

IP 67  
ACCORDING TO  
EN 60529:1991+A1:2001  
IEC 60029:2001

UL US  
E 187490

RoHS  
compliant



## SPECIFICATIONS

**CONTACT RATING:** Dependent upon contact material See Page 63.

**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.

**FRAME:** Spring steel, black std.

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

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

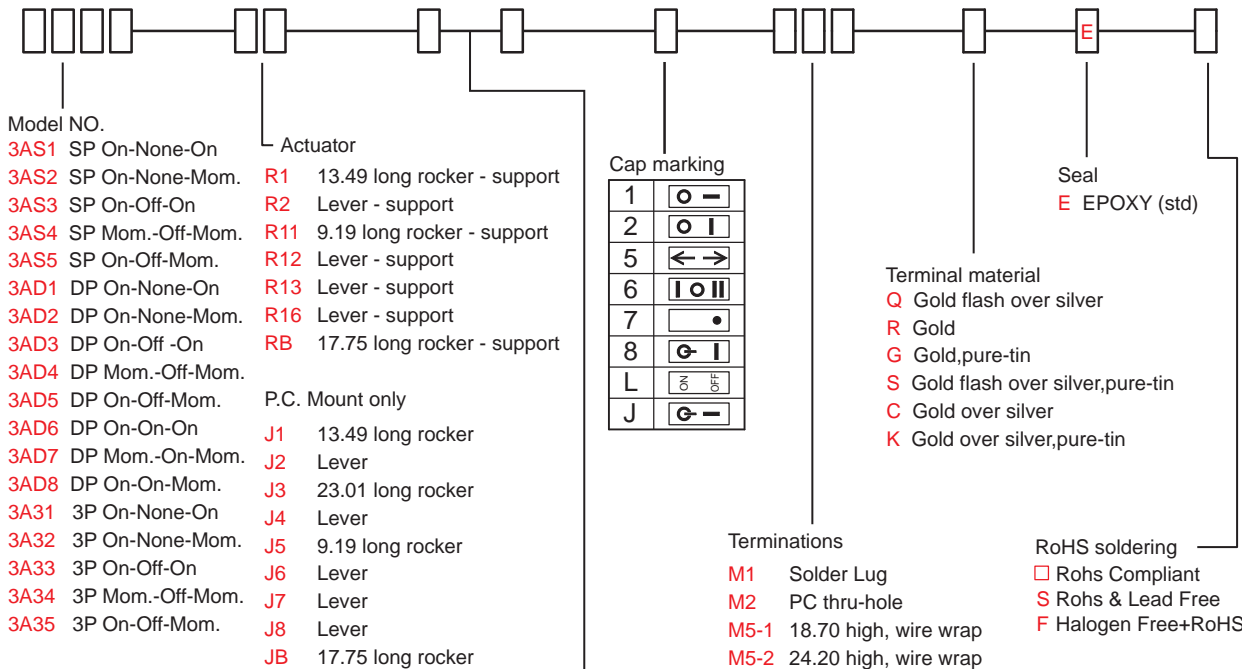
**ACTUATOR PIVOT RETAINER:** Stainless steel.

**TERMINAL/CONTACT:** Silver or gold plated copper alloy.  
(See Page 63)

## HOW TO ORDER

MODEL NO.    ACTUATOR    FRAME COLOR    ACTUATOR COLOR    CAP MARKING    TERMINATIONS    TERMINAL MATERIAL    SEAL    RoHS SOLDERING

