

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

UL US  
E 187490

RoHS  
compliant

Pb  
lead-free

### SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material See Page 64.

**MECHANICAL LIFE:** 30,000 make-and-break cycles.

**CONTACT RESISTANCE:** 10 mΩ max. initial @ 2-4VDC  
100mA for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 1,000 MΩ min.

**DIELECTRIC STRENGTH:** 1,000 Vrms min. @ sea level.

**OPERATING TEMPERATURE:** -30°C to 85°C.

### MATERIALS

**CASE & BUSHING :** Glass filled nylon 6/6, flame retardant, heat stabilized (UL94V-0).

**ACTUATOR:** Nylon, black std. Internal O-ring seal standard with all actuators.

**SWITCH SUPPORT:** Brass or steel, tin plated.

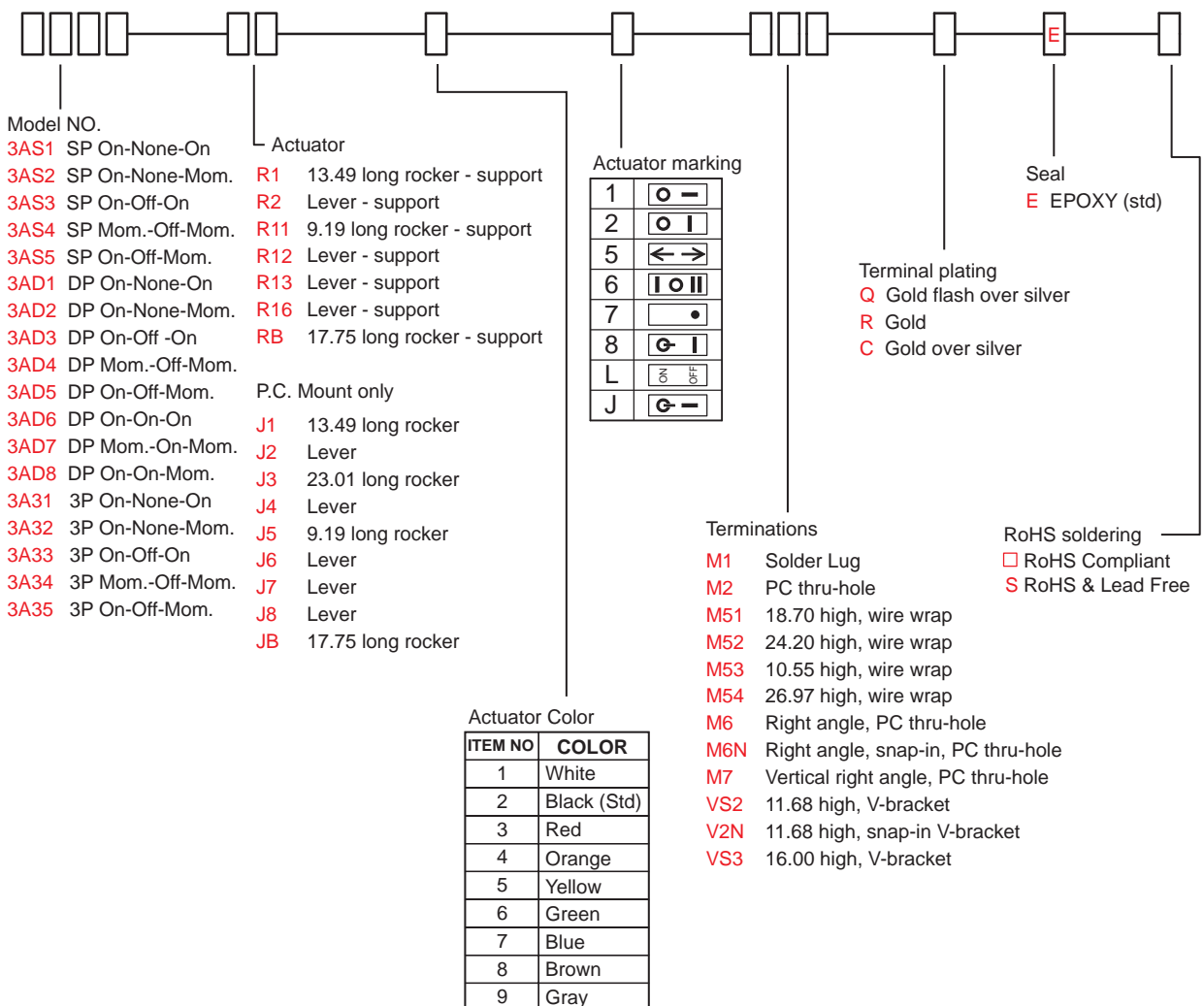
**ACTUATOR PIVOT & MOUNTING BRACKET:** Nylon.

