

**Rocker/Paddle Switches, A Series, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

Contacts/Terminals.....Gold/gold flash  
 Silver/tin lead  
 Case Material .....Thermoset 94V-0  
 Actuator Material .....Polyamide  
 Terminal Seal .....Epoxy

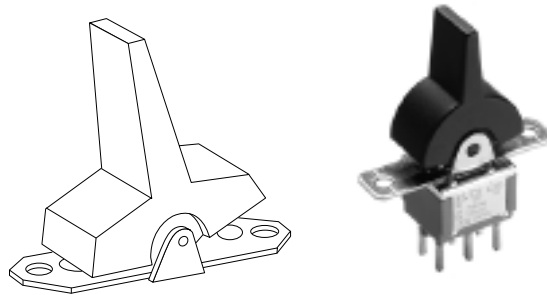
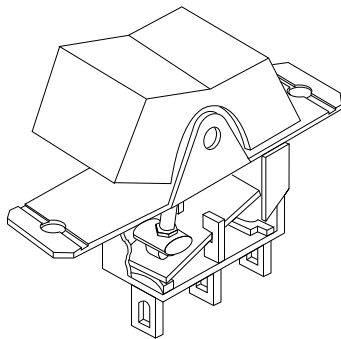
**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-4°F to +185°F (-20°C to +85°C)  
 Storage Temperature.....-49°F to +212°F (-45°C to +100°C)

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....Gold: 0.4 VA @ 20 AC/DC  
 Silver: 2 A @ 250 VAC: 5 A @ 125 VAC  
 Silver: 2 A @ 30 VDC  
 Initial Contact Resistance .....30 Milliohms max.  
 Contact Timing .....Break-before-make  
 Insulation Resistance .....1,000 Megohms @ 500 VDC  
 Dielectric Strength .....1,000 Volts RMS @ sea level  
 Actuator Travel.....25°  
 Life Expectancy .....Up to 30,000 Cycles

**DESIGN**



**PART NUMBERING**

Model	Function	Actuator	Terminal	Contact	Actuator Color	Beveled Frame Color	Option
<b>A1</b>	Single Pole	<b>J1</b> Small	<b>Z</b> Wire Lug	<b>Q</b> Silver	<b>0</b> Black (Std.)	<b>0</b> Black (Std.)	UL (Q or G) contacts only
<b>A2</b>	Double Pole	<b>J3</b> Large	<b>A</b> Right Angle	<b>B</b> Gold	<b>2</b> Red		
<b>01</b>	On-On	<b>J15</b> Snap-in	<b>AV2</b> Vert. Right Angle	<b>G</b> Gold over Silver			
<b>03</b>	On-Off-On	<b>J16</b> Snap-in w/beveled frame	<b>C</b> Printed Circuit				
<b>05</b>	(On)-Off-(On)	<b>J50</b> Snap-in	<b>V5</b> Vertical Right Angle				
		<b>J51</b> Snap-in w/beveled frame	<b>V3</b> <b>V4</b> Vertical Support Bracket				
		<b>J52</b> Snap-in w/beveled frame LED	<b>W</b> Wire Wrap				
		<b>J2</b> Small	<b>Z3</b> Quick Connect				
		<b>J4</b> Large					
		<b>J5</b> Large					
		<b>J60</b> Snap-in					
		<b>J61</b> Snap-in w/beveled frame					
		<b>J62</b> Snap-in w/beveled frame & LED					

**OPTIONAL:**  
 UL recognized under the Component Program of Underwriters Laboratories Inc. File # E46765  
 CSA Certified File #LR65901

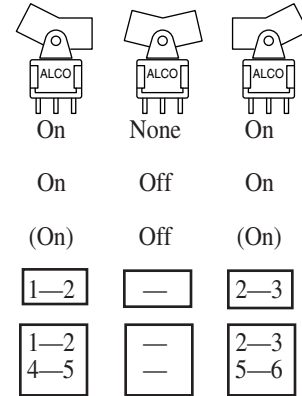
Gemini Series Rocker/Paddle Switches

**Rocker/Paddle Switches, A Series, Options**

**FUNCTIONS**

The following functions available in SP or DP.

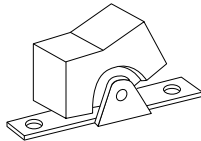
- 01** 2 Positions None indicates no mechanical position
  - 03** 3 Positions Off indicates a mechanical position with no electrical connection.
  - 05** 3 Positions (On) indicates momentary operation.
- SPDT, connect terminals:  
DPDT, connect terminals:



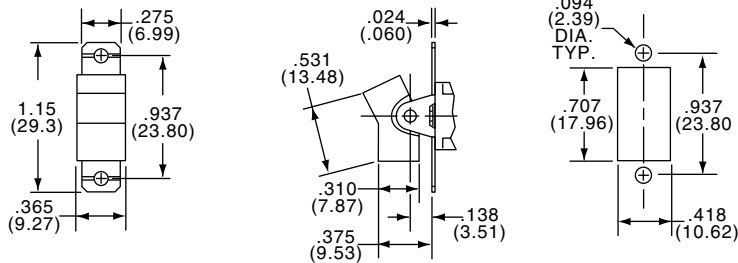
**ACTUATORS**

**J1 Rockers**

Small

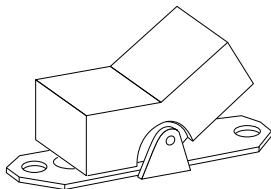


Mounting Type Standard with C or Z Terminal Type

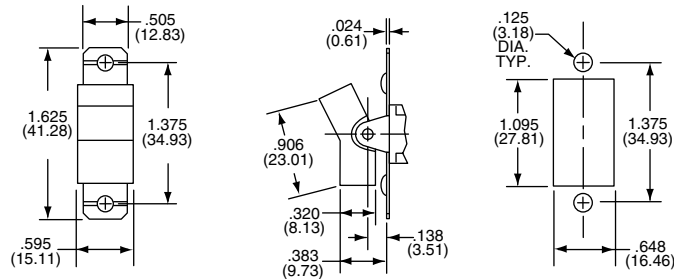


**J3**

Large



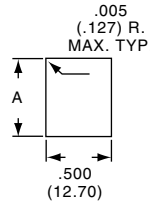
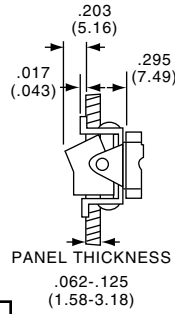
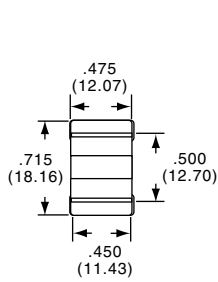
Mounting Type Standard with C or Z Terminal Type



F

Gemini Series Rocker/Paddle Switches

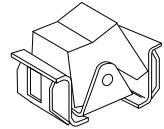
**Rocker/Paddle Switches, A Series, Options**



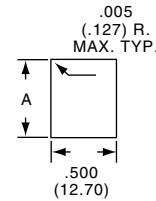
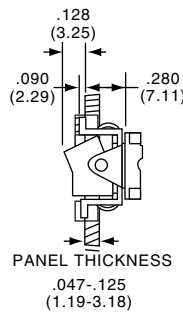
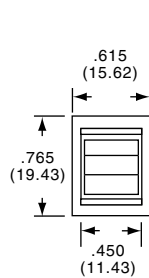
**ROCKER**



