



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



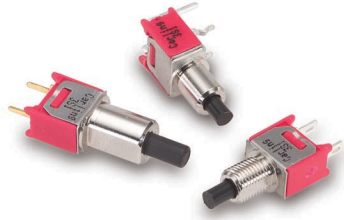
## Contact us

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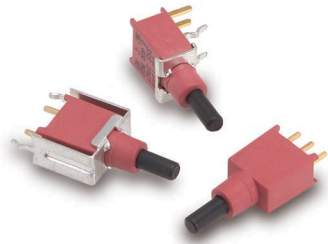
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

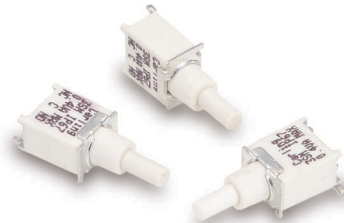




**3S1-Series**  
Sub-Miniature  
Pushbutton Switch



**3SS-Series**  
**Sealed** Sub-Miniature  
Pushbutton Switch



**3SM-Series**  
**Sealed Surface**  
**Mount** Sub-Miniature  
Pushbutton Switch

## Specifications

Contact Rating . . . . . refer to ordering scheme  
 Electrical Life . . . . . 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  
 Operating Temperature . . . . . -30°C to +85°C  
 Index of Protection . . . . . **3SS & 3SM-Series:** IP67  
 Solder Heat Resistance. . . . . MIL-STD-202, Method 210  
 Actuator Travel . . . . . 25°

## Materials

Case . . . . . UL 94-0  
*3S1-Series:* Diallyl phthalate (DAP)  
*3SS-Series:* Glass filled nylon 6/6, flame retardant, heat stabilized  
*3SM-Series:* Glass filled nylon 4/6, flame retardant, heat stabilized  
 Plunger. . . . . *3S1-Series:* Thermoplastic polyester, black  
*3SS -Series:* Thermoplastic polyester (UL 94V-0), with internal o-ring seal  
*3SM-Series:* Glass filled nylon 4/6, flame retardant, heat stabilized  
 Bushing . . . . . *3S1-Series:* Brass, nickel plated  
*3SS-Series:* Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)  
*3SM-Series:* Glass filled nylon 4/6, flame retardant, heat stabilized (UL 94V-0)  
 Housing. . . . . Stainless Steel  
 Switch Support . . . . . Brass, tin plated  
 Terminal Seal . . . . . Epoxy

## 3S1-Series Ordering Scheme



**1 SERIES**  
3S1 Sub-Miniature Pushbutton Switch

**2 POLES**  
SP single pole

**3 CIRCUIT**  
( ) - momentary

<b>8</b>	ON	(ON)
<b>9</b>	OFF	(OFF)

**4 BUSHING**

<b>B5</b>	10-48 Threaded
<b>B6</b>	Unthreaded "D"
<b>B7</b>	Unthreaded
<b>B8</b>	1/4-40 Threaded "D"
<b>B9</b>	Flush Bushing
<b>B0</b>	1/4" Unthreaded "D"

**5 TERMINATION**

<b>M1</b>	Solder Lug
<b>M2</b>	PCB
<b>M6</b>	PC Mount, 90° horizontal
<b>M61</b>	Snap-In, 90° horizontal
<b>M7</b>	PC Mount, 90° vertical
<b>M71</b>	Snap-In, 90° vertical
<b>VS2</b>	PC Mount, U bracket, .620 mounting x .460 high
<b>VS21</b>	Snap-In, U bracket

**6 CONTACT**

Material	Terminal Plating	Rating
<b>G</b> silver <sup>1</sup>	gold over silver <sup>3</sup>	1A @ 125VAC or 28VDC
<b>K</b> gold <sup>2</sup>	tin-lead <sup>4</sup>	0.4VA max. @ 20V max (AC/DC)
<b>P</b> silver <sup>1</sup>	tin-lead <sup>4</sup>	1A @ 125VAC or 28VDC
<b>Q</b> silver <sup>1</sup>	silver <sup>1</sup>	1A @ 125VAC or 28VDC
<b>R</b> gold <sup>2</sup>	gold <sup>2</sup>	0.4VA max. @ 20V max (AC/DC)