**ACTUATOR PIVOT RETAINER:** Stainless steel.

**TERMINAL/CONTACT:** Silver or gold plated copper alloy.  
(See Page 64)

## HOW TO ORDER

MODEL NO.    ACTUATOR    ACTUATOR COLOR    ACTUATOR MARKING    TERMINATIONS    TERMINAL PLATING    SEAL    RoHS SOLDERING



\* Besides standard color, other colors need to check stocks available.



3A  
Rocker Switches

# 3A Series

Swaled Miniature Rocker & Paddle Switches


## 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	Q13A11	3AS1	ON	NONE	ON	2-3	N/A	2-1	
	Q13A12	3AS2	ON	NONE	MOM				
	Q13A13	3AS3	ON	OFF	ON		OPEN		
	Q13A14	3AS4	MOM	OFF	MOM				
	Q13A15	3AS5	ON	OFF	MOM				
DP	Q13A21	3AD1	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	Q13A22	3AD2	ON	NONE	MOM				
	Q13A23	3AD3	ON	OFF	ON		OPEN		
	Q13A24	3AD4	MOM	OFF	MOM				
	Q13A25	3AD5	ON	OFF	MOM				
	▲	Q13A26	3AD6	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4
	▲	Q13A27	3AD7	MOM	ON	MOM			
	Q13A28	3AD8	ON	ON	MOM				
3P	Q13A31	3A31	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7	
	Q13A32	3A32	ON	NONE	MOM				
	Q13A33	3A33	ON	OFF	ON		OPEN		
	Q13A34	3A34	MOM	OFF	MOM				
	Q13A35	3A35	ON	OFF	MOM				

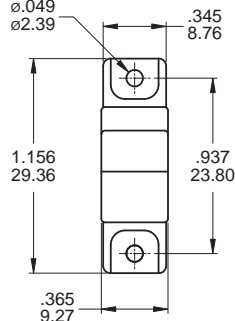
MOM=MOMENTARY

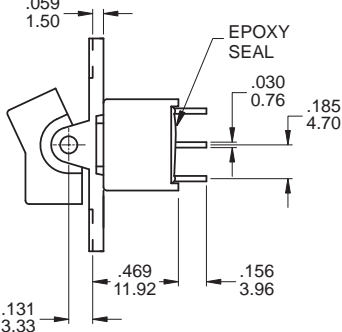
▲ Please check the availability in advance before order

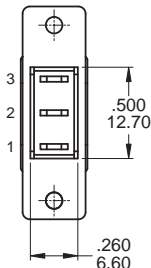
## POLE OPTIONS




**SPDT**



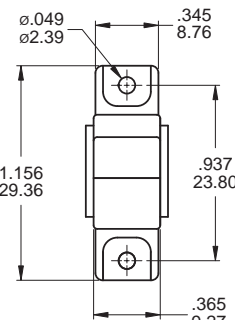


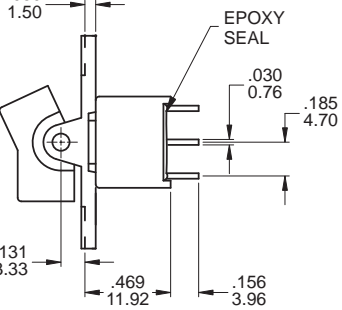


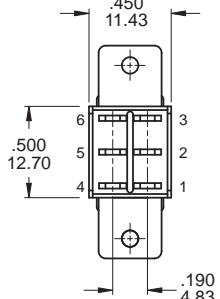
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**DPDT**

