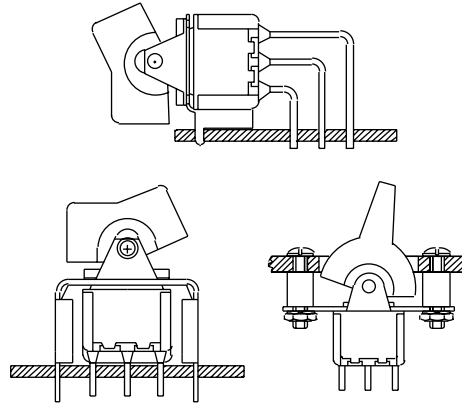


## SERIES 47A Miniature Rocker and Paddle Switches

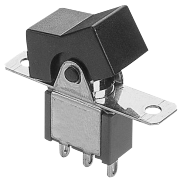
### FEATURES

- Save Space and Weight
- SPDT, DPDT, 3PDT and 4PDT Circuitry
- Choice of Actuators and Terminations



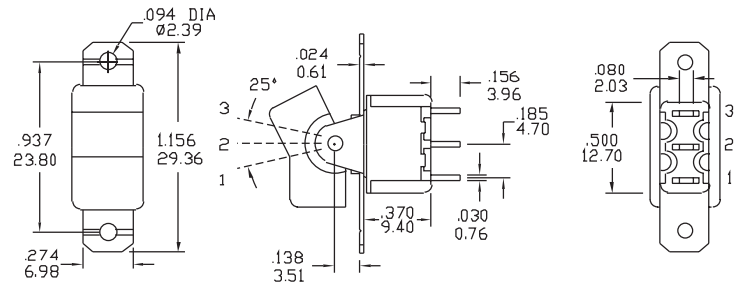
### MODELS In inches (and millimeters)

#### SPDT

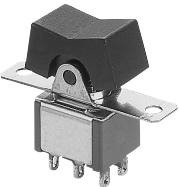


| Model No.   | Switching Position |      |      |
|-------------|--------------------|------|------|
|             |                    |      |      |
| SP1         | ON                 | NONE | ON   |
| SP2         | ON                 | NONE | (ON) |
| SP3         | ON                 | OFF  | ON   |
| SP4         | (ON)               | OFF  | (ON) |
| SP5         | ON                 | OFF  | (ON) |
| Term. Comm. | 2-3                | OPEN | 2-1  |

Schematic  $02Comm.$   $1 \curvearrowright 3 \bullet$   
( ) = Momentary

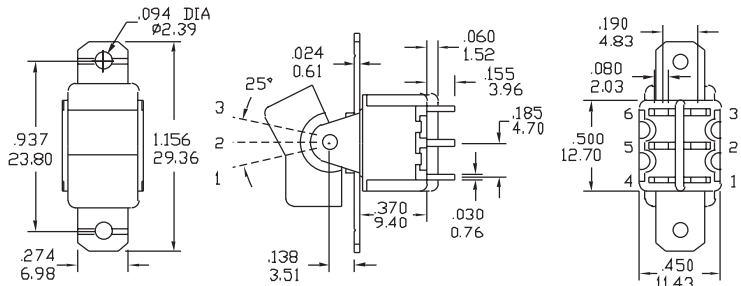


#### DPDT

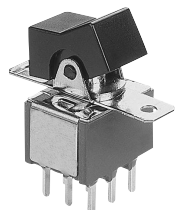


| Model No.   | Switching Position |      |          |
|-------------|--------------------|------|----------|
|             |                    |      |          |
| DP1         | ON                 | NONE | ON       |
| DP2         | ON                 | NONE | (ON)     |
| DP3         | ON                 | OFF  | ON       |
| DP4         | (ON)               | OFF  | (ON)     |
| DP5         | ON                 | OFF  | (ON)     |
| Term. Comm. | 2-3, 5-6           | OPEN | 2-1, 5-4 |

Schematic  $02Comm.$   $05Comm.$   $1 \curvearrowright 3 \bullet \text{---} 4 \curvearrowright 6 \bullet$   
( ) = Momentary

