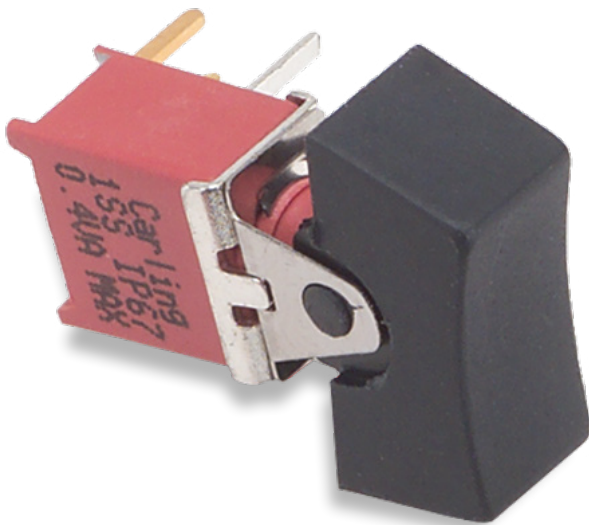
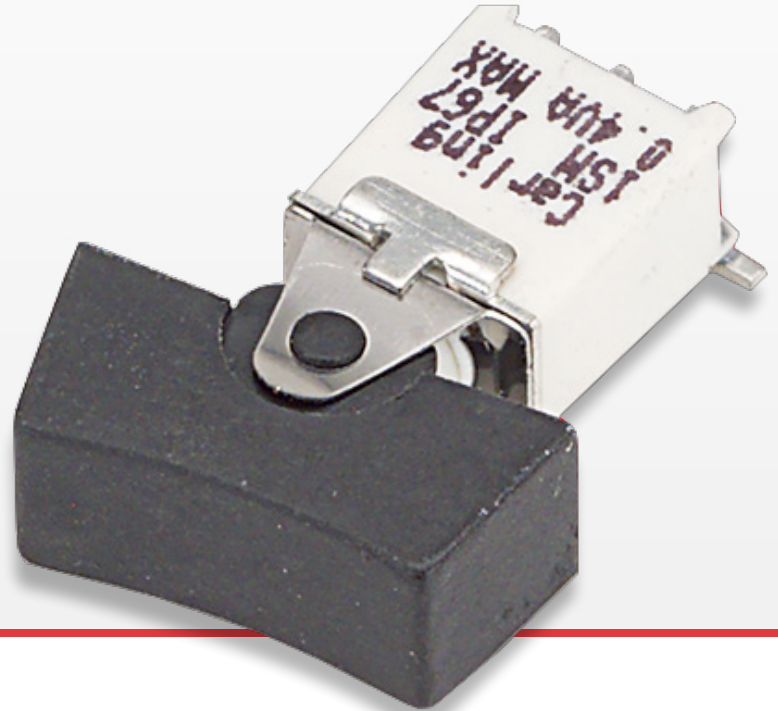


# 1S-Series

Miniature Rockers & Paddles

**PRODUCT WEBPAGE**

*request sample, configure part*



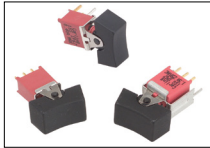
The 1S family of sub-miniature rocker switches is composed of three switch series; the 1S1-Series sub-miniature rocker switch, the 1SS-Series sealed sub-miniature rocker switch, and the 1SM-Series surface mount sealed sub-miniature rocker switch. All of these series offer a variety of ratings, circuits, contact materials, terminal platings, and actuator colors.