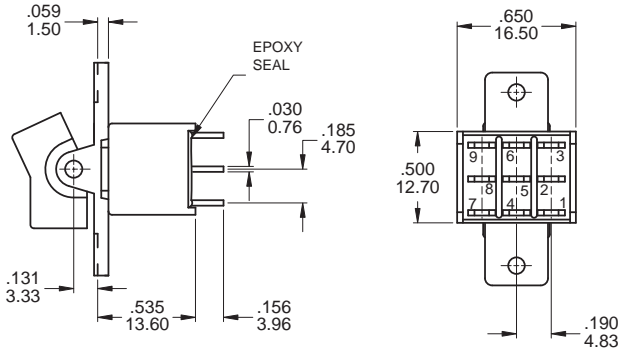
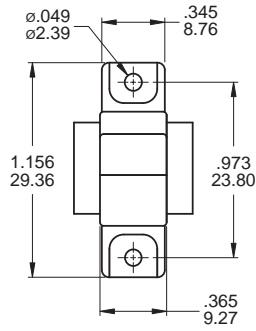






Part No. Shown : 3AD1R102M1QE

3A Rocker Switches

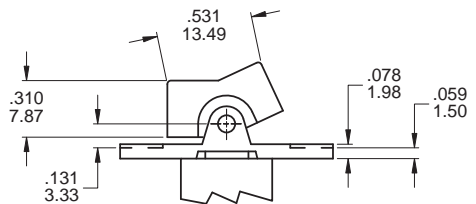
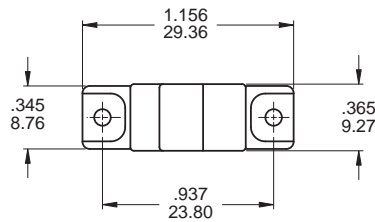


3PDT

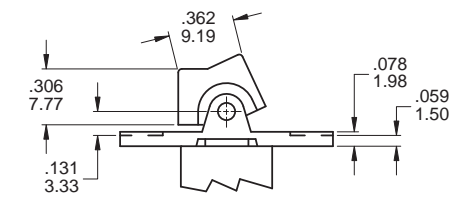
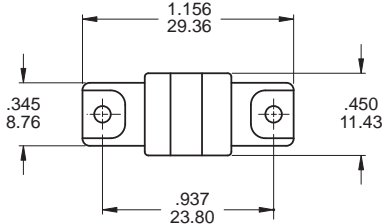
Part No. Shown : 3A31R102M1RE

### ACTUATOR OPTIONS FOR PANEL MOUNT ONLY

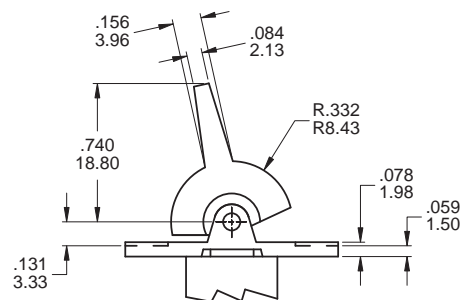
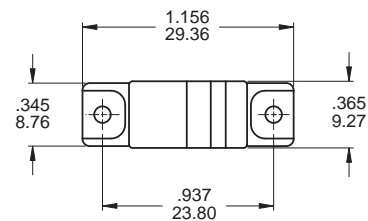
R1



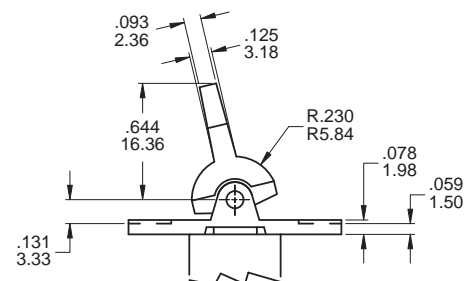
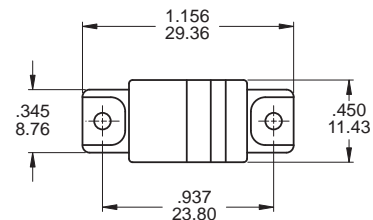
R11