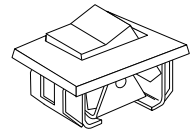
Snap-in



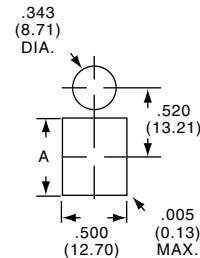
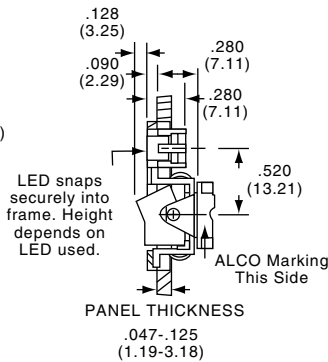
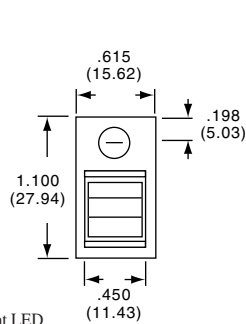
	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



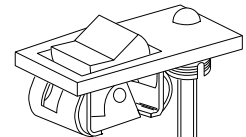
**Snap-in with beveled frame**



	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



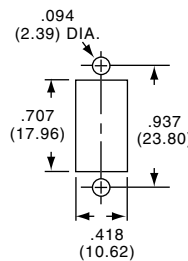
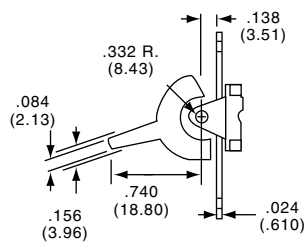
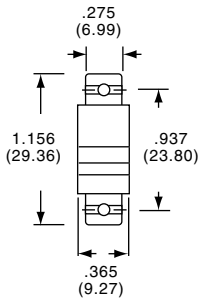
**Snap-in with beveled frame/L.E.D.**



L.E.D. Not supplied.

Accepts BL-17 or equivalent LED

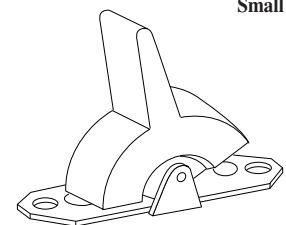
	Panel Opening		
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



**PADDLE**

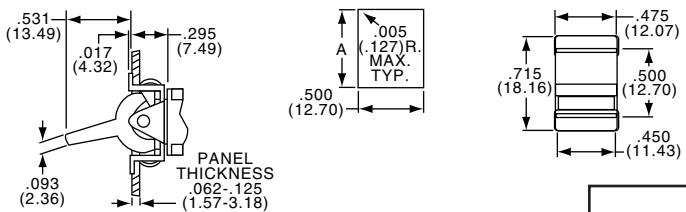
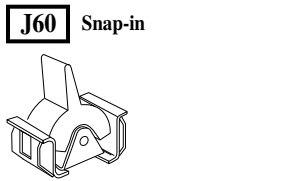
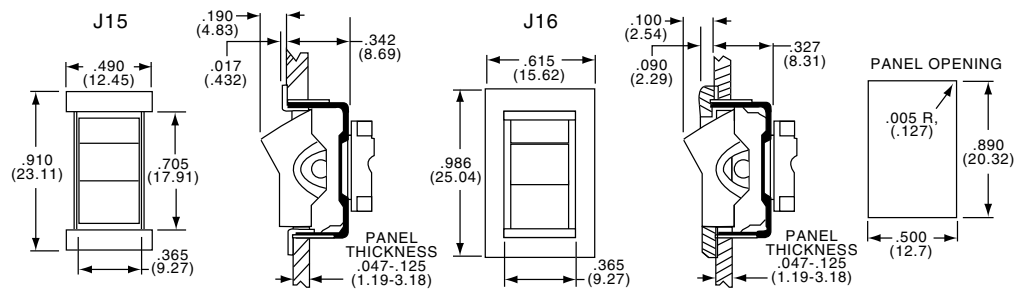
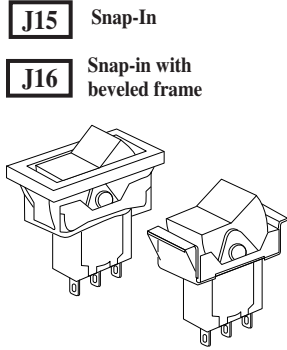
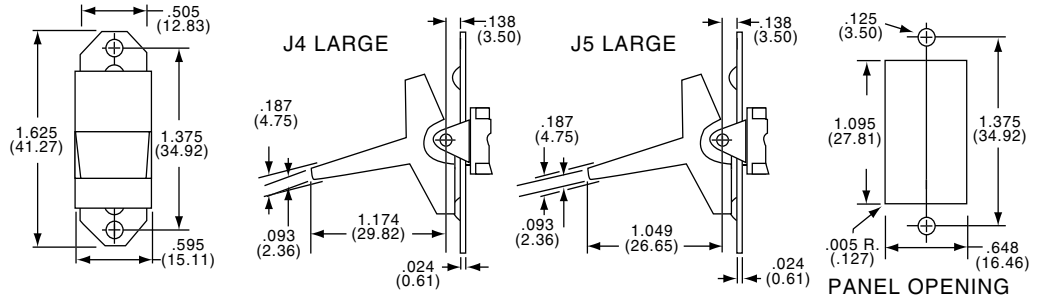
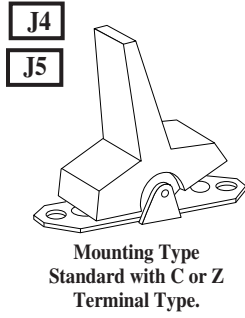


Small

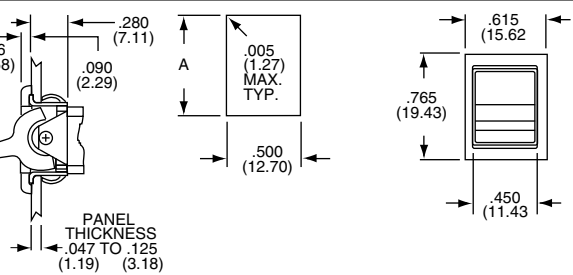
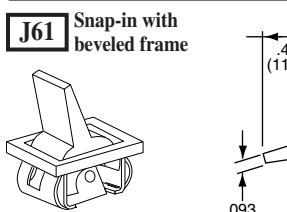


Mounting Type Standard with C or Z Terminal Type.