**1-2** Poles    **.4-3** Amps    **125, 250** VAC    **28** VDC

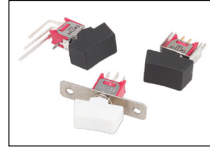
## Typical Applications

- Instrumentation
- Test Equipment
- Telecommunications
- Networking
- Handheld Appliances
- Medical Equipment

# Tech Specs



**ISS-Series**  
Sealed  
Sub-Miniature  
Rocker Switch



**ISI-Series**  
Sub-Miniature  
Rocker Switch



**ISM-Series**  
Sealed Surface Mount  
Sub-Miniature  
Rocker Switch

## Electrical

Contact Rating	refer to ordering scheme
Electrical Life	<b>ISI-Series:</b> 30,000 make & break cycles @ full load <b>ISS &amp; ISM-Series:</b> 50,000 make & break cycles @ full load
Contact Resistance	20 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts
Insulation Resistance	1000 MΩ min.
Dielectric Strength	1500 Volts RMS @ sea level

## Physical

Operating Temperature	-30°C to +85°C
Index of Protection	1SS & 1SM-Series: IP67
Solder Heat Resistance	MIL-STD-202, Method 210
Actuator Travel	25°

## Material

Case	all UL94 V-0 <b>ISI-Series:</b> Diallyl phthalate (DAP) <b>ISS-Series:</b> Glass filled nylon 6/6, flame retardant, heat stabilized <b>ISM-Series:</b> Glass filled nylon 4/6, flame retardant, heat stabilized
Rocker	<b>ISI-Series:</b> Nylon (UL 94V-0) <b>ISS &amp; ISM-Series:</b> Nylon, black standard, internal o-ring sealed
Bushing	<b>ISI-Series:</b> Brass, nickel plated <b>ISS-Series:</b> Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0) <b>ISM-Series:</b> Glass filled nylon 4/6, flame retardant, heat stabilized (UL 94V-0)
Housing	<b>ISI-Series:</b> Stainless Steel
Switch Support	<b>ISI &amp; ISM-Series:</b> Brass, tin plated
Terminal Seal	Epoxy

# Ordering Scheme

Sample Part Number **ISS - WMSP 1 - R2 / 2 M2 G E**

Selection 1 2 3 4 5 6 7 8

### 1. SERIES

**ISS** Sealed Sub-Miniature Rocker Switch

### 2. POLES

**WMSP** Single pole - uses terminals 1, 2 & 3  
**WMDP** Double pole - uses terminals 1, 2, 3, 4, 5 & 6

### 3. CIRCUIT

( ) - momentary  
Position: **1** **2** **3**

1	2-3, 5-6	Connected Terminals	2-1, 5-4
2	ON	NONE	ON
3	ON	NONE	(ON)
4	(ON)	OFF	ON
5	ON	OFF	(ON)

### 4. ACTUATOR STYLE

**R1** Small Rocker  
**R2** Narrow Black Rocker

### 5. ACTUATOR COLOR

**1** White  
**2** Black  
**3** Red  
Other colors available, consult factory.

### 6. TERMINATION

<b>M1</b> Solder Lug	<b>M61</b> Snap-In, U bracket, 90° horizontal
<b>M2</b> PCB	<b>M71</b> Snap-In, U bracket, 90° horizontal
<b>M6</b> PC Mount, 90° horizontal	<b>VS21</b> Snap-In, U bracket
<b>M7</b> PC Mount, 90° vertical	
<b>VS2</b> PC Mount, U bracket	

See dimensional specifications.

### 7. CONTACTS / TERMINALS

Contact	Material	Terminal Plating	Rating	Approvals
<b>G</b>	silver <sup>1</sup>	gold over silver	3A 125VAC or 28VDC, 1.5A 250VAC	IP67
<b>K</b>	gold <sup>2,5</sup>	tin <sup>4</sup>	0.4VA max 20V max (AC/DC)	IP67
<b>P</b>	silver <sup>1,6</sup>	tin <sup>4</sup>	3A 125VAC or 28VDC, 1.5A 250VAC	IP67
<b>R</b>	gold <sup>2</sup>	gold <sup>2,3</sup>	0.4VA max 20V max (AC/DC)	IP67

### 8. EPOXY SEAL

**E** Epoxy Seal **0** without Epoxy Seal

Notes: Tin option not available with M1 terminal.  
1 Movable contact and terminal platings: silver over copper alloy  
2 Movable contact platings: gold over nickel over copper alloy  
3 Terminal platings: gold over nickel over copper alloy  
4 Terminal platings: tin over copper alloy  
5 Terminal contact platings: gold over nickel alloy  
6 Terminal contact platings: silver over nickel alloy

