

### SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material.  
**MECHANICAL LIFE:** 30,000 make-and-break cycles.  
**CONTACT RESISTANCE:** 20mΩ max. initial @ 2-4VDC  
 100mA for both silver and gold plated contacts.  
**INSULATION RESISTANCE:** 1,000MΩ min.  
**DIELECTRIC STRENGTH:** 1,000 V RMS@sea level.  
**OPERATING TEMPERATURE:** -30°C to 85°C.










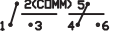
### MATERIALS

**CASE & BUSHING** - Glass filled nylon 66, flame retardant, heat stabilized ( UL 94V-0 )  
**ACTUATOR** - Brass, chrome plated, internal O-ring seal. Standard for all actuators.  
**SWITCH SUPPORT** - Brass, tin plated.  
**CONTACT/TERMINALS** - Copper alloy with silver or gold plated. (See Page 36)

### HOW TO ORDER

MODEL NO.	ACTUATOR	BUSHING	TERMINATIONS	CONTACT MATERIAL	SEAL	ROHS SOLDERING
<div> <div>MODEL NO.</div> <div> <div>2AS1</div> <div>2AS2</div> <div>2AS3</div> <div>2AS4</div> <div>2AS5</div> <div>2AS6</div> <div>2AD1</div> <div>2AD2</div> <div>2AD3</div> <div>2AD6</div> </div> <div> <div>SP On-None-On</div> <div>SP On-None-Mom</div> <div>SP On-Off-On</div> <div>SP Mom-Off-Mom</div> <div>SP On-Off-Mom</div> <div>SP Off-None-On</div> <div>DP On-None-On</div> <div>DP On-None-Mom</div> <div>DP On-Off-On</div> <div>DP On-On-On</div> </div> </div>	<div> <div>ACTUATOR</div> <div> <div>T1</div> <div>T2</div> <div>T3</div> <div>T4</div> <div>TA</div> <div>TB</div> </div> <div> <div>10.16 high</div> <div>6.10 high</div> <div>8.13 high</div> <div>13.97 high</div> <div>Plastic, anti-static</div> <div>10.16 high</div> <div>Plastic, anti-static</div> <div>6.10 high</div> </div> </div>	<div> <div>BUSHING</div> <div> <div>A1</div> <div>A2</div> <div>A3</div> </div> <div> <div>SP 4.65 high</div> <div>DP 4.50 high</div> <div>SP 5.00 high</div> </div> </div>	<div> <div>TERMINATIONS</div> <div> <div>M2</div> <div>M5</div> <div>M6</div> <div>M6N</div> <div>M7</div> <div>M7N</div> <div>VS2</div> <div>V2N</div> </div> <div> <div>PC thru-hole</div> <div>Wire wrap</div> <div>Right angle, PC thru-hole</div> <div>Right angle, snap-in, PC thru-hole</div> <div>Vertical right angle, PC thru-hole</div> <div>Vertical right angle, snap-in, PC thru-hole</div> <div>9.30 high, V-bracket</div> <div>9.30 high, snap-in V-bracket</div> </div> </div>	<div> <div>CONTACT MATERIAL</div> <div> <div>Q</div> <div>R</div> <div>G</div> <div>S</div> <div>C</div> <div>K</div> </div> <div> <div>Silver</div> <div>Gold</div> <div>Gold, pure-tin</div> <div>Silver, pure-tin</div> <div>Gold over silver</div> <div>Gold over silver, pure-tin</div> </div> </div>	<div> <div>SEAL</div> <div> <div>E</div> </div> <div> <div>EPOXY (std)</div> </div> </div>	<div> <div>ROHS SOLDERING</div> <div> <div>□</div> <div>S</div> </div> <div> <div>Rohs Compliant</div> <div>Rohs &amp; Lead Free</div> </div> </div>

### SWITCH FUNCTION

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
								
SP	Q22A11	2AS1	ON	NONE	ON	2-3 	N/A	2-1
	Q22A12	2AS2	ON	NONE	MOM		OPEN 	2-1
	Q22A13	2AS3	ON	OFF	ON			
	Q22A14	2AS4	MOM	OFF	MOM	OPEN		
	Q22A15	2AS5	ON	OFF	MOM			
	Q22A16	2AS6	OFF	NONE	ON		OPEN	N/A
DP	Q22A21	2AD1	ON	NONE	ON	2-3,5-6 	N/A	2-1,5-4
	Q22A22	2AD2	ON	NONE	MOM		OPEN 	2-1,5-4
	Q22A23	2AD3	ON	OFF	ON			
	Q22A26	2AD6	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4