R2



R12



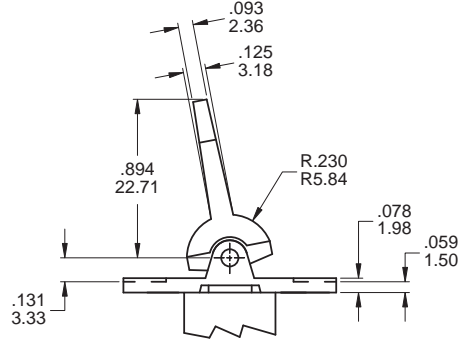
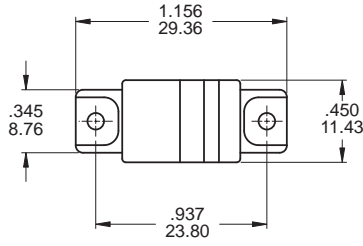
# 3A Series

Sealed Miniature Rocker & Paddle Switches

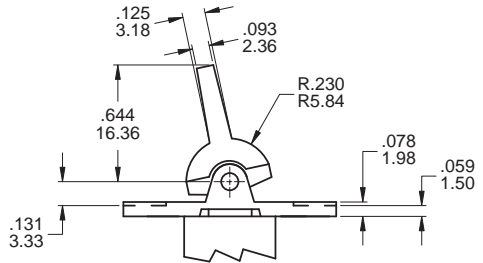
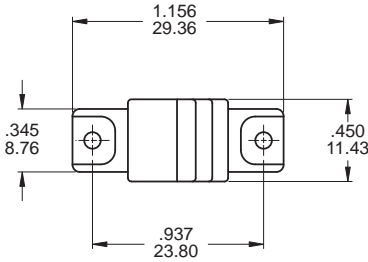


3A  
Rocker Switches

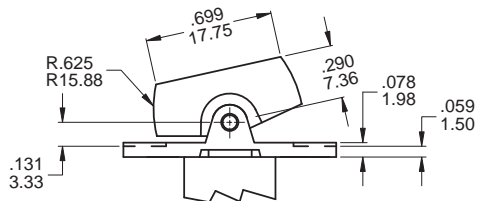
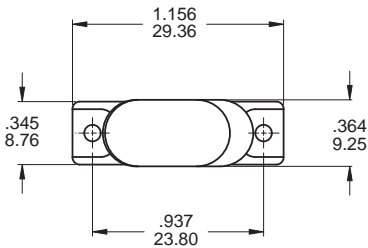
## R13



## R16

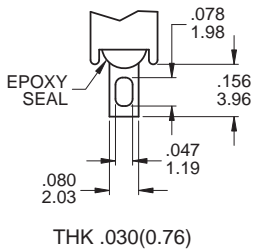


## RB

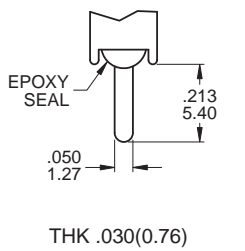


## TERMINATION OPTIONS

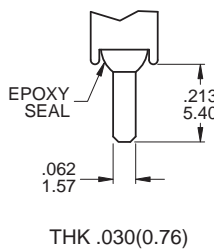
### M1 Solder lug



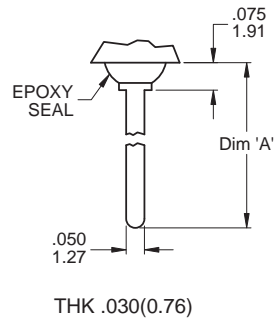
### M2 PC Thru-hole



### M3 Quick connect



### M5 Wire Wrap



## OTHER TERMINATION OPTIONS

**M6** Right angle P.C. Mount

**M7** Right angle P.C. Mount

**VS2** Vertical bracket P.C. Mount

**VS3** Vertical bracket P.C. Mount

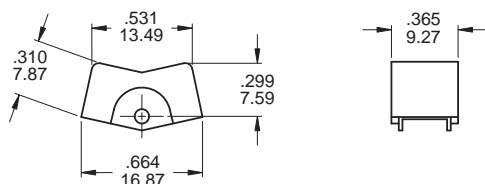
**M6N** Right angle P.C. Mount with snap-in bracket