[Configure Complete Part Number >](#)

[Browse Standard Parts >](#)

# Ordering Scheme

Sample Part Number 1S1 - MSP 1 - R2 / 2 M6 Q E

Selection 1 2 3 4 5 6 7 8

## 1. SERIES

**1S1** Sub-Miniature Rocker Switch

## 2. POLES

**MSP** Single pole - uses terminals 1, 2 & 3  
**MDP** Double pole - uses terminals 1, 2, 3, 4, 5 & 6

## 3. CIRCUIT

( ) - momentary  
**Position:**

1	2	3
2-3, 5-6	Connected Terminals	2-1, 5-4
ON	NONE	ON
ON	NONE	(ON)
ON	OFF	ON
(ON)	OFF	(ON)
ON	OFF	(ON)

## 4. ACTUATOR STYLE

**R1** Small Rocker  
**R2** Narrow Black Rocker  
**R3** Medium Rocker

## 5. ACTUATOR COLOR

**1** White  
**2** Black  
**3** Red  
 Other colors available, consult factory.

## 6. TERMINATION

<b>M1</b> Solder Lug	<b>M61</b> Snap-In, U bracket, 90° horizontal
<b>M2</b> PCB	<b>M71</b> Snap-In, U bracket, 90° horizontal
<b>M6</b> PC Mount, 90° horizontal	<b>VS21</b> Snap-In, U bracket
<b>M7</b> PC Mount, 90° vertical	
<b>VS2</b> PC Mount, U bracket	
<b>VS3</b> PC Mount, U bracket	

See dimensional specifications.

## 7. CONTACTS / TERMINALS

Contact Material	Terminal Plating	Rating	Approvals
<b>G</b> silver <sup>1</sup>	gold over silver 1.5A 250VAC	3A 125VAC or 28VDC,	UL, CE
<b>K</b> gold <sup>2</sup>	tin <sup>3</sup>	0.4VA max 20V max (AC/DC) N/A	
<b>P</b> silver <sup>1</sup>	tin <sup>3</sup> 1.5A 250VAC	3A 125VAC or 28VDC,	UL, CE
<b>Q</b> silver <sup>1</sup>	silver <sup>1</sup> 1.5A 250VAC	3A 125VAC or 28VDC,	UL, CE
<b>R</b> gold <sup>2</sup>	gold <sup>2</sup>	0.4VA max 20V max (AC/DC) N/A	

## 8. EPOXY SEAL

**E** Epoxy Seal      **0** without Epoxy Seal

Notes:  
 Tin option available with M1 termination.  
 1 Movable contact and terminal platings: silver over copper alloy  
 2 Movable contact and terminal platings: gold over nickel over copper alloy  
 3 Terminal platings: tin over nickel over copper alloy

[Configure Complete Part Number >](#)    [Browse Standard Parts >](#)

# Ordering Scheme

Sample Part Number 1SM - WMSP 1 - R2 - M2 G E

Selection 1 2 3 4 5 6 7

## 1. SERIES

**1SM** Sealed Surface Mount Sub-Miniature Rocker Switch

## 2. POLES

**WMSP** Single pole - uses terminals 1, 2 & 3

## 3. CIRCUIT

( ) - momentary  
**Position:**

1	2	3
2-3	Connected Terminals	2-1
ON	NONE	ON
ON	NONE	(ON)
ON	OFF	ON
(ON)	OFF	(ON)
ON	OFF	(ON)

## 4. ACTUATOR STYLE

**R2** Narrow Black Rocker

## 5. TERMINATION

**M6** Surface Mount, 90° flat - horizontal / side  
**S6** Surface Mount, 90° horizontal / back  
**S7** Surface Mount, 90° vertical  
 See dimensional specifications.