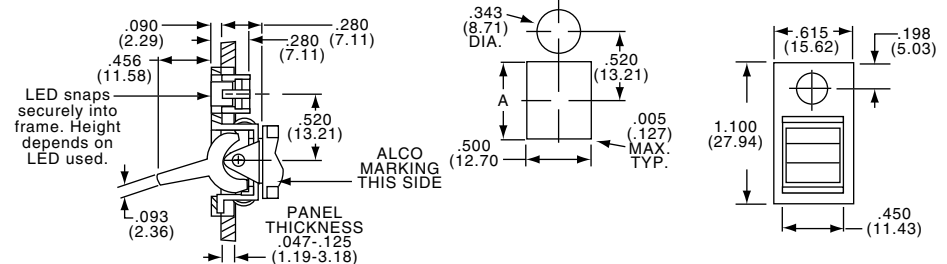
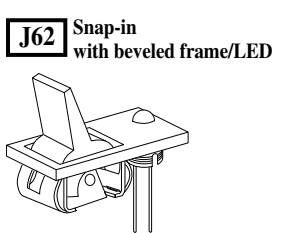
**Rocker/Paddle Switches, A Series, Options**



Panel Opening			
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625



Panel Opening			
Panel Thickness	.062	.093	.125
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Panel Opening			
Panel Thickness	.062	.093	.125
"A"	.600-.605	.610-.615	.620-.625

Accepts BL-17 or equivalent LED  
L.E.D. not supplied

F10

F

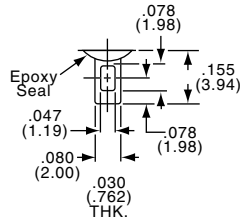
Gemini Series Rocker/Paddle Switches

**Rocker/Paddle Switches, A Series, Termination Options**

TERMINALS

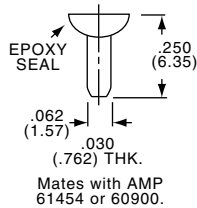
**Z**

Wire Lug Standard



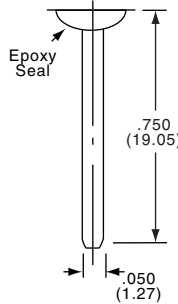
**Q**

Quick Connect



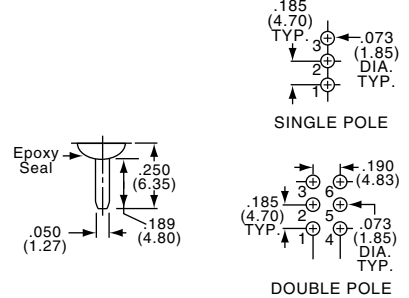
**W**

Wire Wrap



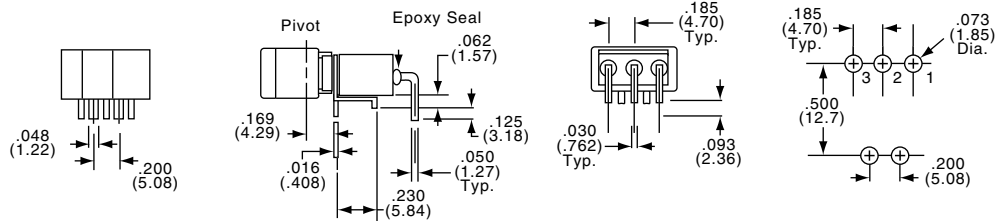
**C**

Printed Circuit



**A**

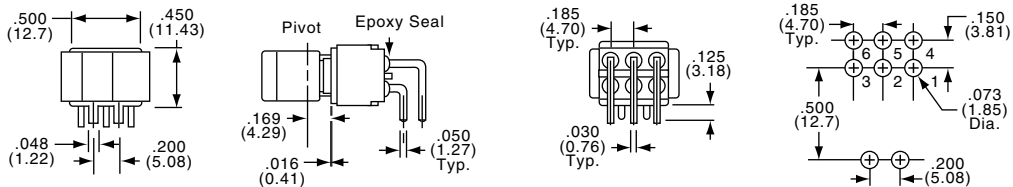
Right Angle Single Pole



NOTE: Terminal numbers viewed from top of P.C. board.

**A**

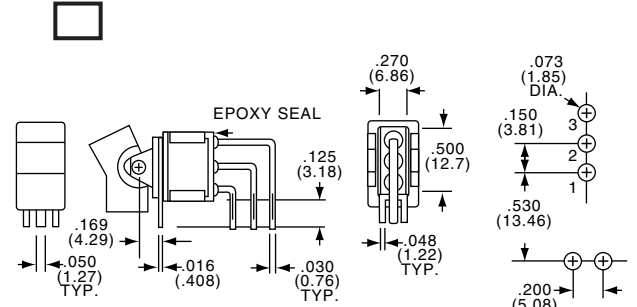
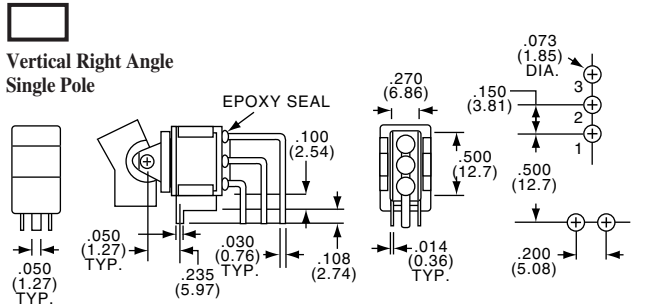
Right Angle Double Pole



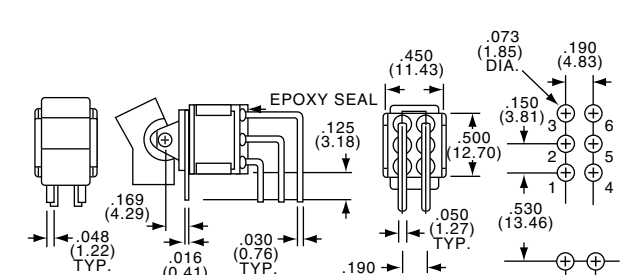
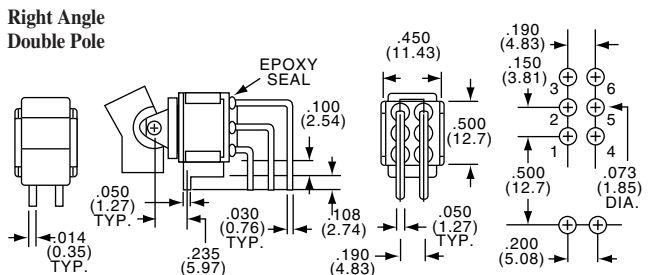
NOTE: Terminal numbers viewed from top of P.C. board.

**F**  
Gemini Series Rocker/Paddle Switches

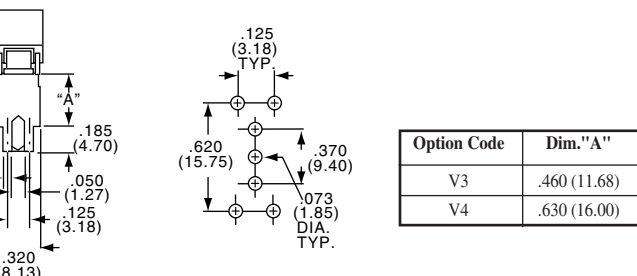
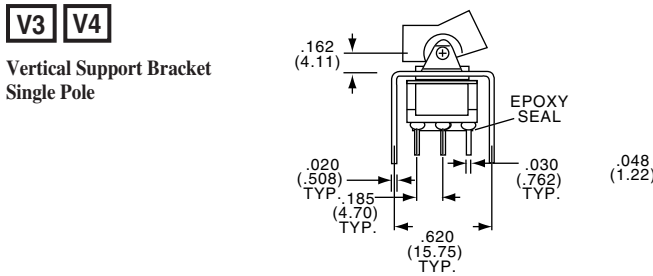
**Rocker/Paddle Switches, A Series, Options**