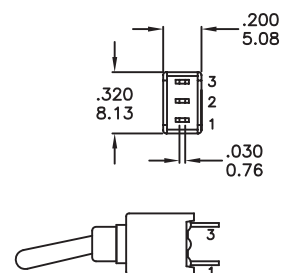
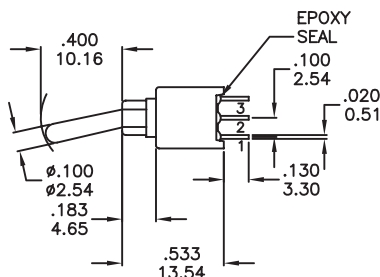
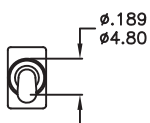
MOM=MOMENTARY

### POLE OPTIONS



SPDT

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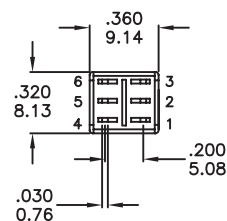
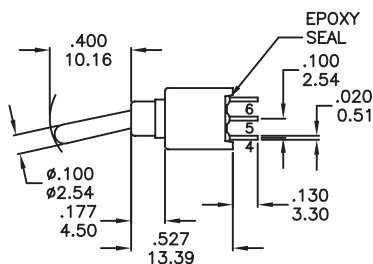
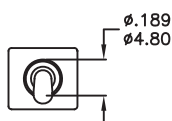


2AS6 Models : Omit 2nd terminal



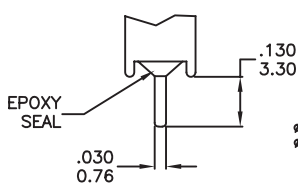
DPDT

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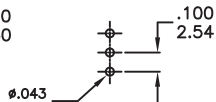


### TERMINATION OPTIONS

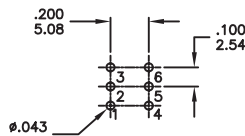
#### M2



#### P.C. MOUNTING



SPDT

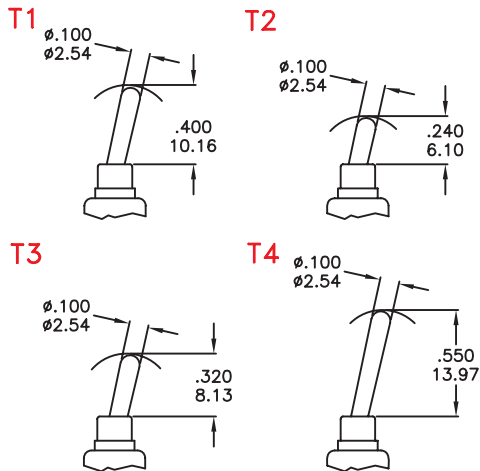


DPDT

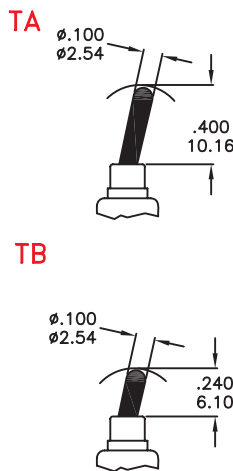
#### OTHER TERMINATION OPTIONS

- M6 RIGHT ANGLE P.C. MOUNT
- M6N RIGHT ANGLE P.C. MOUNT SNAP-IN BRACKET
- M7 RIGHT ANGLE P.C. MOUNT
- VS2 VERTICAL BRACKET P.C.MOUNT

### ACTUATOR OPTIONS

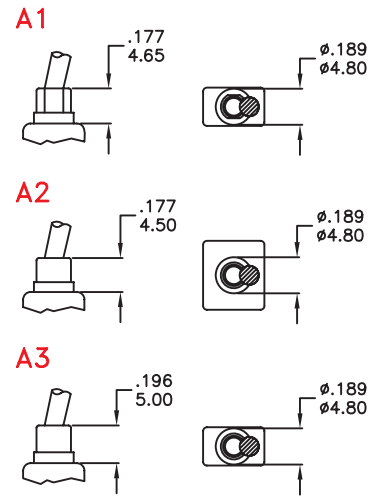


Actuator shown with A1 Bushing,  
sub .020(0.50) for A3 Bushing.