See below



### Frame/Actuator Color

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

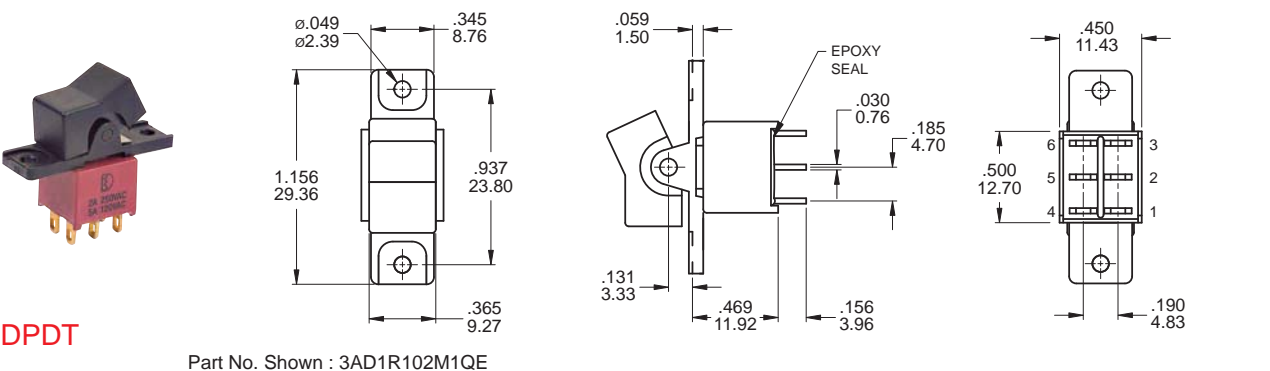
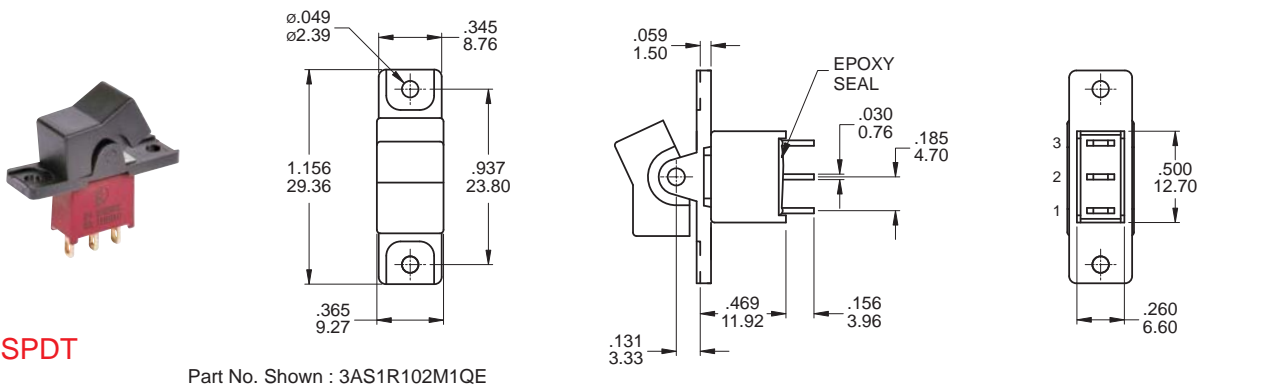
## SWITCH FUNCTION