**V2N** Vertical bracket P.C. Mount with snap-in bracket

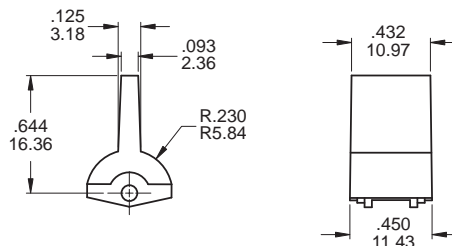
OPTION CODE	DIM. 'A'
M51	.736 (18.70)
M52	.953 (24.20)
M53	.415 (10.55)
M54	1.062 (26.97)

### ACTUATOR OPTIONS FOR P.C. MOUNT ONLY

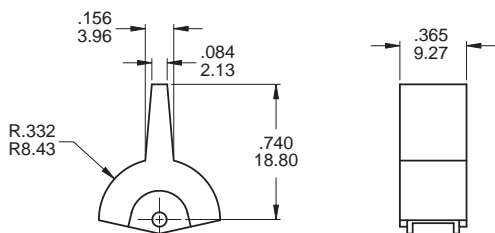
J1



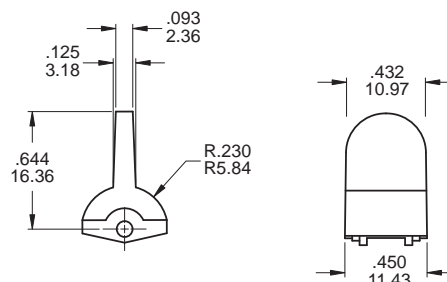
J6



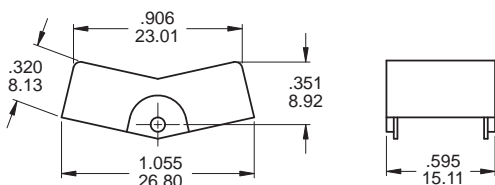
J2



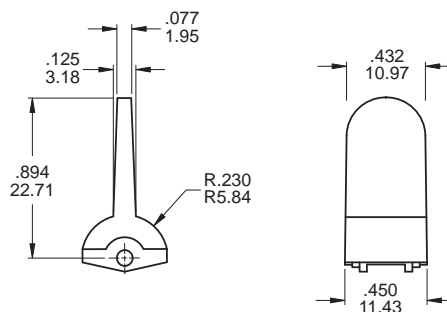
J7



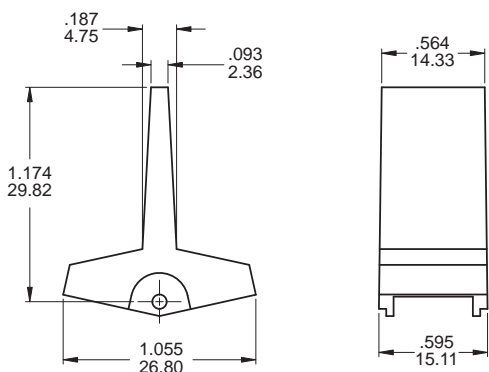
J3



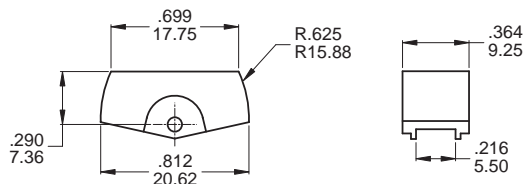
J8



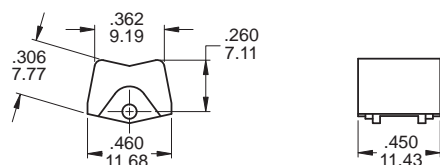
J4



JB



J5



#### Actuator colors:

ITEM NO	COLOR
1	White
2	Black ( Std )
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray

\* Besides standard color, other colors need to check stocks available.