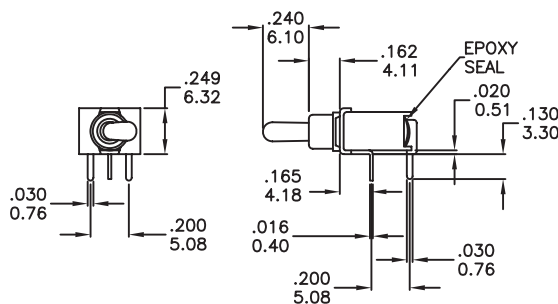
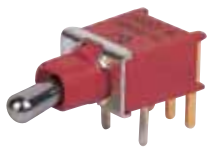
ESD  
PLASTIC ACTUATOR

### BUSHING OPTIONS

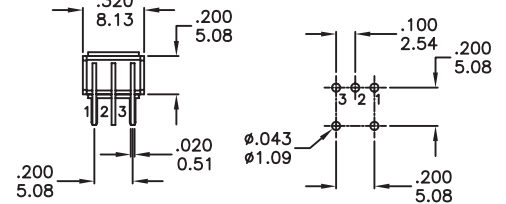


A1 A3 FOR SPDT  
A2 FOR DPDT

### M6



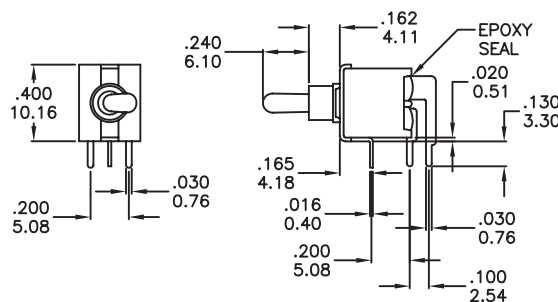
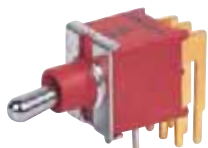
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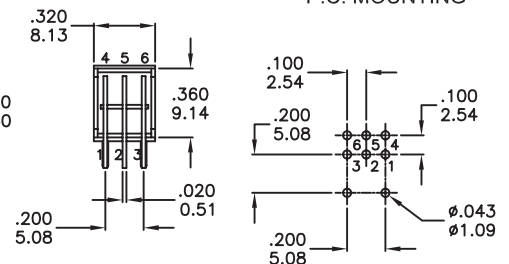
### SPDT

Part No. Shown : 2AS1T2A1M6RE

### M6



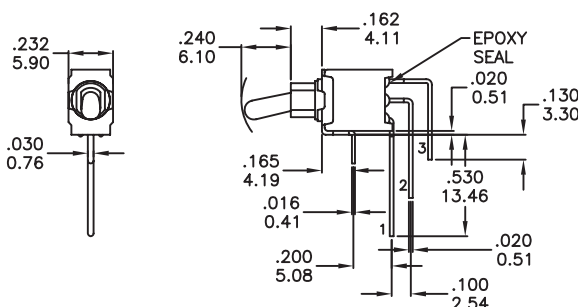
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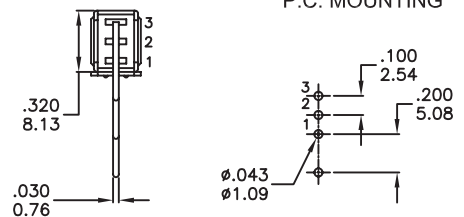
### DPDT