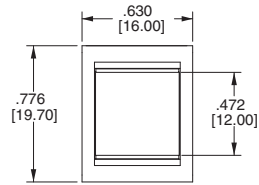
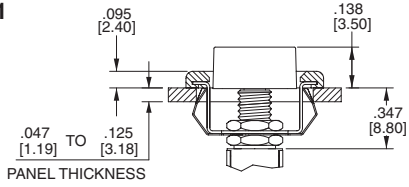
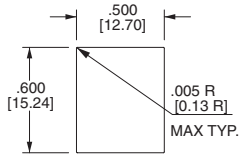
NOTE:  
 Tin-lead option available with PC type terminations only.  
 1 Moveable contact & terminals: copper alloy, silver plate  
 2 Moveable contact & terminals: copper alloy with gold plate over nickel plate  
 3 Terminals: silver plated with outer layer in gold plating  
 4 Outer terminals: copper alloy with tin-lead over nickel plate

**7 EPOXY SEAL**  
 E epoxy seal

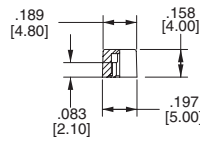
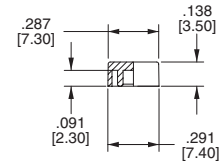


## 3S1-Series Dimensional Specifications: in. [mm]

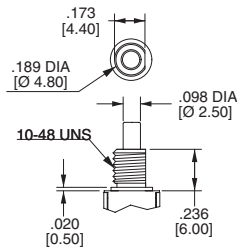
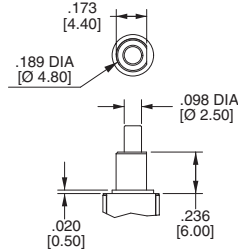
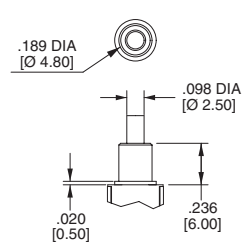
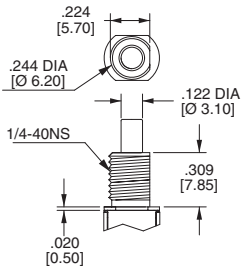
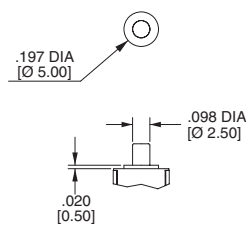
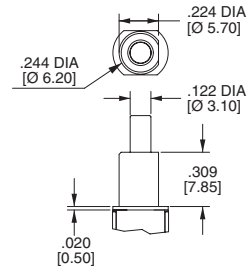
### ACTUATOR

**OP1**

**PANEL MOUNTING**


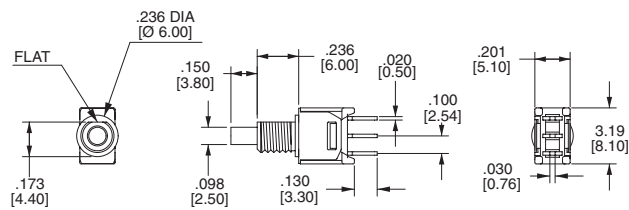
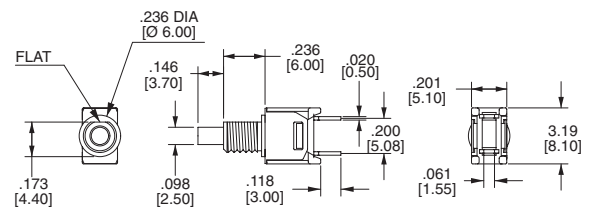
### CAP

**C1**

**C2**


### BUSHING

**B5**

**B6**

**B7**

**B8**

**B9**

**B0**


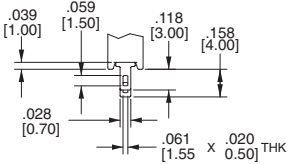
### TERMINATION

**SP8**
**SINGLE POLE DOUBLE THROW**

**SP9**
**SINGLE POLE SINGLE THROW**


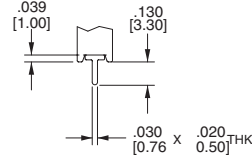
**3S1-Series Dimensional Specifications: in. [mm]**