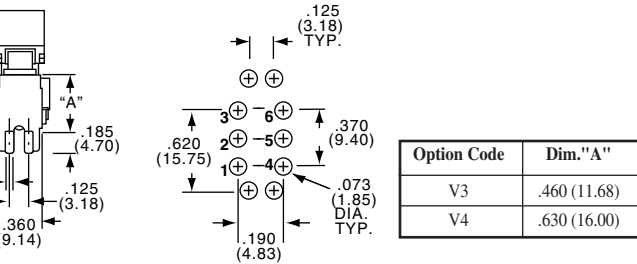
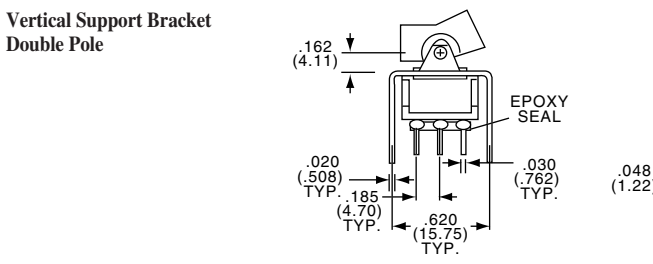
NOTE: Terminal numbers viewed from top of P.C. board.



NOTE: Terminal numbers viewed from top of P.C. board.



Option Code	Dim. "A"
V3	.460 (11.68)
V4	.630 (16.00)



Option Code	Dim. "A"
V3	.460 (11.68)
V4	.630 (16.00)

**CONTACTS**

**B** CONTACTS: Copper alloy with gold plate, welded button.

TERMINALS: Copper alloy with gold plate.

ELECTRICAL RATING: 0.4VA @ 20 VAC/DC.

**Q** CONTACTS: Copper alloy with silver, welded button.

TERMINALS: Copper alloy with tin/lead plate.

ELECTRICAL RATING: 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC. UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

**G** CONTACTS: Copper alloy with gold plate over silver, welded button.

TERMINALS: Copper alloy with gold plate.

ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC or 5 A @ 125 VAC, 2 A @ 250 VAC, 2 A @ 30 VDC.

Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arc-removal of gold plate.

UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

F

Gemini Series Rocker/Paddle Switches

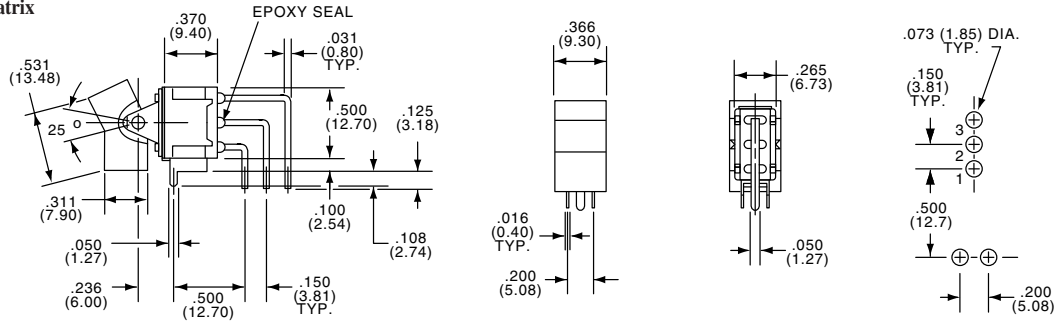
**Rocker Switches, A Series, PC Tail, Straight or Vertical Right Angle**

\* Refer to Pages F7 for Product Specifications and Part Matrix

SPDT



A101J1AV2Q0

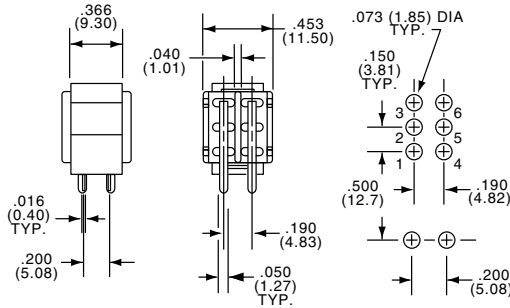


DPDT



A205J1AV2Q0

Standard Rocker Color - (Black)

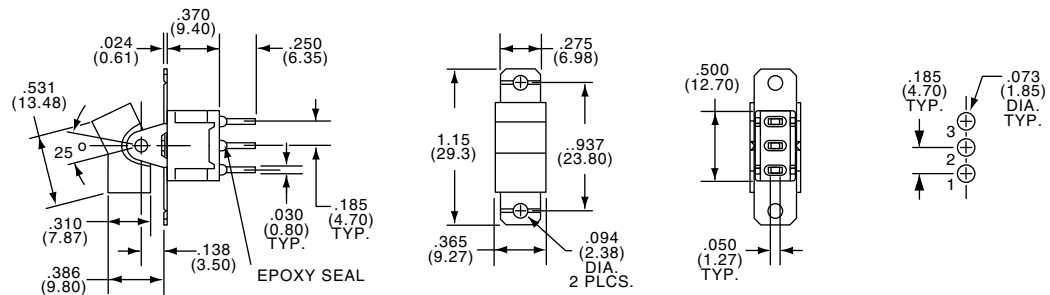


Silver Contacts						
Tyco Electronics	Alcoswitch	Type	Act. Code. P. M5			
1-1437591-1	A101J1AV2Q0	SPDT	1	On	None	On
4-1437591-7	A105J1AV2Q0	SPDT	5	(On)	Off	(On)
7-1437591-1	A201J1AV2Q0	DPDT	2	On	None	On
9-1437591-6	A205J1AV2Q0	DPDT	6	(On)	Off	(On)

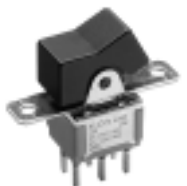
SPDT



A101J1CQ0

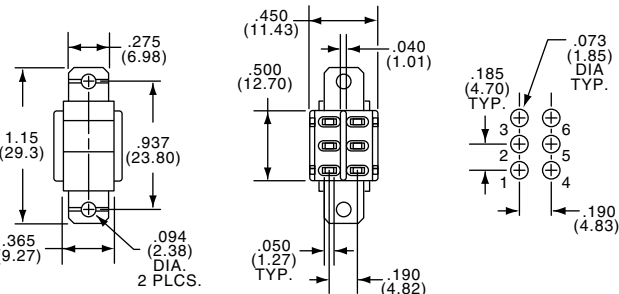


DPDT



A201J1CQ0

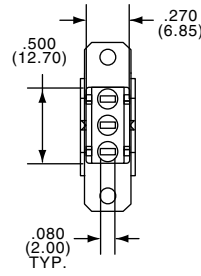
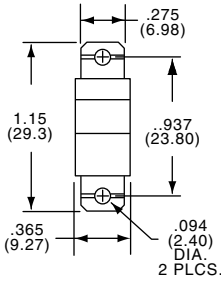
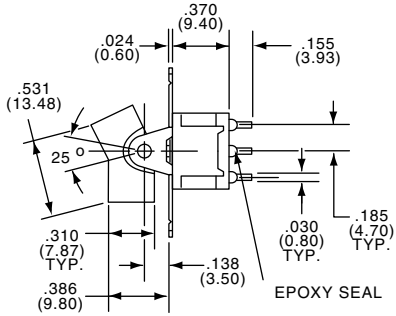
Standard Rocker Color - (Black)