3A  
Rocker Switches

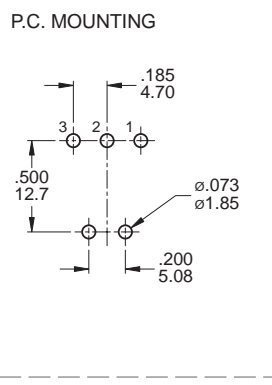
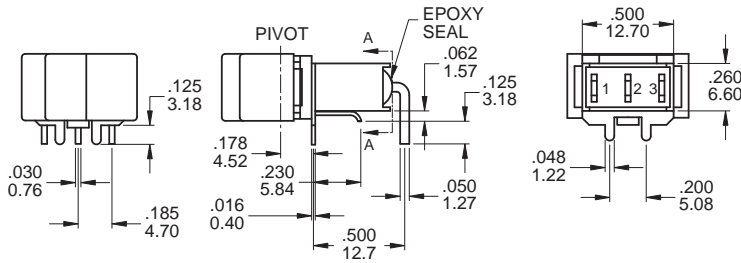
# 3A Series

Sealed Miniature Rocker & Paddle Switches



3A  
Rocker Switches

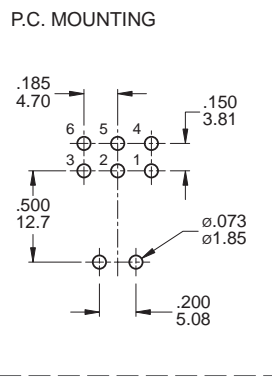
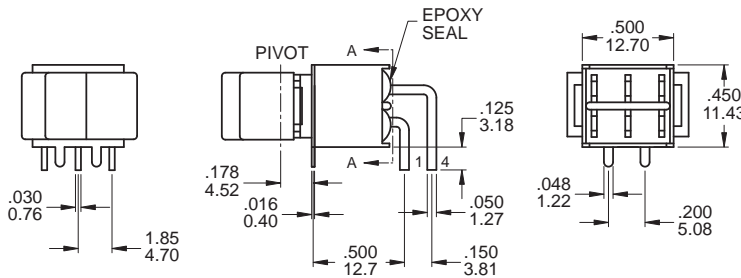
M6



SPDT

Part No. Shown : 3AS1J102M6QE

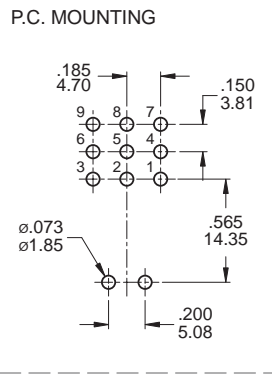
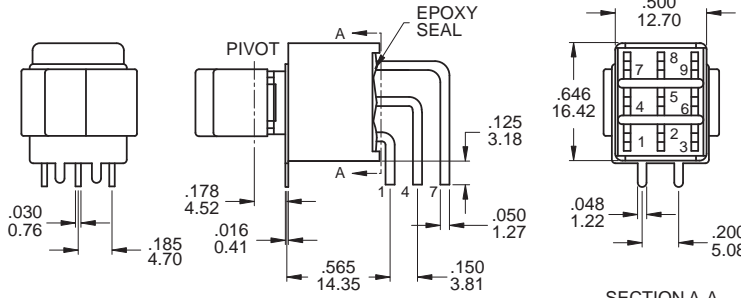
M6