**TERMINATION**

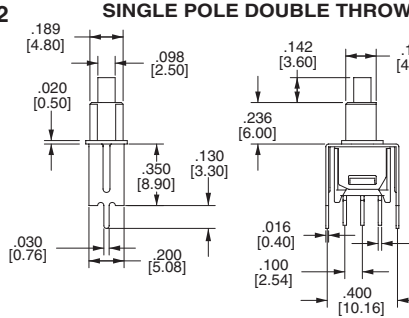
**M1**



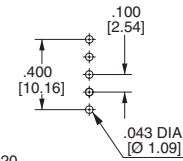
**M2**



**VS2**

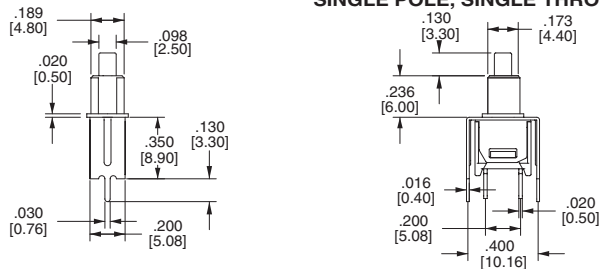


**PC MOUNTING**

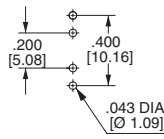


**VS2**

**SINGLE POLE, SINGLE THROW**

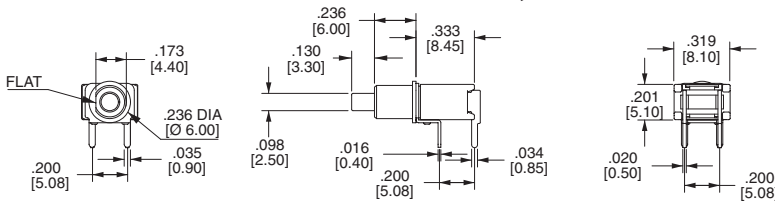


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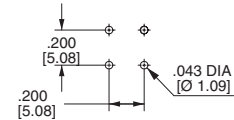