Silver Contacts						
Tyco Electronics	Alcoswitch	Type	Act. Code. P. M5			
1-1437591-3	A101J1CQ0	SPDT	1	On	None	On
4-1437591-8	A105J1CQ0	SPDT	5	(On)	Off	(On)
7-1437591-2	A201J1CQ0	DPDT	2	On	None	On
—	A203J1CQ0	DPDT	6	On	Off	On
—	A205J1CQ0	DPDT	6	(On)	Off	(On)

**Rocker Switches, A Series, Wire Lug or Right Angle**

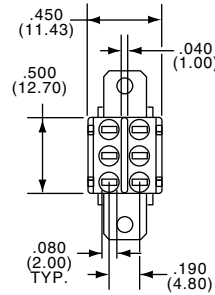
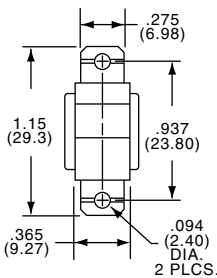
SEE PAGE F7 FOR PRODUCT SPECIFICATIONS AND PART MATRIX



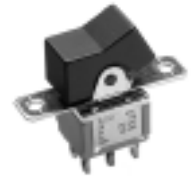
SPDT



A101J1ZQ0



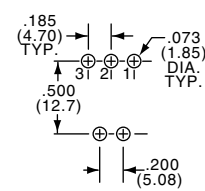
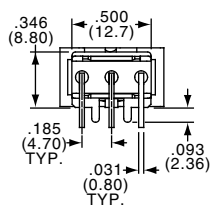
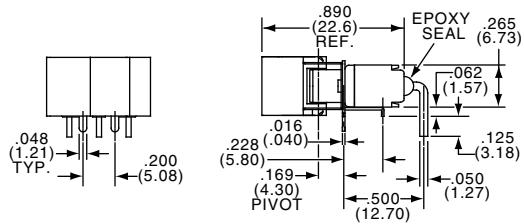
DPDT



A201J1ZQ0

Standard Rocker Color - (Black)

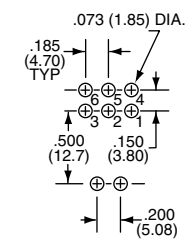
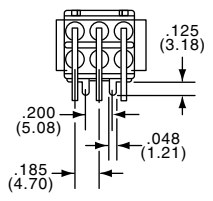
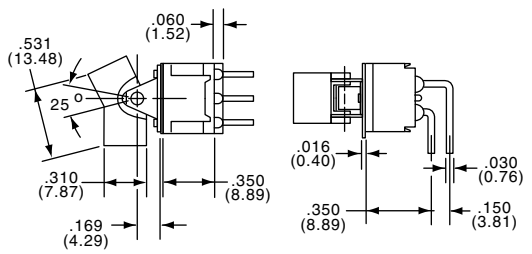
Silver Contacts			Type			Act. Code			P. M5			Silver Contacts			Type			Act. Code			P. M5					
Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5	On	None	Off	(On)	Off	(On)	Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5	On	None	Off	(On)	Off	(On)	
1-1437591-7	A101J1ZQ0	SPDT	1	On	None	On	On	None	Off	(On)	Off	(On)	7-1437591-4	A201J1ZQ0	DPDT	2	On	None	Off	(On)	Off	(On)	Off	(On)	Off	(On)
3-1437591-8	A103J1ZQ0	SPDT	5	On	None	On	On	None	Off	(On)	Off	(On)	9-1437591-1	A203J1ZQ0	DPDT	6	On	None	Off	(On)	Off	(On)	Off	(On)	Off	(On)
5-1437591-0	A105J1ZQ0	SPDT	5	(On)	Off	(On)	(On)	Off	(On)	(On)	Off	(On)	9-1437591-7	A205J1ZQ0	DPDT	6	(On)	Off	(On)	(On)	Off	(On)	(On)	Off	(On)	(On)



SPDT



A101J1AQ0



DPDT



A201J1AQ0

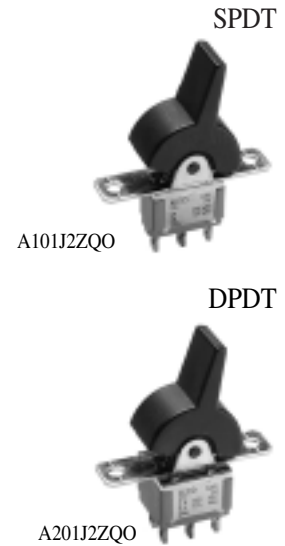
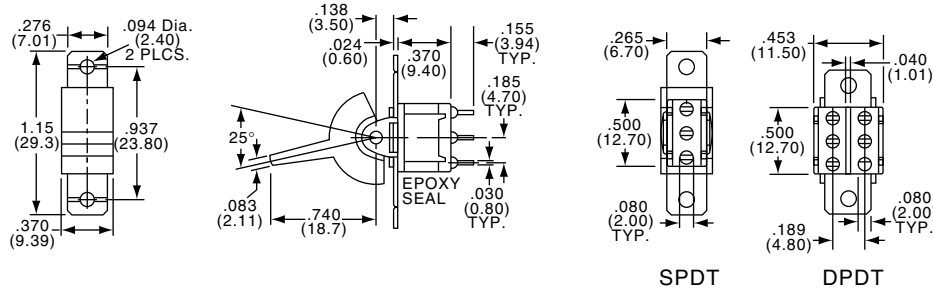
Standard Rocker Color - (Black)

Silver Contacts			Type			Act. Code			P. M5			Silver Contacts			Type			Act. Code			P. M5					
Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5	On	None	Off	(On)	Off	(On)	Tyco Electronics	Alcoswitch	Type	Act.	Code	P.	M5	On	None	Off	(On)	Off	(On)	
1437591-8	A101J1AQ0	SPDT	1	On	None	On	On	None	Off	(On)	Off	(On)	6-1437591-9	A201J1AQ0	DPDT	2	On	None	Off	(On)	Off	(On)	Off	(On)	Off	(On)
4-1437591-6	A105J1AQ0	SPDT	5	(On)	Off	(On)	(On)	Off	(On)	(On)	Off	(On)	8-1437591-7	A203J1AQ0	DPDT	6	On	None	Off	(On)	Off	(On)	Off	(On)	Off	(On)
													—	A205J1AQ0	DPDT	6	(On)	Off	(On)	(On)	Off	(On)	(On)	Off	(On)	