DPDT

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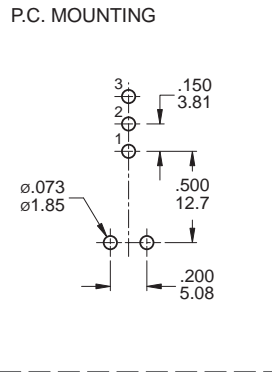
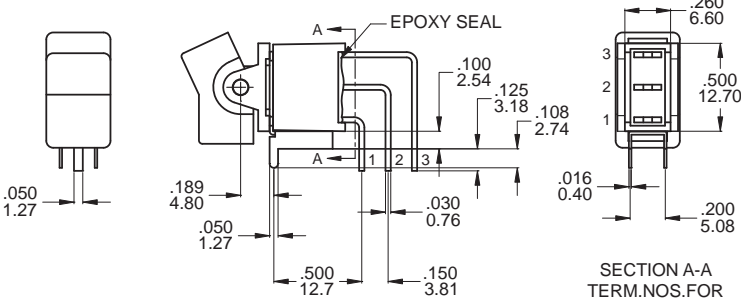
M6



3PDT

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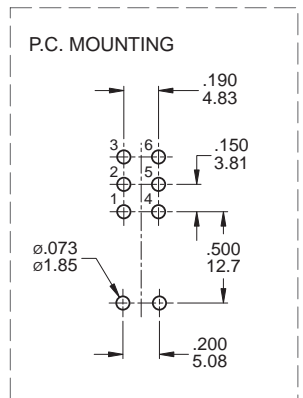
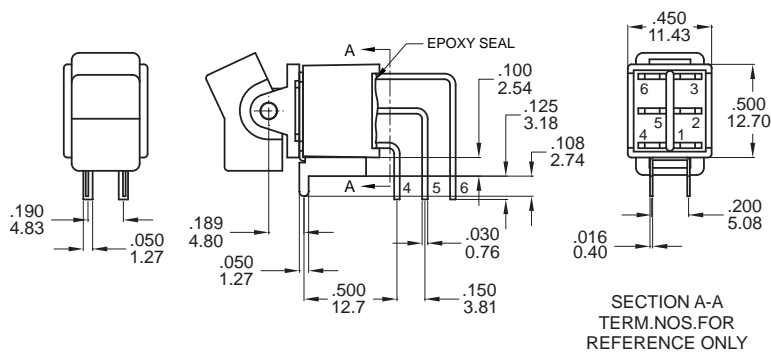
M7



SPDT

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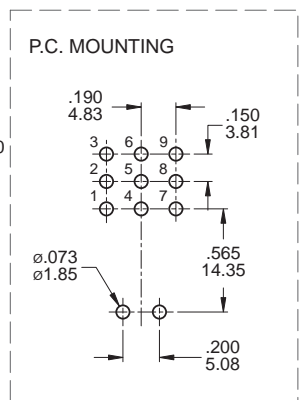
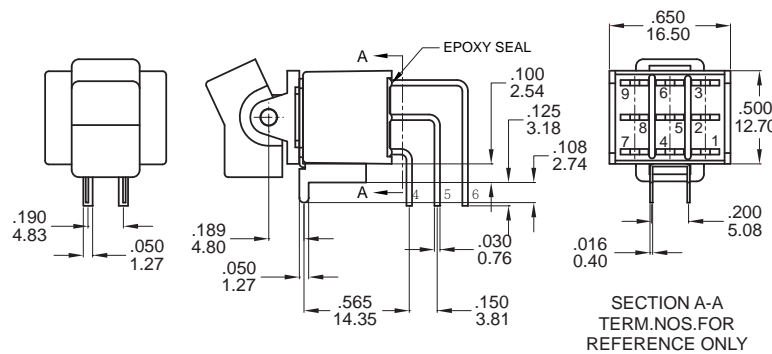
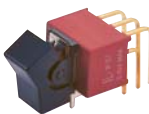
### M7



### DPDT

Part No. Shown : 3AD1J102M7RE

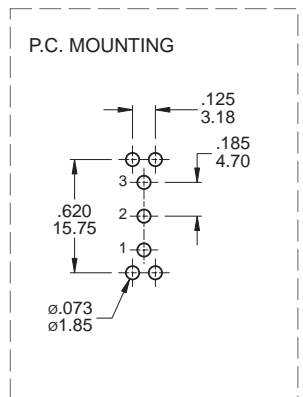
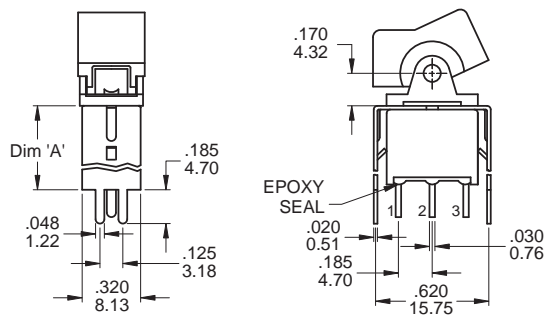
### M7