**M6**

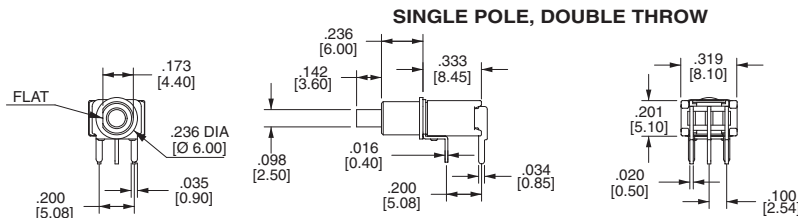
**SINGLE POLE, SINGLE THROW**



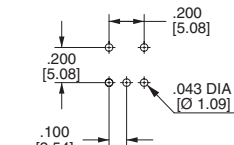
**PC MOUNTING**



**SINGLE POLE, DOUBLE THROW**

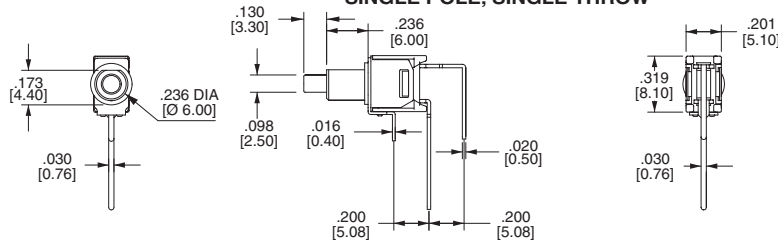


**PC MOUNTING**

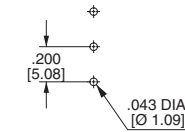


**M7**

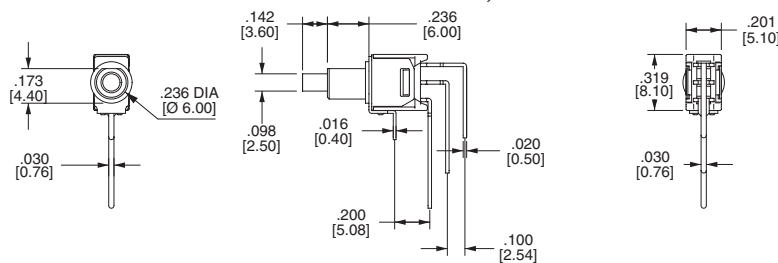
**SINGLE POLE, SINGLE THROW**



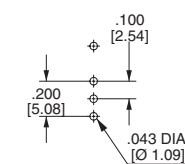
**PC MOUNTING**



**SINGLE POLE, DOUBLE THROW**



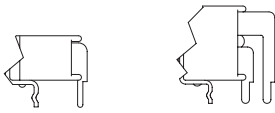
**PC MOUNTING**



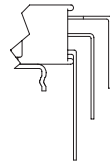
**3SS-Series Dimensional Specifications: in. [mm]**

**SNAP-IN TERMINATION**

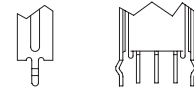
**M61**



**M71**



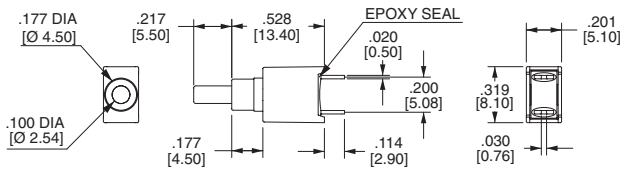
**VS21**



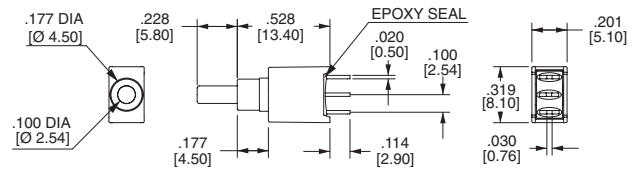
M61, M71, VS21 have the same P.C. mounting but with snap-in bracket.

**TERMINATION**

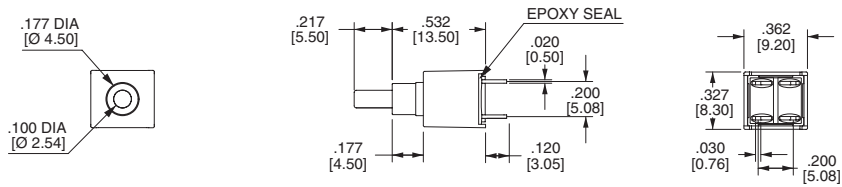
**SINGLE POLE, SINGLE THROW**



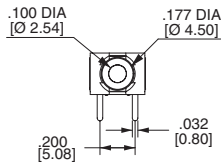
**SINGLE POLE, DOUBLE THROW**



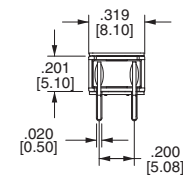
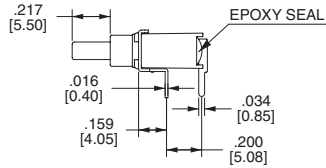
**DOUBLE POLE, SINGLE THROW**



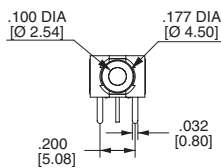
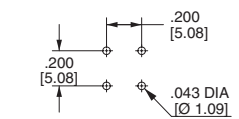
**M6**



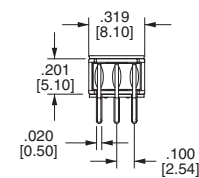
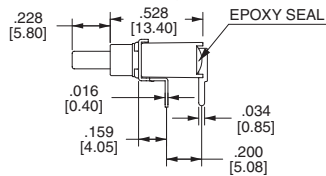
**SINGLE POLE, SINGLE THROW**