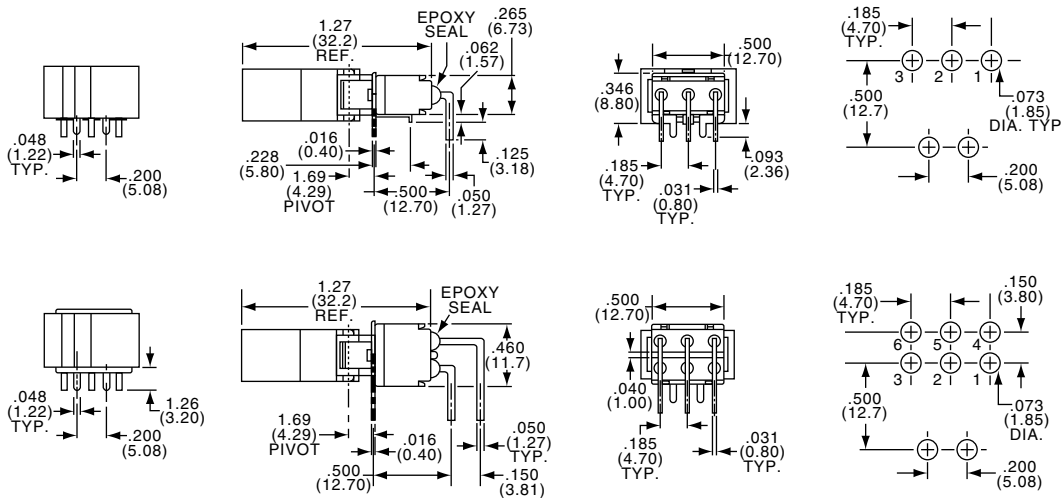
\* Refer to Pages F7 for Product Specifications and Part Matrix

**Paddle Switches, A Series, Wire Lug or Right Angle**



Standard Paddle Color - (Black)

Silver Contacts	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off	Silver Contacts	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
1-1437591-9	A101J2ZQ0	SPDT	1	On	None	On	7-1437591-6	A201J2ZQ0	DPDT	2	On	None	On				
4-1437591-0	A103J2ZQ0	SPDT	5	On	Off	On	—	A203J2ZQ0	DPDT	6	On	Off	On				
5-1437591-3	A105J2ZQ0	SPDT	5	(On)	Off	(On)	9-1437591-9	A205J2ZQ0	DPDT	6	(On)	Off	(On)				



Standard Paddle Color - (Black)

Silver Contacts	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off	Silver Contacts	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	Off
—	A101J2AQ0	SPDT	1	On	None	On	—	A201J2AQ0	DPDT	2	On	None	On				
—	A103J2AQ0	SPDT	5	On	Off	On	—	A203J2AQ0	DPDT	6	On	Off	On				
5-1437591-1	A105J2AQ0	SPDT	5	(On)	Off	(On)	—	A205J2AQ0	DPDT	6	(On)	Off	(On)				

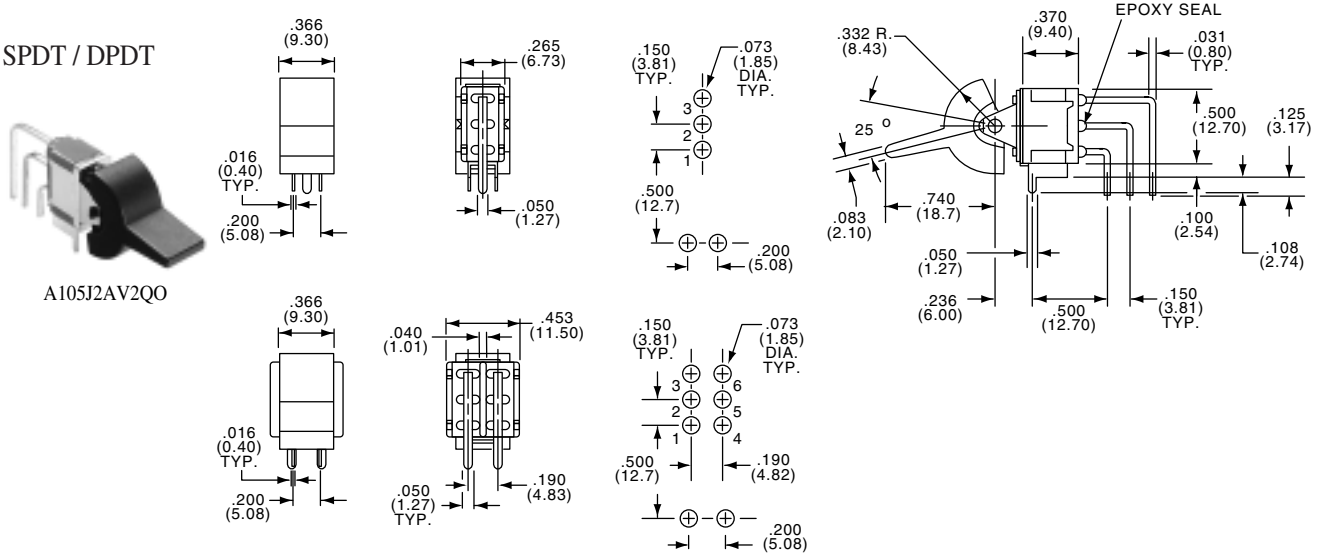
**F**

Gemini Series Rocker/Paddle Switches

**Paddle Switches, A Series, PC Tail, Straight or Vertical Right Angle**

SEE PAGE F7 FOR PRODUCT SPECIFICATIONS AND PART MATRIX

SPDT / DPDT



A105J2AV2Q0

F

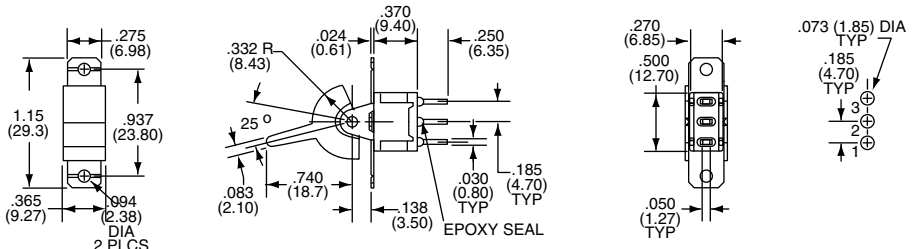
Standard Paddle Color - (Black)

Silver Contacts							Silver Contacts								
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	On	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	On
1-1437591-8	A101J2AV2Q0	SPDT	1		On	None	On	—	A201J2AV2Q0	DPDT	2		On	None	On
5-1437591-2	A105J2AV2Q0	SPDT	5		(On)	Off	(On)								

SPDT



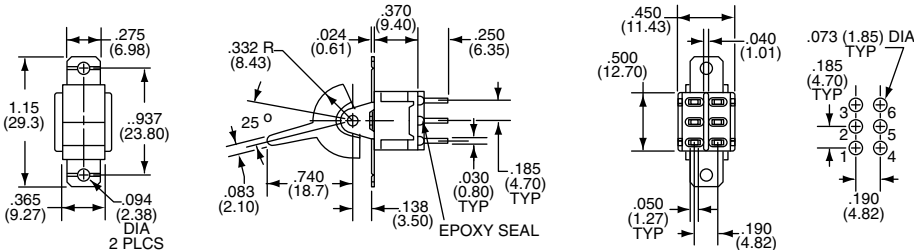
A105J2CQ0



DPDT



A205J2CQ0



Silver Contacts							Silver Contacts								
Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	On	Tyco Electronics	Alcoswitch	Type	Act. Code	P. M5	On	None	On
—	A103J2CQ0	SPDT	5		(On)	Off	(On)	7-1437591-5	A201J2CQ0	DPDT	2		On	None	On
—	A105J2CQ0	SPDT	5		(On)	Off	(On)	9-1437591-8	A205J2CQ0	DPDT	6		(On)	Off	(On)