## 6. CONTACTS / TERMINALS

Contact Material	Terminal Plating	Rating	Approvals
<b>G</b> silver <sup>1</sup>	gold over silver	3A 125VAC or 28VDC,	IP67 1.5A 250VAC
<b>K</b> gold <sup>2,5</sup>	tin <sup>4</sup>	0.4VA max 20V max (AC/DC)	IP67
<b>P</b> silver <sup>1,6</sup>	tin <sup>4</sup>	3A 125VAC or 28VDC,	IP67 1.5A 250VAC
<b>Q</b> silver <sup>1</sup>	silver <sup>1</sup>	3A 125VAC or 28VDC,	IP67 1.5A 250VAC
<b>R</b> gold <sup>2</sup>	gold <sup>3</sup>	0.4VA max 20V max (AC/DC)	IP67

## 7. EPOXY SEAL

**E** Epoxy Seal      **0** without Epoxy Seal

## 8. PACKAGING

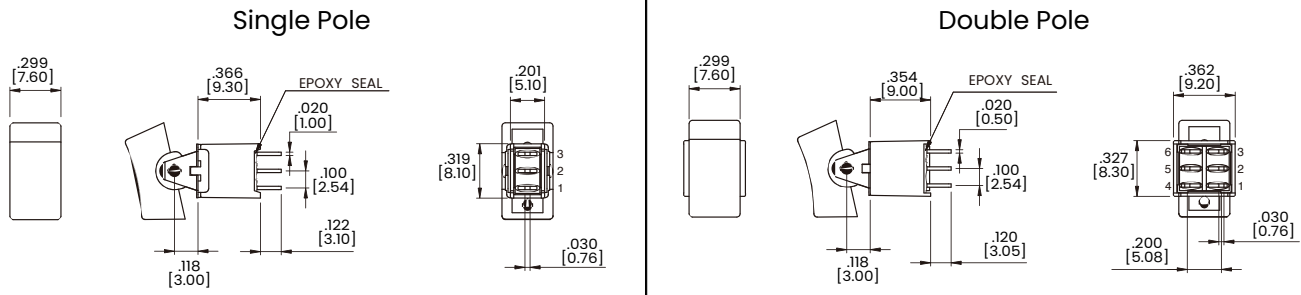
**T/R** tape reel - 500 pieces per reel  
 Switches are bulk packed, unless T/R is specified at the end of the part number.

Notes:  
 Tin option not available with M1 termination.  
 1 Movable contact and terminal platings: silver over copper alloy  
 2 Movable contact platings: gold over nickel over copper alloy  
 3 Terminal platings: gold over nickel over copper alloy  
 4 Terminal platings: tin over copper alloy  
 5 Terminal contact platings: gold over nickel alloy  
 6 Terminal contact platings: silver over nickel alloy

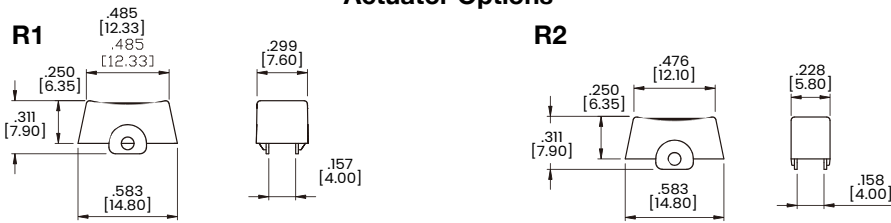
[Configure Complete Part Number >](#)    [Browse Standard Parts >](#)

# Dimensional Specs

inches [millimeters]