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

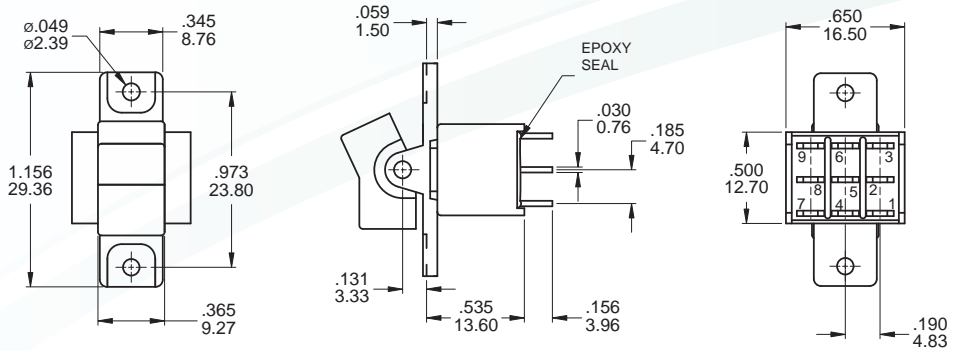


3A  
Rocker Switches



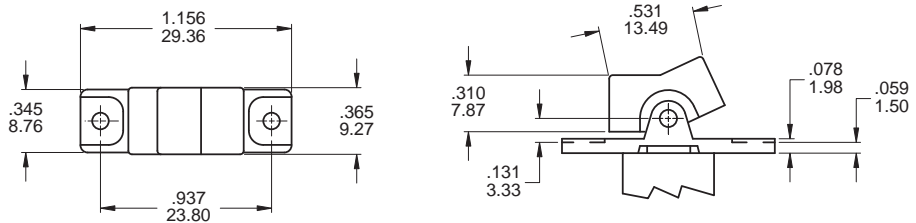
**3PDT**

Part No. Shown : 3A31R102M1RE

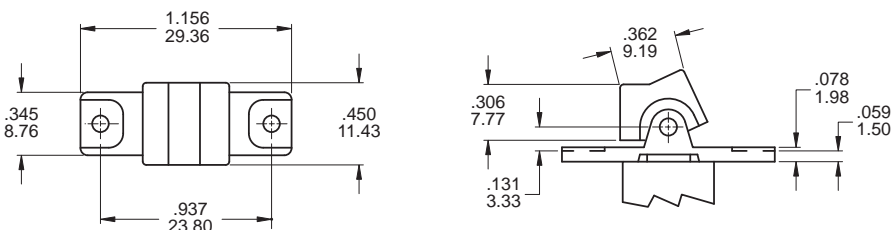


## ACTUATOR OPTIONS FOR PANEL MOUNT ONLY

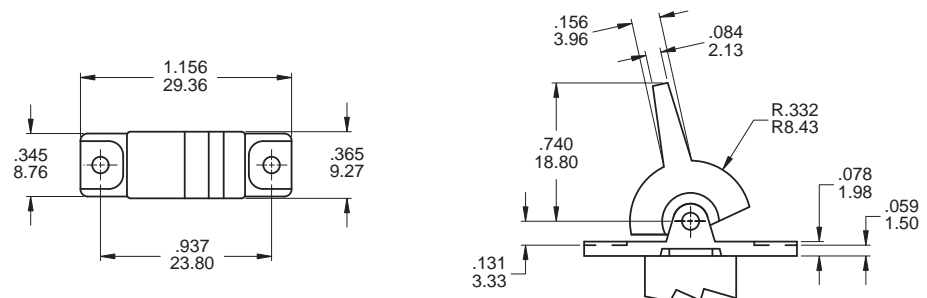
**R1**



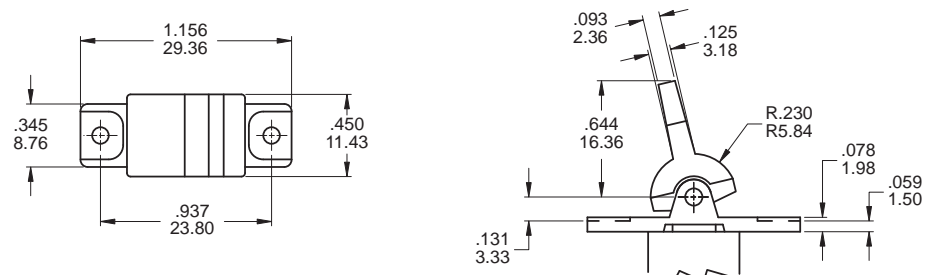
**R11**



**R2**

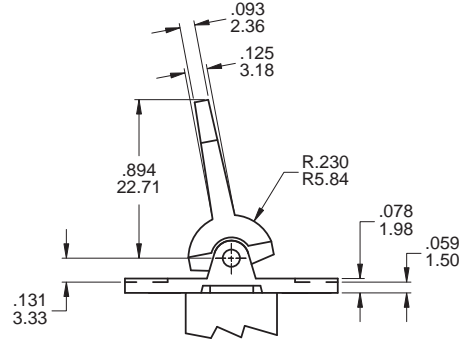
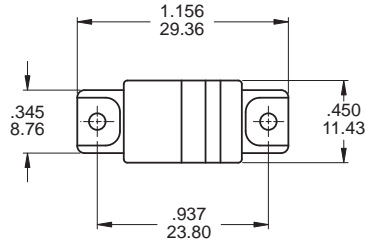


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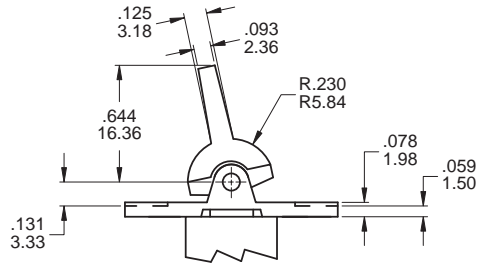
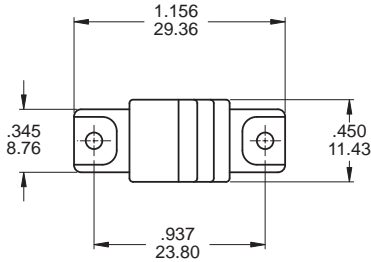