**Rocker/Paddle Switches, AE Series, Process Sealed, Part Number Matrix**

**MATERIAL SPECIFICATIONS:**

- Terminal Seal .....Epoxy (standard)
- Process Sealing .....Seals will withstand wave soldering and subsequent cleaning operations.
- Contact/Terminals .....Gold/gold flash over tin/lead  
Silver/tin lead
- Case Material .....Thermoplastic
- Actuator Material .....Polyamide

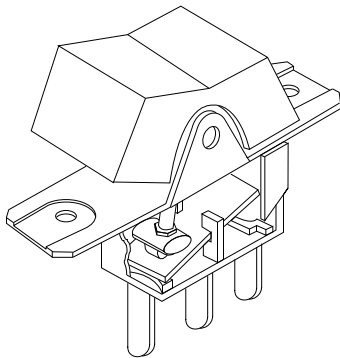
**TYPICAL PERFORMANCE CHARACTERISTICS:**

- Contact Rating .....Silver: 2 A @ 250 VAC, 5 A @ 125 VAC  
Silver: 2 A @ 30 VDC  
Gold: 0.4 VA @ 20 VDC max.
- Contact Resistance .....30 Milliohms max. initial
- Insulation Resistance .....1,000 Megohms min. @ 500 VDC.
- Dielectric Strength .....1,000 Volts RMS @ sea level initial
- Static Withstanding.....15KV Per IEC 801-2.
- Electrical Life .....Up to 30,000 Cycles
- Actuator Travel......25°
- Contact Timing .....Break before make

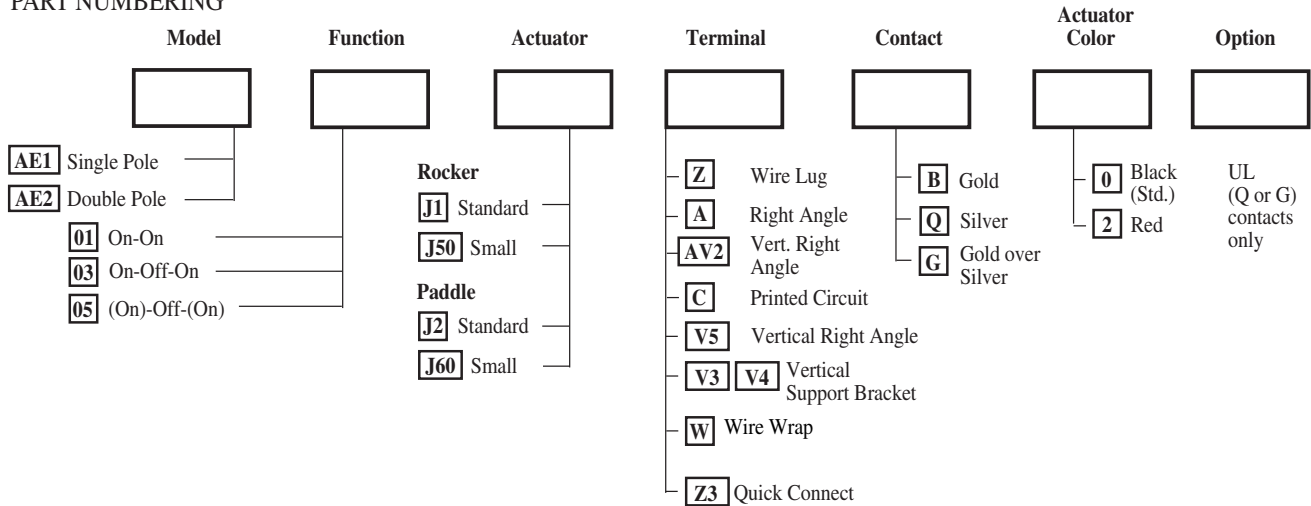
**ENVIRONMENTAL SPECIFICATIONS:**

- Operating Temperature.....-4°F to +185°F (-20°C to +85°C)
- Storage Temperature.....-49°F to +212°F (-45°C to +100°C)
- Meets MIL-STD-202, method 112C, Test Condition A & D 85°C.

**DESIGN**



**PART NUMBERING**



U.L. Available upon request

**OPTIONAL:**

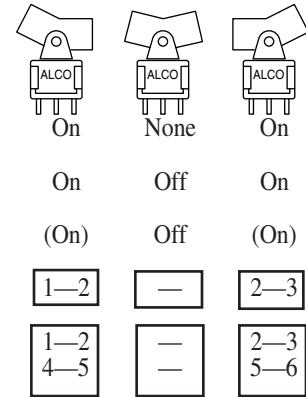
UL recognized under the Component Program Underwriters Laboratories Inc.  
File #E46765  
CSA Certified File #LR65901

**Rocker/Paddle Switches, AE Series, Process Sealed, Options**

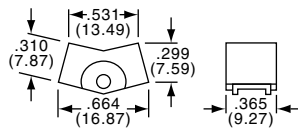
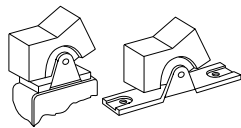
**FUNCTIONS**

The following functions available in SP or DP.

- 01** 2 Positions None indicates no mechanical position
  - 03** 3 Positions Off indicates a mechanical position with no electrical connection.
  - 05** 3 Positions (On) indicates momentary operation
- SPDT, connect terminals:  
 DPDT, connect terminals:



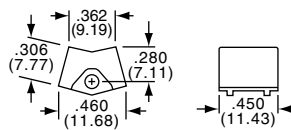
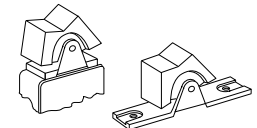
**J1**  
Rocker



Mounting Provided with C or Z Terminal Type.

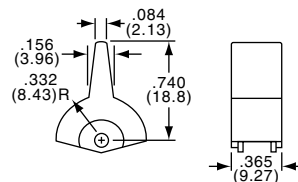
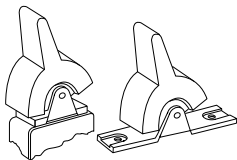
**ACTUATORS**

**J50**  
Rocker



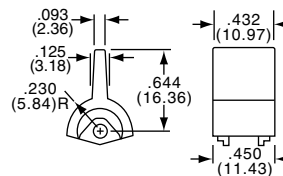
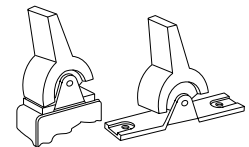
Mounting Provided with C or Z Terminal Type.

**J2**  
Paddle



Mounting Provided with C or Z Terminal Type.

**J60**  
Paddle



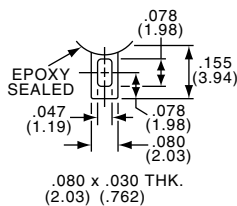
Mounting Provided with C or Z Terminal Type.