### 3PDT

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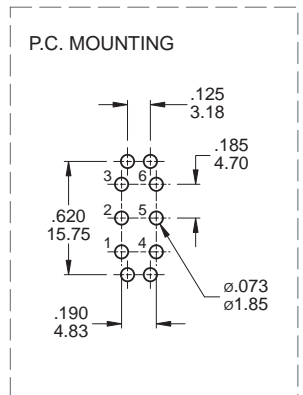
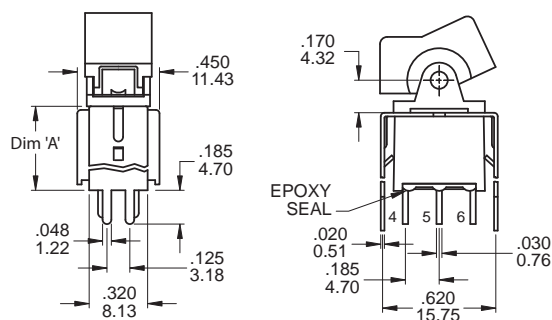
### VS2 - VS3



### SPDT

Part No. Shown : 3AS1J102VS2QE

### VS2 - VS3



### DPDT

Part No. Shown : 3AD1J102VS2QE

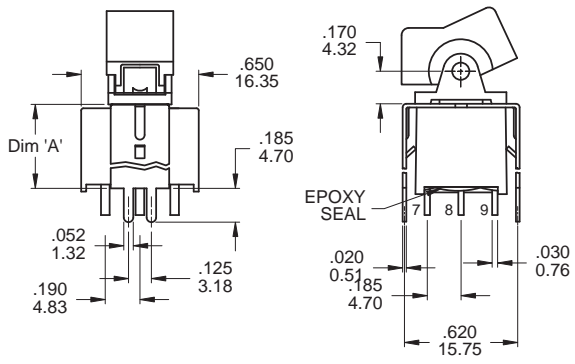


# 3A Series

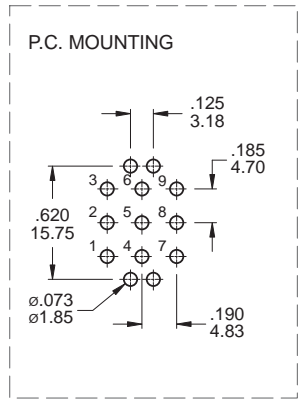
Sealed Miniature Rocker & Paddle Switches

3A  
Rocker Switches

## VS2 - VS3



OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00



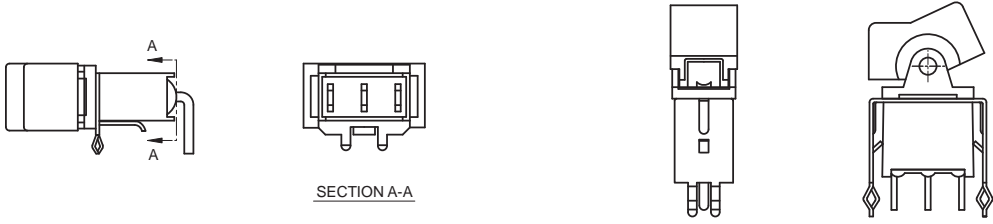
3PDT

Part No. Shown : 3A31J102VS2RE

## SNAP-IN TERMINATION OPTIONS

M6N

V2N



## CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
<b>Q</b>	Silver	<b>Q</b> = Gold flash over silver	5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC
<b>C</b>	Gold over Silver	<b>C</b> = Gold over silver	
<b>R</b>	Gold	<b>R</b> = Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )

## 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: 270 ± 5°C

Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)