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### M7



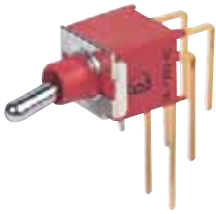
### P.C. MOUNTING



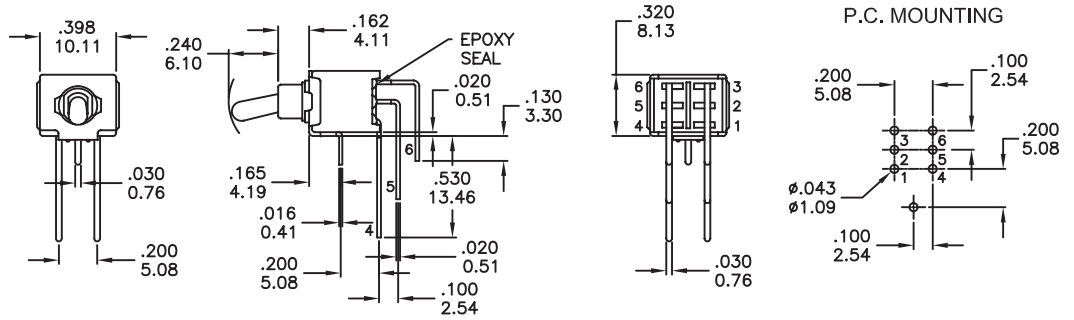
### SPDT

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M7



DPDT

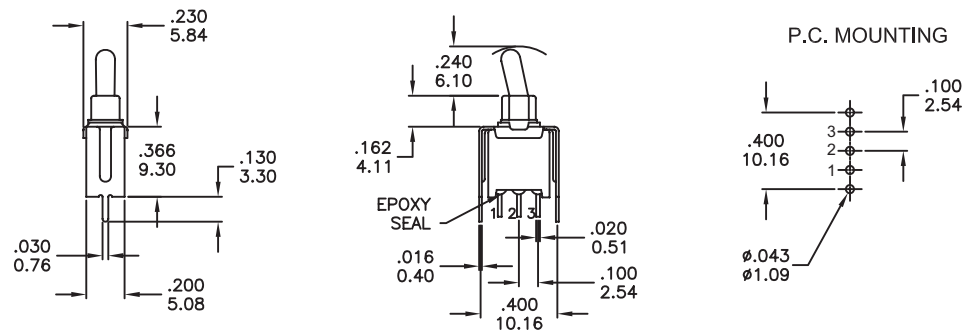


Part No. Shown : 2AD1T2A2M7RE

VS2



SPDT

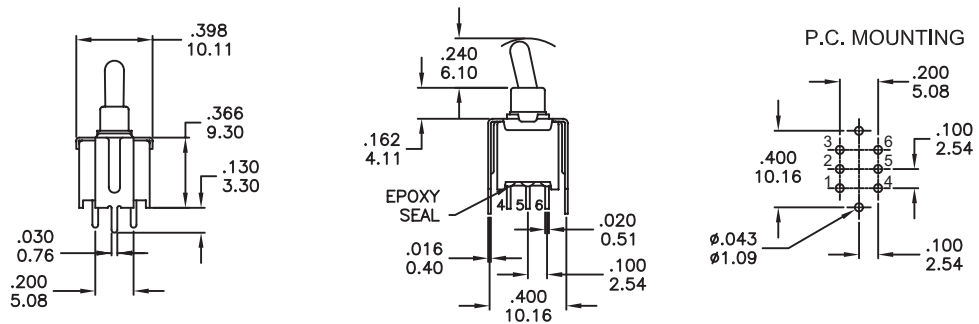


Part No. Shown : 2AS1T2A1VS2RE

VS2



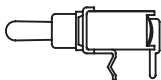
DPDT



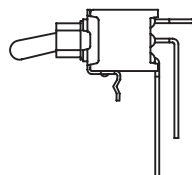
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### SNAP-IN TERMINATION OPTIONS

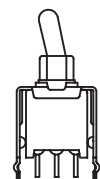
M6N



M7N



V2N



### CONTACT MATERIAL OPTIONS

	CONTACT MATERIAL	TERMINATION RATING	RATINGS
<b>Q</b>	<b>Silver</b>	<b>Q</b> = Gold flash over silver	3 Amps with resistant load @ 120VAC or 28VDC 1 Amps with resistant load @ 250VAC
<b>S</b>		<b>S</b> = Gold flash over silver,pure - tin	
<b>C</b>	<b>Gold over Silver</b>	<b>C</b> = Gold over silver	
<b>K</b>		<b>K</b> = Gold over silver,pure - tin	
<b>R</b>	<b>Gold</b>	<b>R</b> = Gold	0.4 Volt-Amps(VA)max. @ 20V max. (AC or DC)
<b>G</b>		<b>G</b> = Gold,pure - tin	



**IP 67**  
 ACCORDING TO  
 EN 60529:1991+A1:2001  
 IEC 60529:2001

### SOLDERING PROCESSES

**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: 5 ±1 seconds  
 (PCB is 1.6mm in thickness)

**SOLDERING** : Vapor phase

### Temperature Profile

Zone	Room temperature	Time ( Sec )
Pre-heat ( A )	150°C	Min 120s
Soak ( B )	180°C~200°C	Min 150s
Peak ( C )	200°C~235°C	Min 30s
Peak ( D )	235°C~260°C	Min 40s
Peak ( E )	260°C	Max 10s