**Rocker/Paddle Switches, AE Series, Process Sealed, Termination Options**

TERMINALS

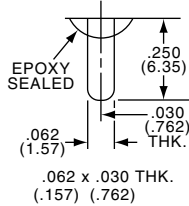
**Z**

Wire Lug



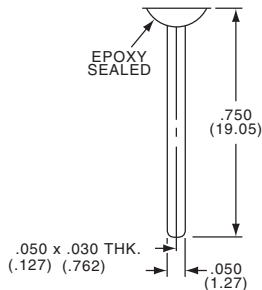
**Q**

Quick Connect



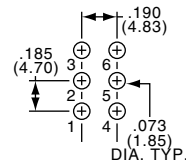
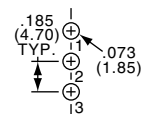
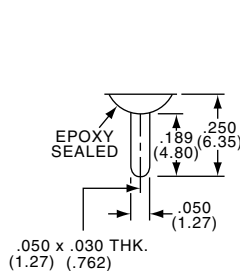
**W**

Wire Wrap



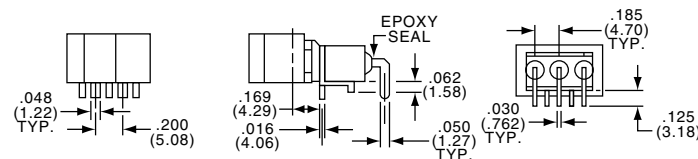
**C**

Printed Circuit



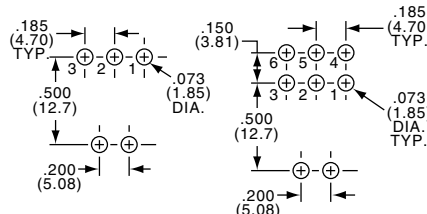
**A**

Right Angle Single Pole

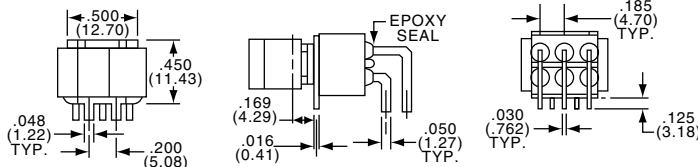


SINGLE POLE

DOUBLE POLE



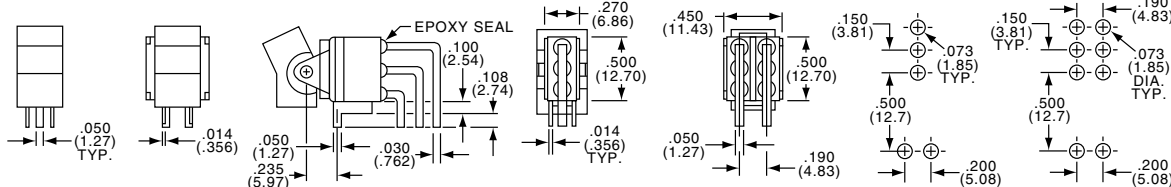
Right Angle Double Pole



NOTE: Terminal numbers viewed from top of P.C. board.

**V**

Vertical Right Angle



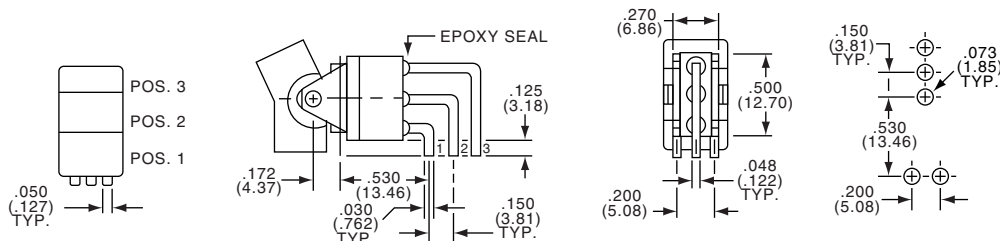
SINGLE POLE

DOUBLE POLE

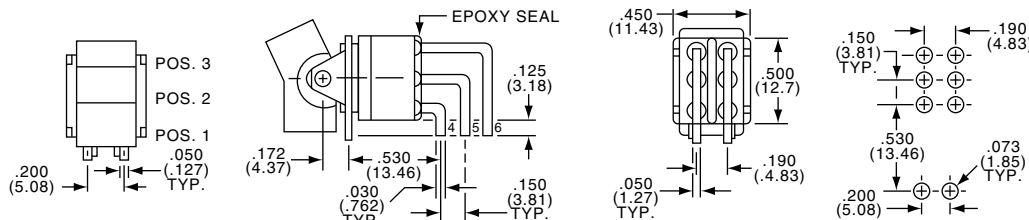
NOTE: Terminal numbers viewed from top of P.C. board.

**V**

Vertical Right Angle Single Pole



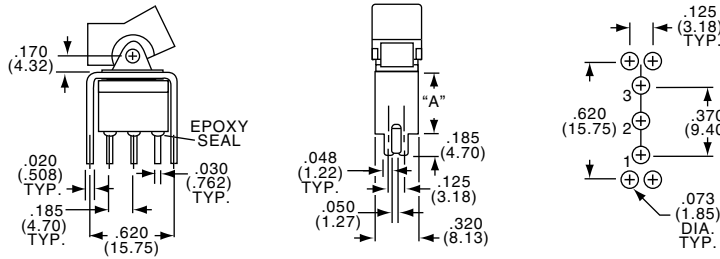
Vertical Right Angle Double Pole



**Rocker/Paddle Switches, AE Series, Process Sealed, Options**

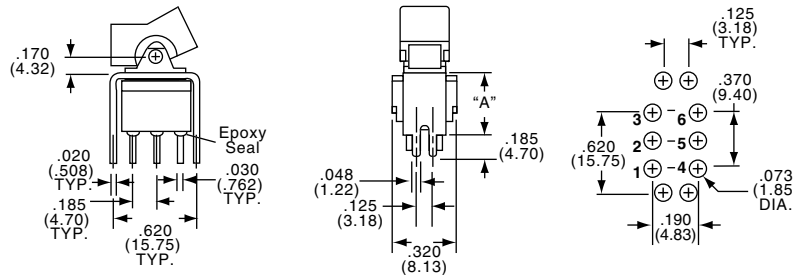


**Vertical Support Bracket  
Single Pole**



Option Code	Dim."A"
V3	.460 (11.68)
V4	.630 (16.00)

**Vertical Support Bracket  
Double Pole**



Option Code	Dim."A"
V3	.460 (11.68)
V4	.630 (16.00)

**CONTACTS**

**B** CONTACTS: Copper alloy with gold plate, welded button.  
 TERMINALS: Copper alloy with gold plate.  
 ELECTRICAL RATING: 0.4VA @ 20 VAC/DC.

**Q** CONTACTS: Copper alloy with silver, welded button.  
 TERMINALS: Copper alloy with tin/lead plate.  
 ELECTRICAL RATING: 5 amps @ 125 VAC, 2 amps @ 250 VAC, 2 amps @ 30 VDC.  
 UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

**G** CONTACTS: Copper alloy with gold plate over silver, welded button.  
 TERMINALS: Copper alloy with gold plate.  
 ELECTRICAL RATING: 0.4 VA @ 20 VAC/DC or 5 amps @ 125 VAC, 2 amps @ 250 VAC, 2 amps @ 30 VDC.  
 Note: This contact option can be used for low-level or power switching. If level is above 0.4 VA @ 20 VAC/DC, the switch is rendered usable only for power switching due to arc-removal of gold plate.  
 UL/CSA RATING: 5A @ 125 VAC, 3 @ 250 VAC (Specify "UL" option code)

F

Gemini Series Rocker/Paddle Switches