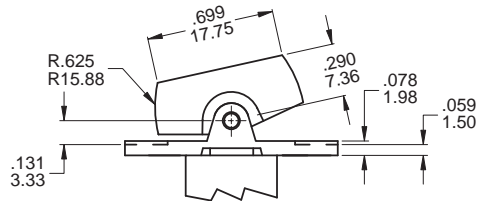
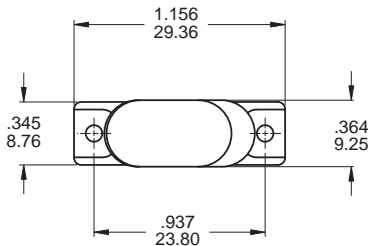
## R13



## R16

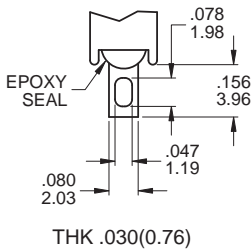


## RB

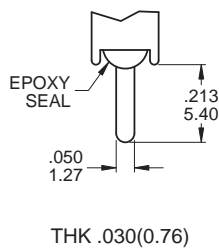


## TERMINATION OPTIONS

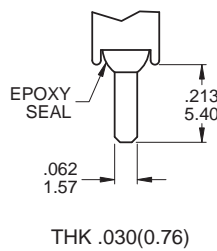
### M1 Solder lug



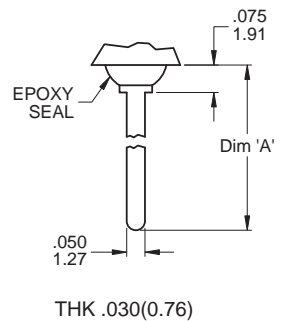
### M2 PC Thru-hole



### M3 Quick connect



### M5 Wire Wrap



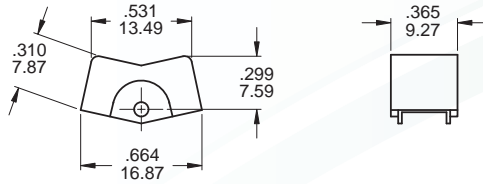
## OTHER TERMINATION OPTIONS

- M6 RIGHT ANGLE P.C. MOUNT
- M7 RIGHT ANGLE P.C. MOUNT
- VS2 VERTICAL BRACKET P.C. MOUNT
- VS3 VERTICAL BRACKET P.C. MOUNT

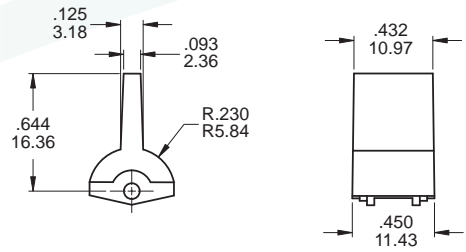
OPTION CODE	DIM. 'A'
M5-1	.736 (18.70)
M5-2	.953 (24.20)
M5-3	.415 (10.55)
M5-4	1.062 (26.97)