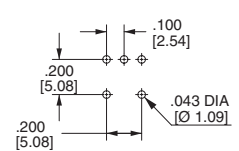
**PC MOUNTING**



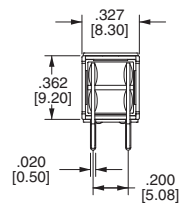
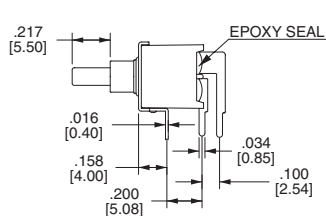
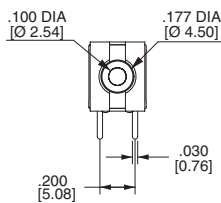
**SINGLE POLE, DOUBLE THROW**



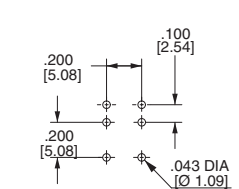
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**DOUBLE POLE, SINGLE THROW**



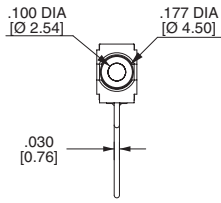
**PC MOUNTING**



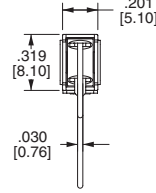
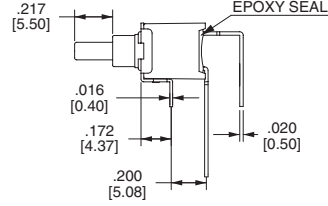
**3SS-Series Dimensional Specifications: in. [mm]**

**TERMINATION**

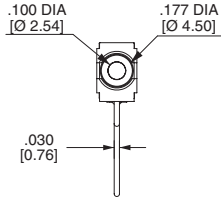
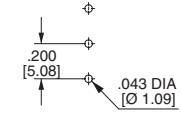
**M7**



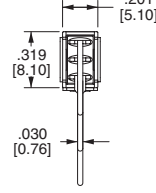
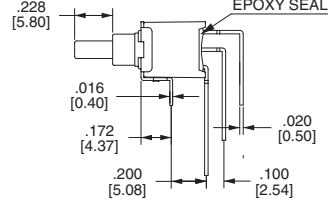
**SINGLE POLE, SINGLE THROW**



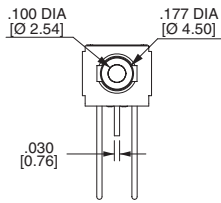
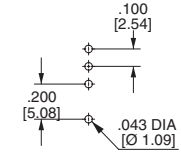
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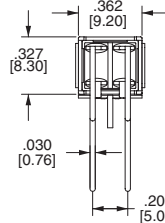
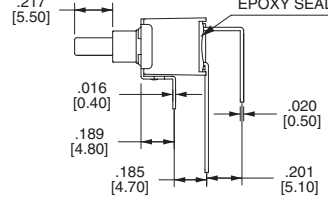
**SINGLE POLE, DOUBLE THROW**



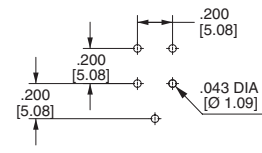
**PC MOUNTING**



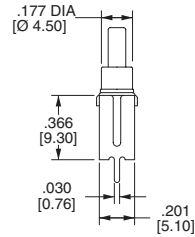
**DOUBLE POLE, SINGLE THROW**



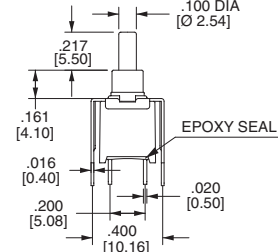
**PC MOUNTING**



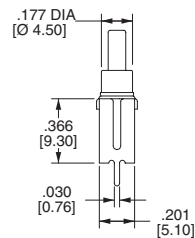
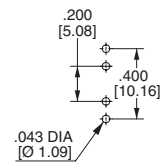
**VS2**



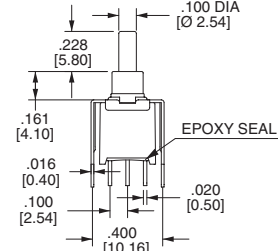
**SINGLE POLE, SINGLE THROW**



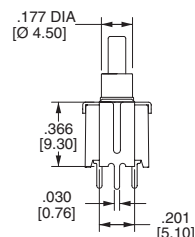
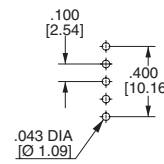
**PC MOUNTING**