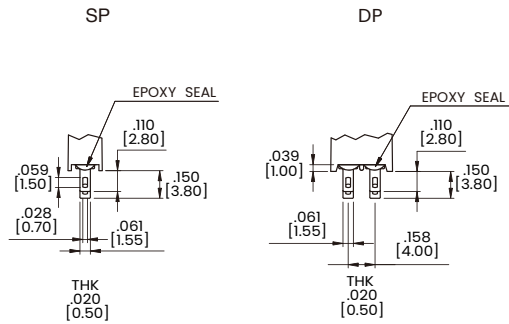


## Actuator Options

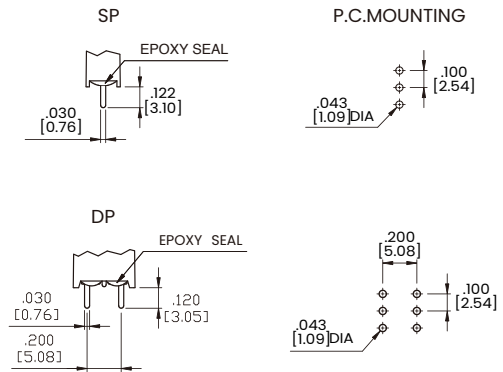


## Termination Options

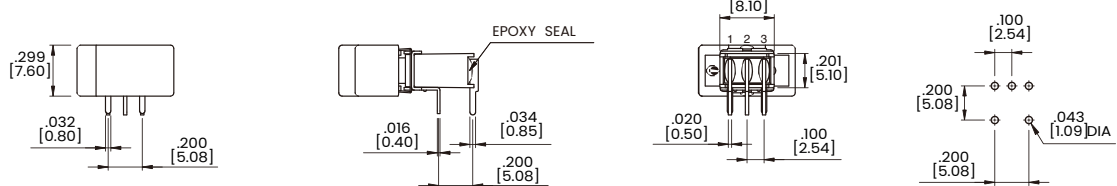
### M1 STD. Solder Lug



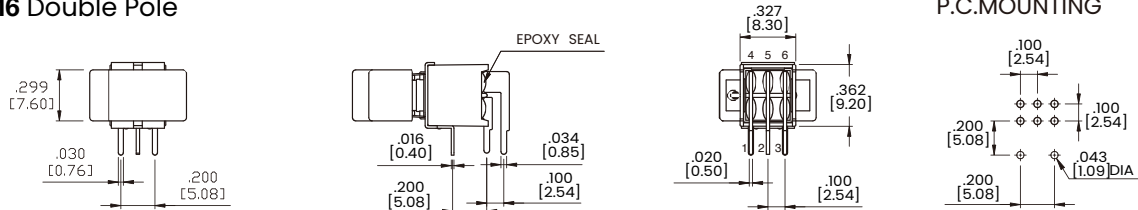
### M2 PC Thru-Hole



### M6 Single Pole



### M6 Double Pole

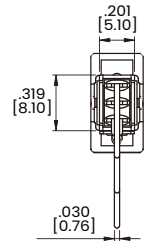
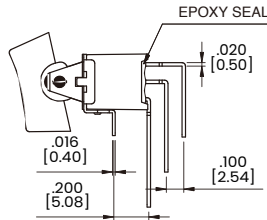
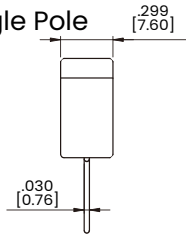


# Dimensional Specs

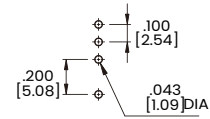
inches [millimeters]

## Termination Options

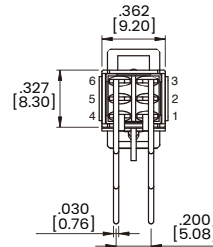
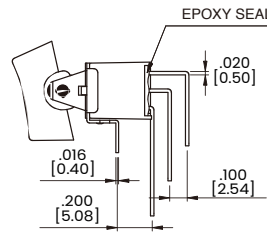
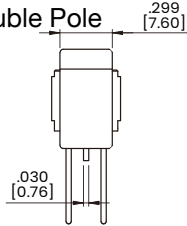
**M7 Single Pole**



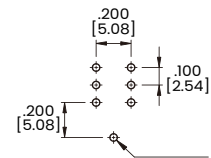
**P.C.MOUNTING**



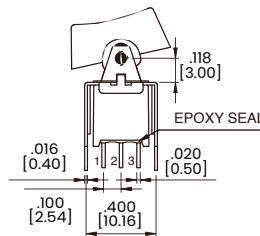
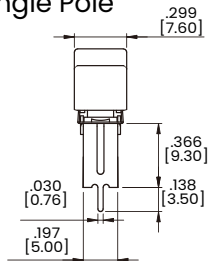
**M7 Double Pole**