## ACTUATOR OPTIONS FOR P.C. MOUNT ONLY

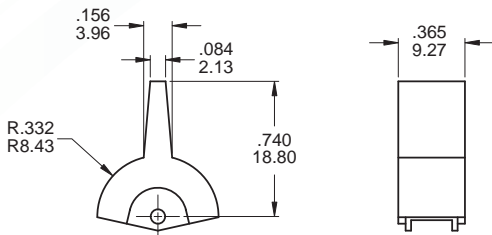
J1



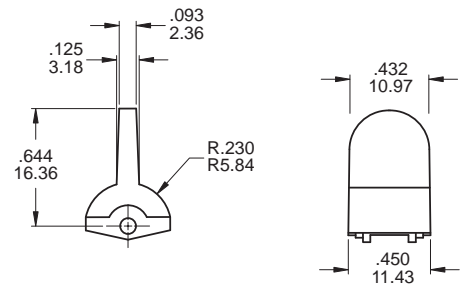
J6



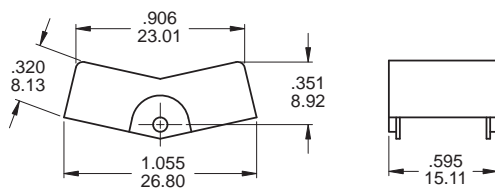
J2



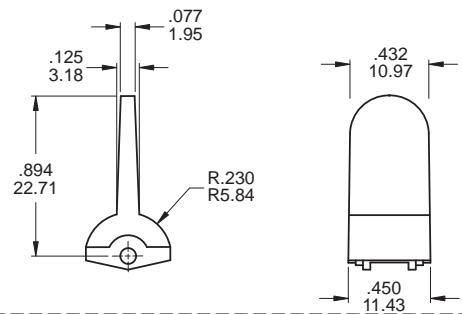
J7



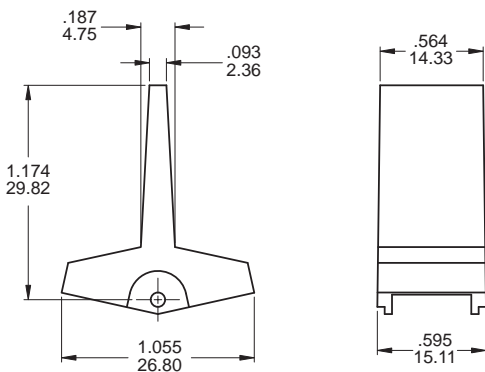
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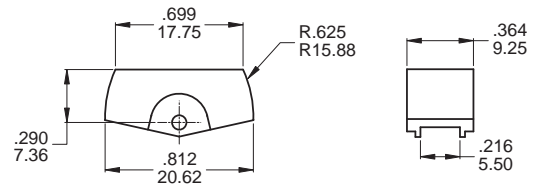
J8



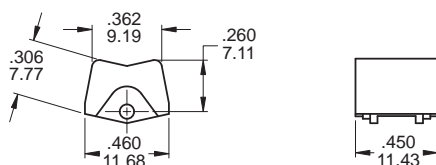
J4



JB



J5



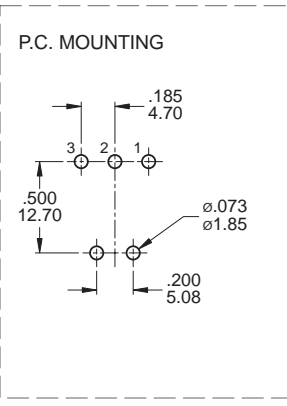
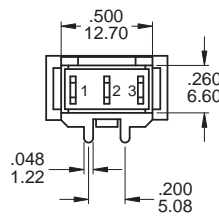
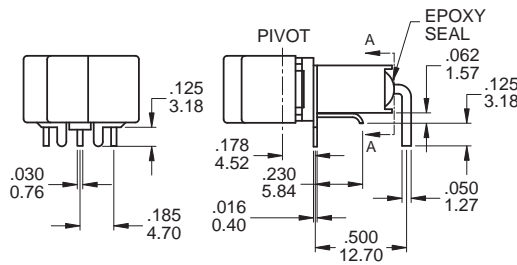
### Actuator colors:

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



3A Sealed Miniature Rocker & Paddle Switches

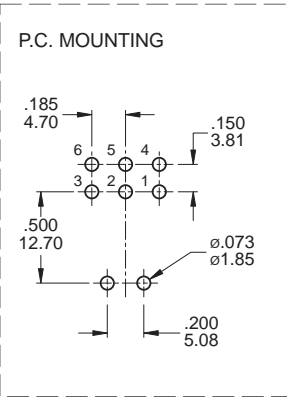
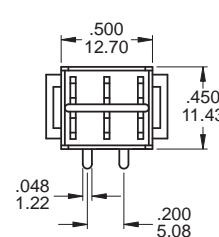
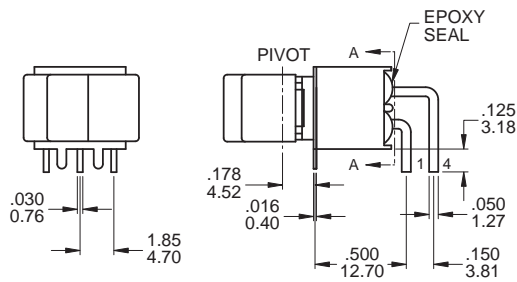
## M6