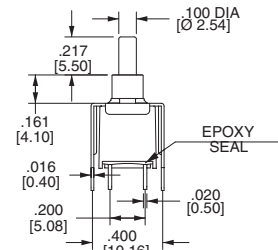
**SINGLE POLE, DOUBLE THROW**



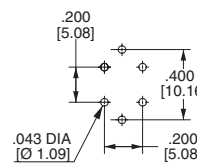
**PC MOUNTING**



**DOUBLE POLE, SINGLE THROW**

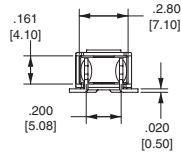
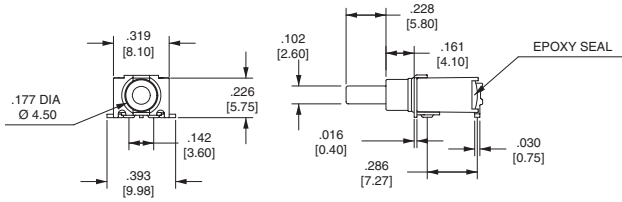
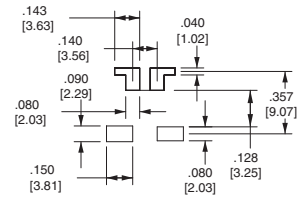
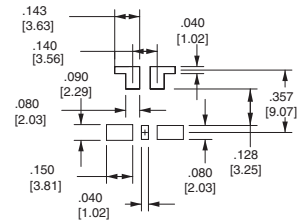
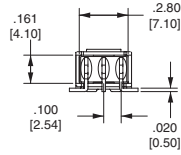
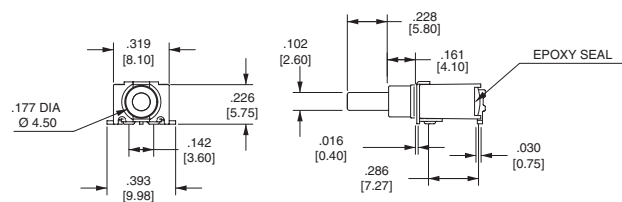
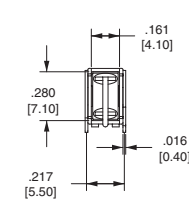
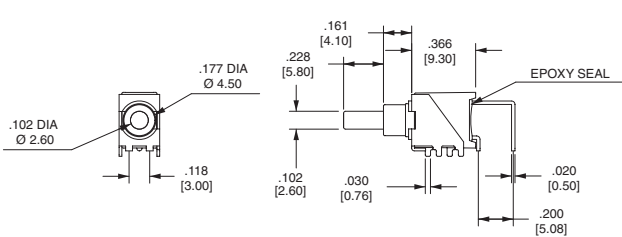
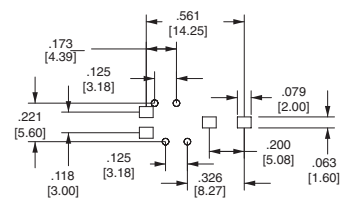
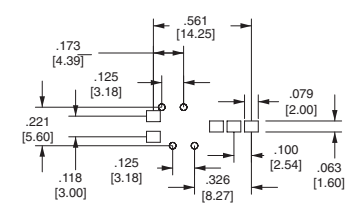
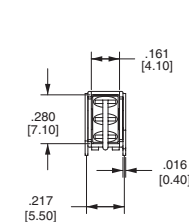
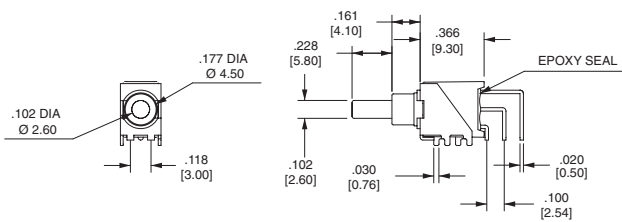
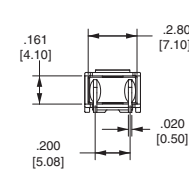
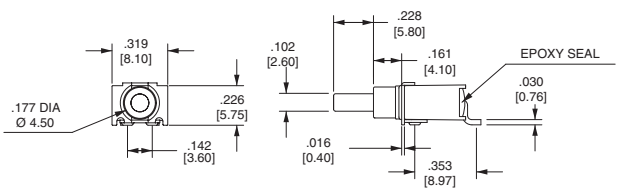
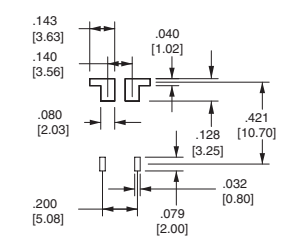
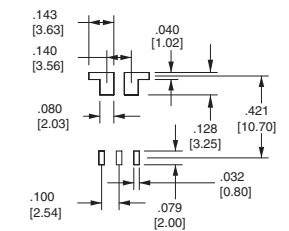
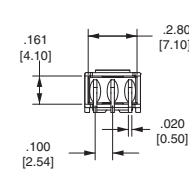
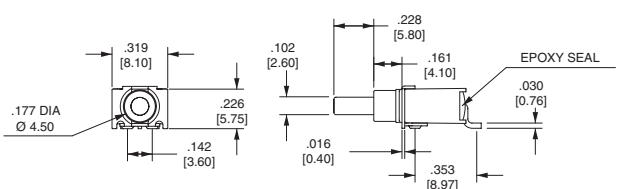