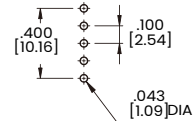
**P.C.MOUNTING**



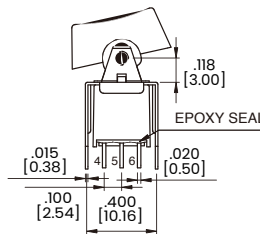
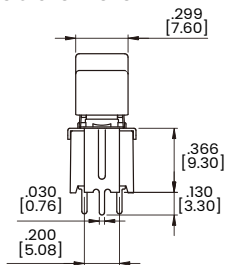
**VS2 Single Pole**



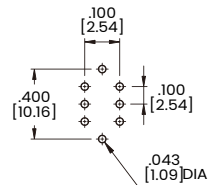
**P.C.MOUNTING**



**VS2 Double Pole**

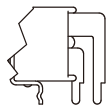
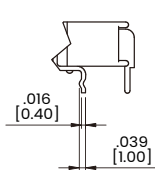


**P.C.MOUNTING**

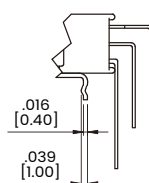


## Snap-In Termination Options

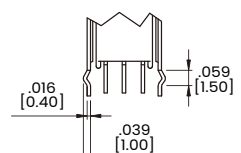
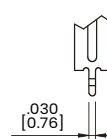
**M61**



**M71**



**VS21**

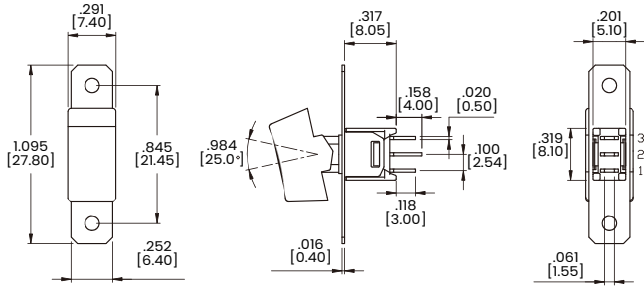


\* PC Mounting for M61, M71, VS21 refer to M6, M7, VS2 respectively.

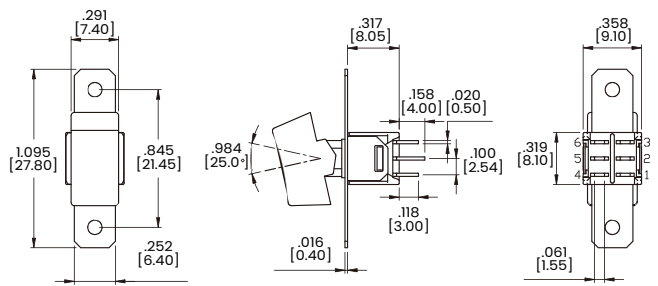
# Dimensional Specs

inches [millimeters]

## Single Pole

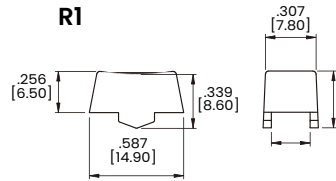


## Double Pole

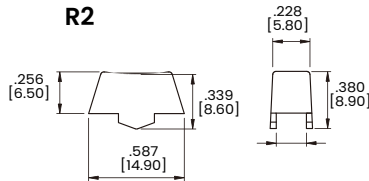


## Actuator Options

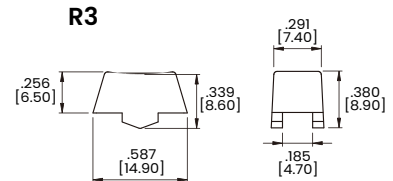
### R1



### R2

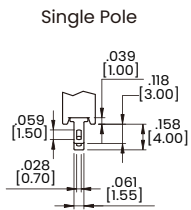


### R3

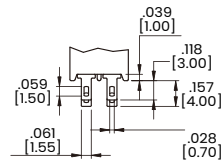


## Termination Options

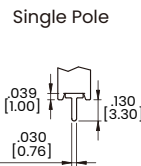
### M1 STD. Solder Lug



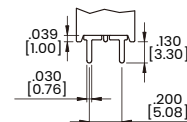
### Double Pole



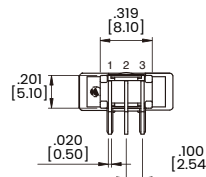
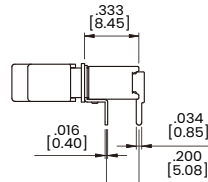
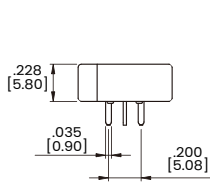
### M2 PC Thru-Hole