## SPDT

Part No. Shown : 3AS1J102M6QE

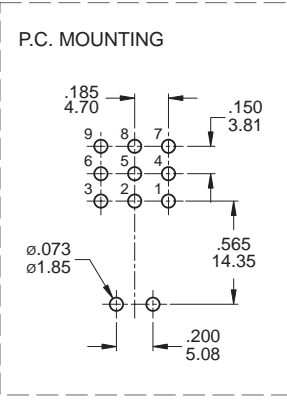
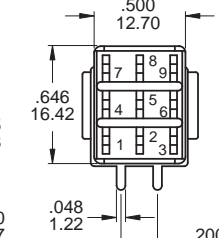
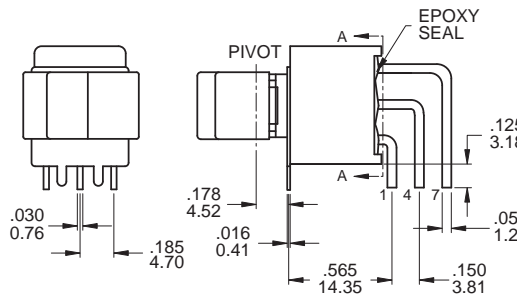
## M6



## DPDT

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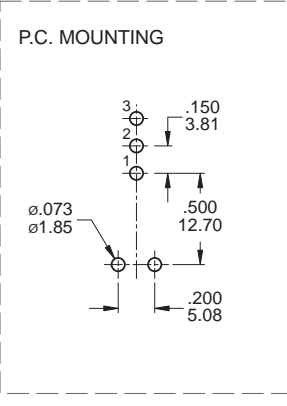
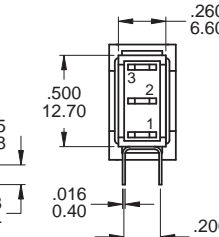
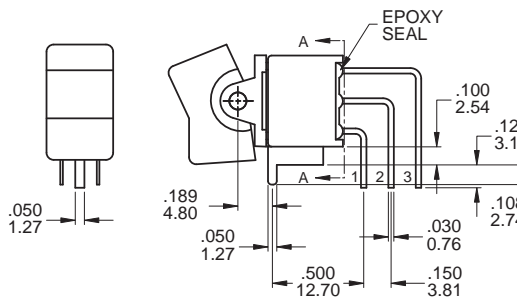
## M6



## 3PDT

Part No. Shown : 3A31J102M6RE

## M7



## SPDT

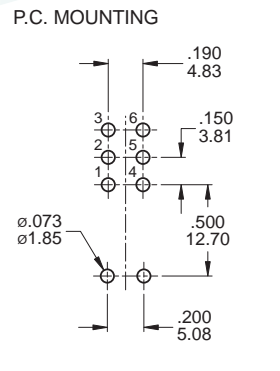
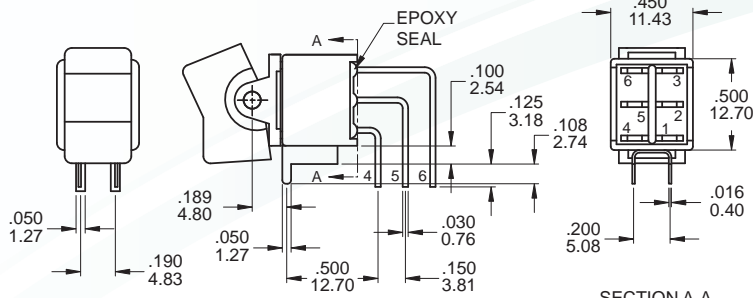
Part No. Shown : 3AS1J102M7RE



3A  
Rocker Switches



## M7

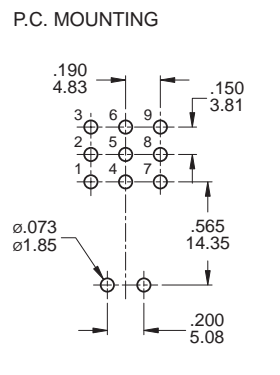
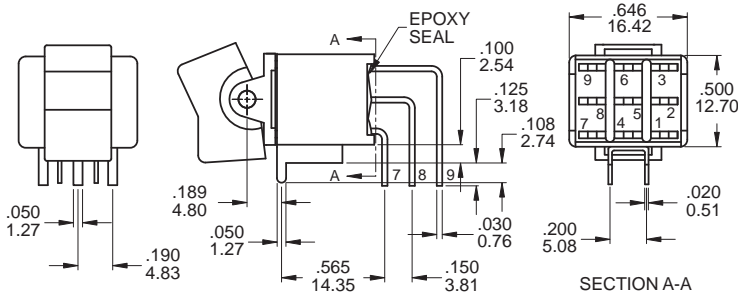
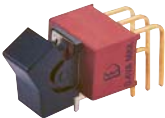


