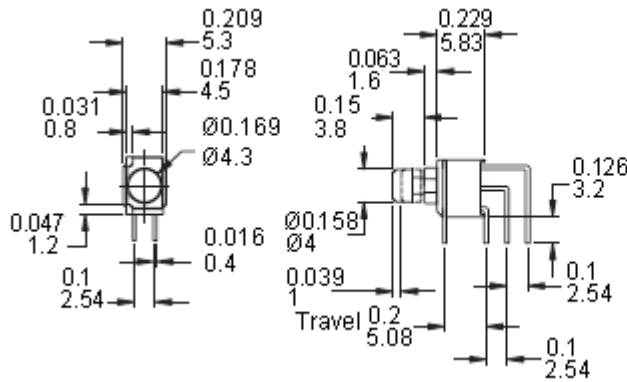


Dimensions : Inches (Millimetres)

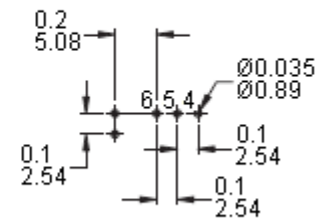
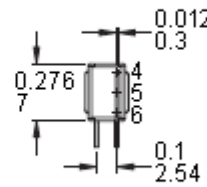
#### SPDT



MC8US8WR2C2M7RES



PC Mounting

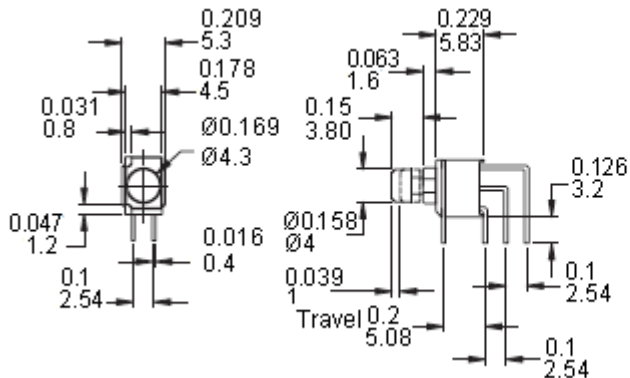


Dimensions : Inches (Millimetres)

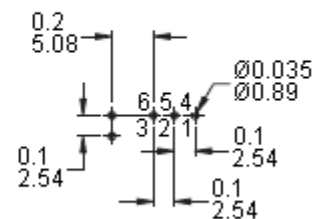
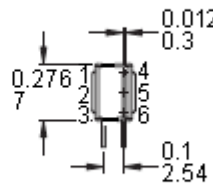
#### DPDT



MC8UD8WR2C2M7RES



PC Mounting



Dimensions : Inches (Millimetres)

### Soldering Process:

Wave soldering : Recommended soldering temperature : 260  $\pm$ 5°C  
 : Duration of solder immersion : Maximum 5 seconds (PCB is 1.6mm in thickness)

### Soldering : Vapour phase

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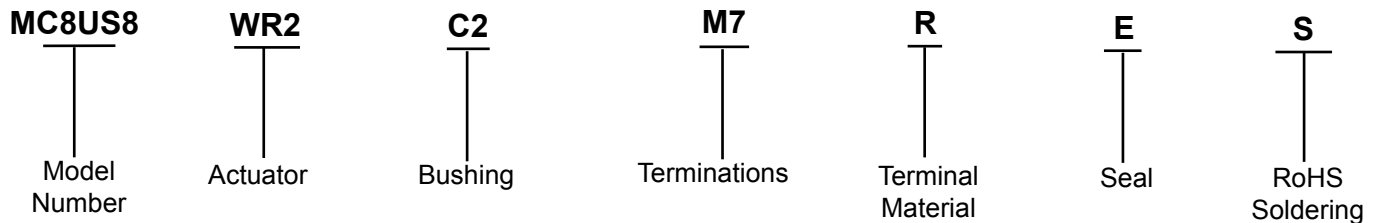


## Ultra Miniature

### Part Number Table

Description	Part Number
Switch, SPDT, Off-MOM, PCB, Sealed	MC8US9R2A2M6RES
Switch, SPDT, Off-MOM, Right / Angle, Sealed	MC8US9R2A2M7RES
Switch, SPDT, Off-MOM, Vert Right / Angle, Sealed	MC8US9R2A2M2RES
Switch, SPDT, On-MOM, Right / Angle, Sealed	MC8US8WR2C2M7RES
Switch, DPDT, On-MOM, Right / Angle, Sealed	MC8UD8WR2C2M7RES
Switch, DPST, Off-MOM, PCB, Sealed	MC8UD9R2A2M2RES
Switch, DPST, Off-MOM, Right / Angle, Sealed	MC8UD9R2A2M6RES
Switch, DPST, Off-MOM, Vert Right / Angle, Sealed	MC8UD9R2A2M7RES

### Part Number Explanation:



<b>Model Number</b>	: MC8US8 = SP On-Mom, MC8UD8 = DP On-Mom, MC8US9 = SP Off-Mom and MC8UD9 = DP Off-Mom
<b>Actuator</b>	: WR2 = CAP (Black std), R2 = CAP (Black std)
<b>Bushing</b>	: C2 = 1.6 high (STD)
<b>Terminations</b>	: M2 = PC thru-hole, M6 = Right angle, PC thru-hole and M7 = Vertical right angle, PC thru-hole
<b>Terminal Material</b>	: R = Gold
<b>Seal</b>	: E = Epoxy (std)
<b>RoHS Soldering</b>	: S = RoHS and Lead Free

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