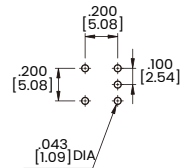
### Double Pole



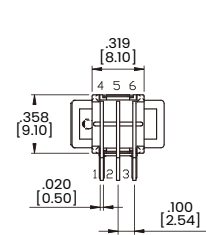
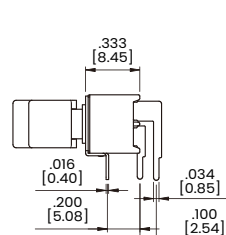
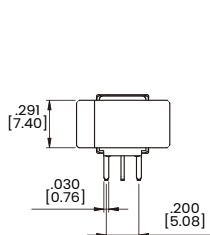
### M6 Single Pole



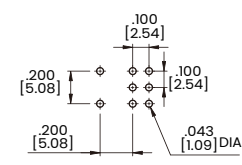
### P.C.MOUNTING



### M6 Double Pole



### P.C.MOUNTING

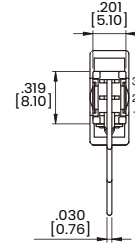
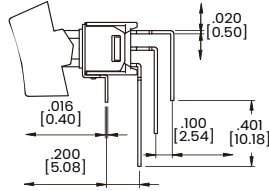
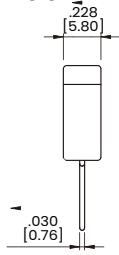


# Dimensional Specs

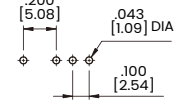
inches [millimeters]

## Termination Options

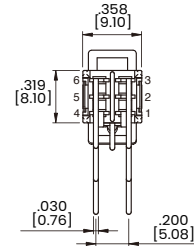
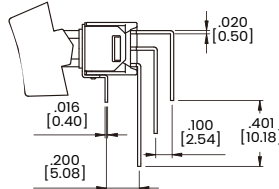
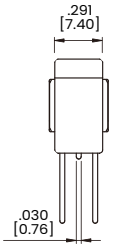
### M7 Single Pole



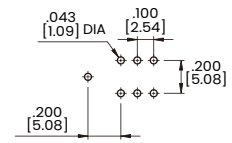
### P.C. MOUNTING



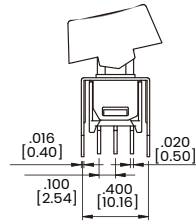
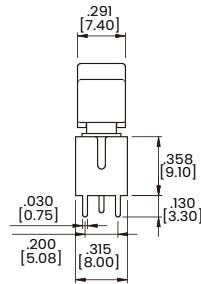
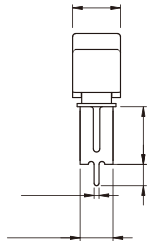
### M7 Double Pole



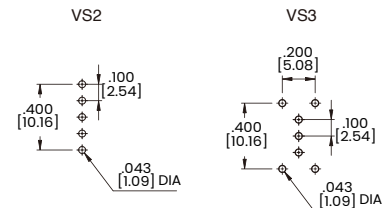
### P.C. MOUNTING



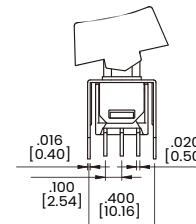
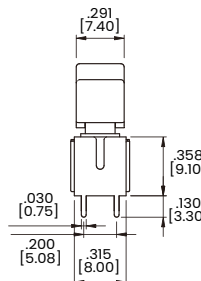
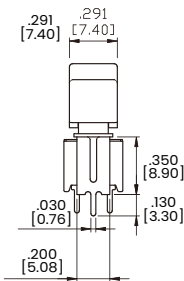
### VS2-VS3 Single Pole