## DPDT

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SECTION A-A  
TERM.NOS.FOR  
REFERENCE ONLY

## M7

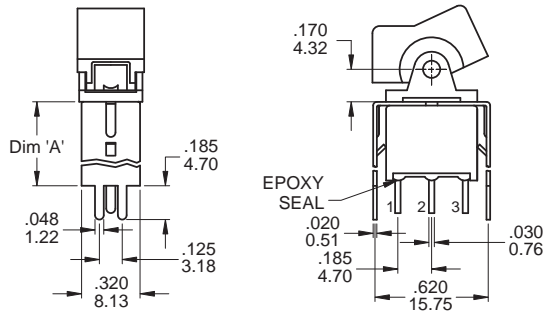


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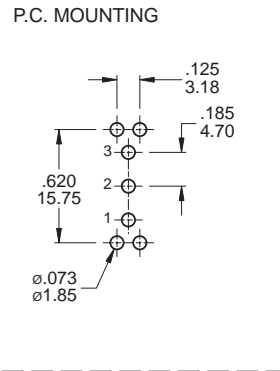
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SECTION A-A  
TERM.NOS.FOR  
REFERENCE ONLY

## VS2 - VS3



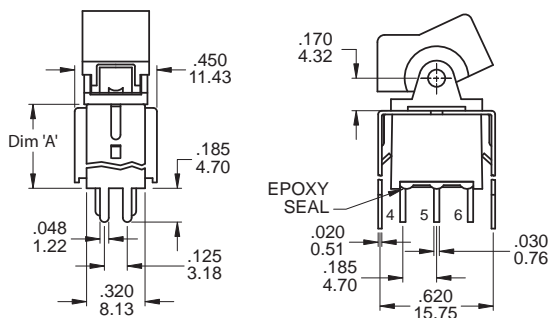
OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00



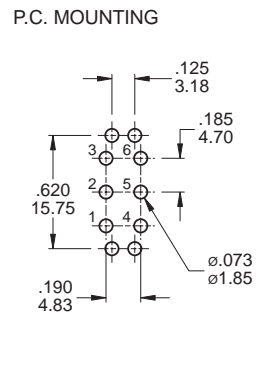
## SPDT

Part No. Shown : 3AS1J102VS2QE

## VS2 - VS3



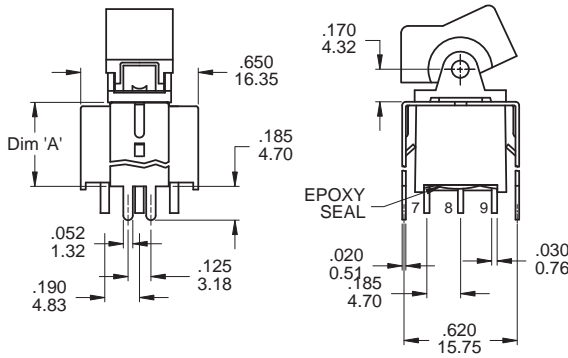
OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00



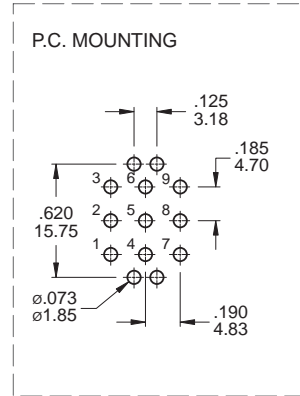
## DPDT

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## VS2 - VS3



OPTION CODE	DIM. 'A'
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VS3	.630 16.00

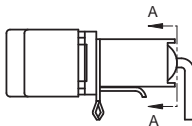


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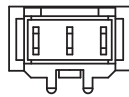
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## SNAP-IN TERMINATION OPTIONS

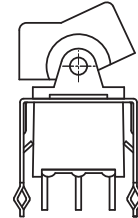
### M6N



### V2N



SECTION A-A



## CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Q = Gold flash over silver	5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC
S		S = Gold flash over silver,pure - tin	
C	Gold over Silver	C = Gold over silver	
K		K = Gold over silver,pure - tin	
R	Gold	R = Gold	0.4 Volt - Amps ( VA ) max. @ 20V max. ( AC or DC )
G		G = Gold,pure - tin	

## 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: Max 5 sec. (PCB is 1.6mm in thickness)

