# Pushbutton Switches Ultra Miniature



### RoHS Compliant



### **Specifications**

Contact Rating : 0.4 VA max. @ 20 V AC or DC max. Mechanical Life : 40,000 make-and-break cycles.

Contact Resistance : Below  $100m\Omega$  typ. initial @ 2-4V DC, 100mA.

Insulation Resistance :  $500m\Omega$  min.

Dielectric Strength : 500Vrms min.@sea level.

Operating Temperature : -30°C to 85°C

**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, with Sn plate.

Contacts/Terminals : Gold plated copper alloy.

#### **Switch Function**

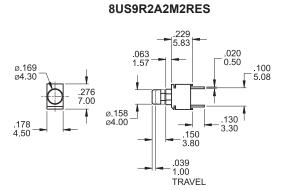
| No.<br>Poles | Model<br>No. | Switch Function |            | Connected Terminals / Schematic |                         |            |                         |
|--------------|--------------|-----------------|------------|---------------------------------|-------------------------|------------|-------------------------|
|              |              | Position 1      | Position 2 | Position 1                      |                         | Position 2 |                         |
|              |              | 1               | 1          |                                 | <b>1</b>                |            | 4                       |
| SP           | 8US9         | ON              | МОМ        | 5-6                             | NC 4 • 5 (COMM)         | 5-4        | 5 (COMM)<br>NC 4 • 6 NO |
|              | 8US8         | OFF             | MOM        |                                 | Open                    | 4-6        | 4 📍 🕈 6                 |
| DP           | 8UD9         | ON              | МОМ        | 2-3, 5-6                        | NC 1 • 3 NO NC 4 • 6 NO | 2-1, 5-4   | NC 1 3 NO NC 4 6 NO     |
|              | 8UD8         | OFF             | MOM        |                                 | Open                    | 1-3, 4-    | 6 1 7 3 4 7 6           |

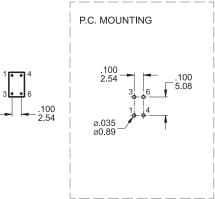
MOM = MOMENTARY

### **Pole Options**

SPDT







Dimensions: Inches (Millimetres)

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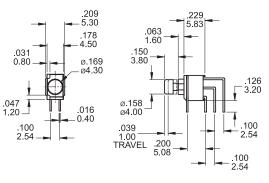
# Pushbutton Switches Ultra Miniature

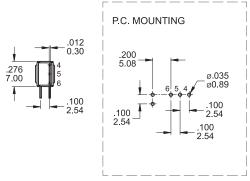


#### **SPDT**

#### 8US8WR2C2M7RES





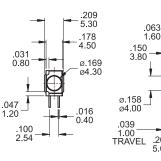


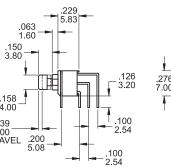
Dimensions: Inches (Millimetres)

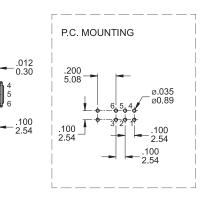
#### DPDT

#### 8UD8WR2C2M7RES









Dimensions: Inches (Millimetres)

#### **Soldering Process:**

Wave soldering : Recommended soldering temperature : 260 ±5°C

: Duration of solder immersion : Max. 5 seconds (PCB is 1.6 mm in thickness)

Soldering : Vapour phase



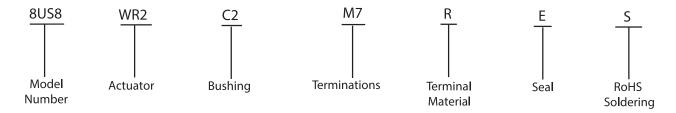
# Pushbutton Switches Ultra Miniature



#### **Part Number Table**

| Description                                       | Part Number    |  |  |
|---|----------------|--|--|
| Switch, SPDT, Off-MOM, PCB, Sealed                | 8US9R2A2M6RES  |  |  |
| Switch, SPDT, Off-MOM, Right / Angle, Sealed      | 8US9R2A2M7RES  |  |  |
| Switch, SPDT, Off-MOM, Vert Right / Angle, Sealed | 8US9R2A2M2RES  |  |  |
| Switch, SPDT, On-MOM, Right / Angle, Sealed       | 8US8WR2C2M7RES |  |  |
| Switch, DPDT, On-MOM, Right / Angle, Sealed       | 8UD8WR2C2M7RES |  |  |
| Switch, DPDT, Off-MOM, PCB, Sealed                | 8UD9R2A2M2RES  |  |  |
| Switch, DPDT, Off-MOM, Right / Angle, Sealed      | 8UD9R2A2M6RES  |  |  |
| Switch, DPDT, Off-MOM, Vert Right / Angle, Sealed | 8UD9R2A2M7RES  |  |  |

#### **Part Number Explanation:**



 $\mbox{Model Number} \hspace{1.5cm} : \hspace{.2cm} \mbox{8US8} = \mbox{SP On-Mom, 8UD8} = \mbox{DP On-Mom, 8US9} = \mbox{SP Off-Mom and 8UD9} = \mbox{DP Off-Mom and 8UD9}$ 

Actuator : WR2 = CAP (Black std), R2 = CAP (Black std)

Bushing : C2 = 1.6 high (STD)

Terminations : M2 = PC thru-hole, M6 = Right angle, PC thru-hole and M7 = Vertical right angle, PC thru-hole

 $\begin{tabular}{lll} Terminal Material & : & R = Gold \\ Seal & : & E = Epoxy (std) \\ \end{tabular}$ 

RoHS Soldering : S = RoHS and Lead Free

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