**PC MOUNTING**



## 3SM-Series Dimensional Specifications: in. [mm]

### TERMINATION

**M6**
**SINGLE THROW**

**PC MOUNTING**

**DOUBLE THROW**

**M7**
**SINGLE THROW**

**PC MOUNTING**

**DOUBLE THROW**

**S6**
**SINGLE THROW**

**PC MOUNTING**

**DOUBLE THROW**




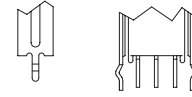
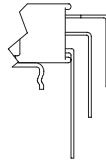
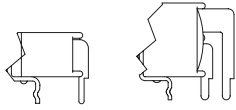
**3SM-Series Dimensional Specifications: in. [mm]**

**SNAP-IN TERMINATION**

**M61**

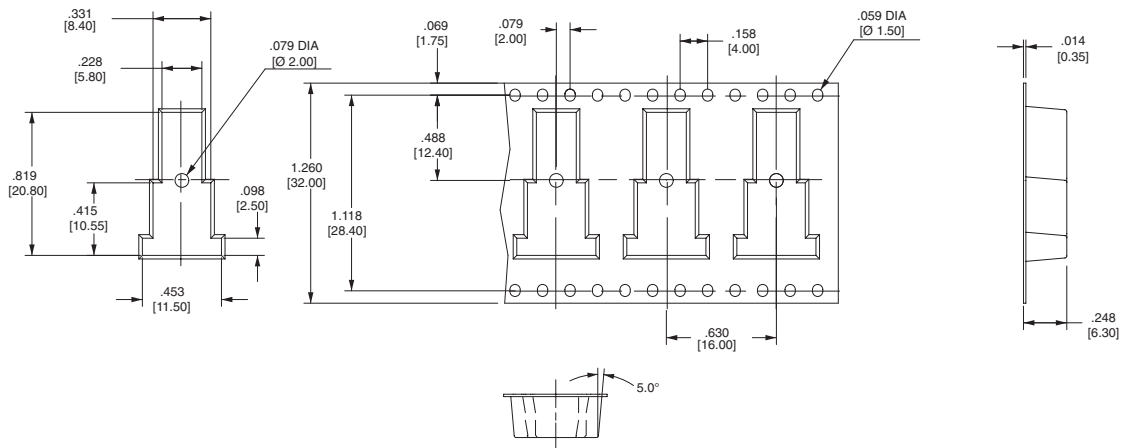
**M71**

**VS21**



M61, M71, VS21 have the same P.C. mounting but with snap-in bracket.

**REEL TAPING**



**FOR M6 ONLY**