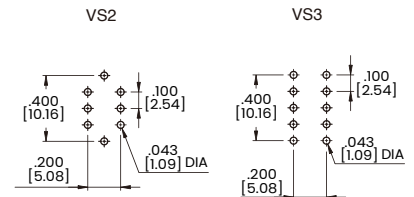
### P.C. MOUNTING



### VS2-VS3 Double Pole

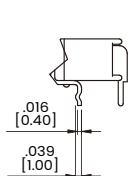


### P.C. MOUNTING

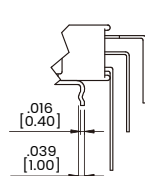


## Snap-In Termination Options

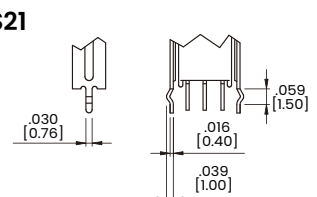
### M61



### M71



### VS21

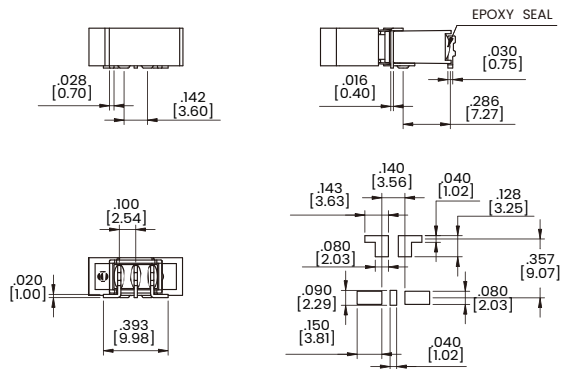


\* PC Mounting for M61, M71, VS21 refer to M6, M7, VS2 respectively.

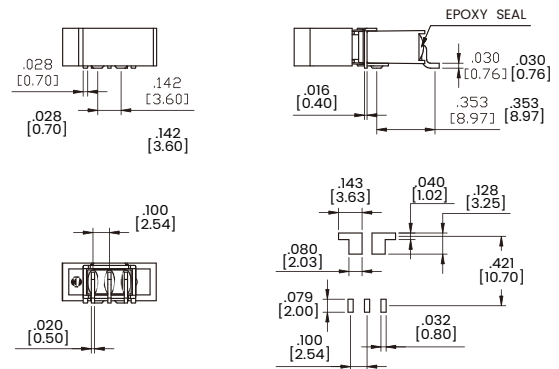
# Dimensional Specs

inches [millimeters]

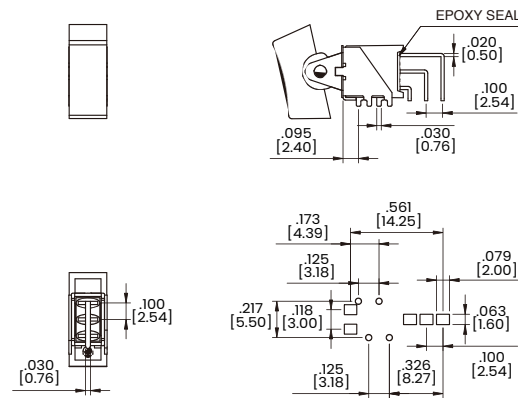
## M6 Single Pole



## S6 Single Pole

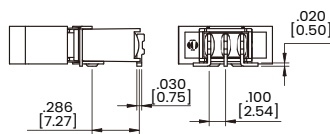


## S7 Single Pole

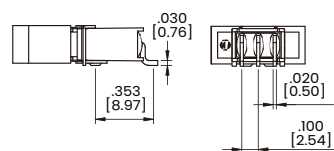


## Termination Options

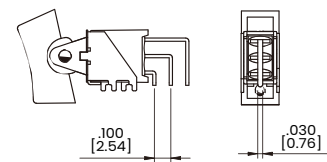
### M6



### S6



### S7





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