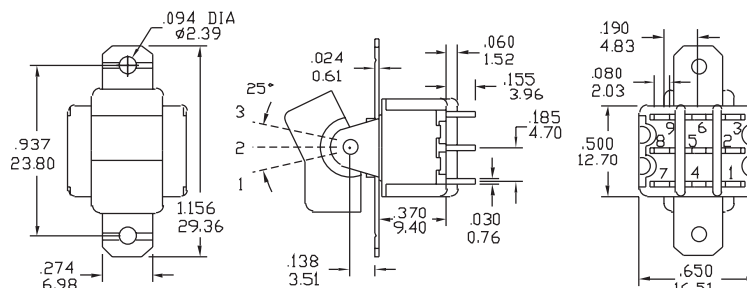


#### 3PDT



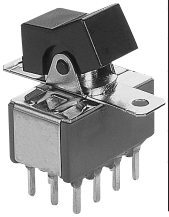
| Model No.   | Switching Position |      |                 |
|-------------|--------------------|------|-----------------|
|             |                    |      |                 |
| 3P1         | ON                 | NONE | ON              |
| 3P2         | ON                 | NONE | (ON)            |
| 3P3         | ON                 | OFF  | ON              |
| 3P4         | (ON)               | OFF  | (ON)            |
| 3P5         | ON                 | OFF  | (ON)            |
| Term. Comm. | 2-3, 5-6<br>8-9    | OPEN | 2-1, 5-4<br>8-7 |

Schematic  $02Comm.$   $05Comm.$   $08Comm.$   $1 \curvearrowright 3 \bullet \text{---} 4 \curvearrowright 6 \bullet \text{---} 7 \curvearrowright 9 \bullet$   
( ) = Momentary



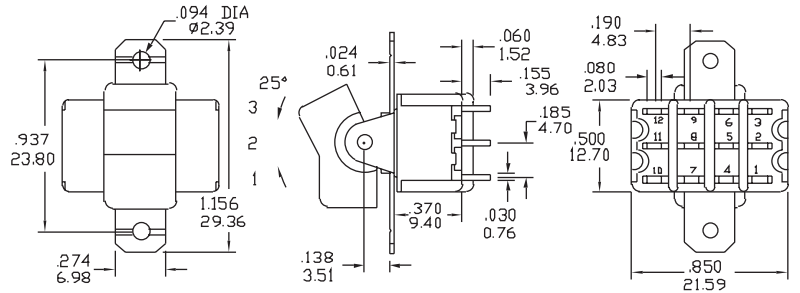
**MODELS** In inches (and millimeters)

**4PDT**



| Model No.   | Switching Position     |      |                        |
|-------------|------------------------|------|------------------------|
|             |                        |      |                        |
| 4P1         | ON                     | NONE | ON                     |
| 4P2         | ON                     | NONE | (ON)                   |
| 4P3         | ON                     | OFF  | ON                     |
| 4P4         | (ON)                   | OFF  | (ON)                   |
| 4P5         | ON                     | OFF  | (ON)                   |
| Term. Comm. | 2-3, 5-6<br>8-9, 11-12 | OPEN | 2-1, 5-4<br>8-7, 11-10 |

( ) = Momentary



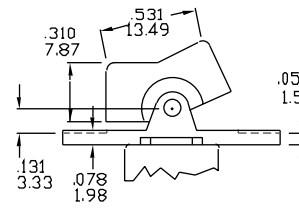
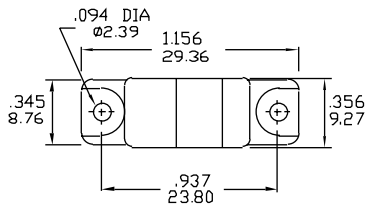
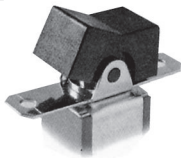
Schematic

02Comm. 05Comm. 08Comm. 011Comm.

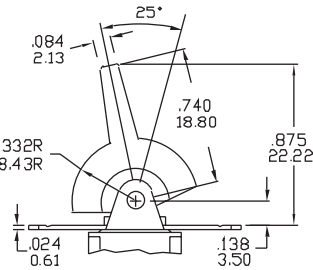
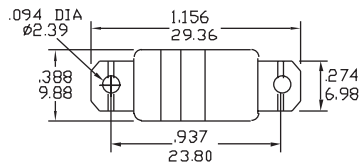
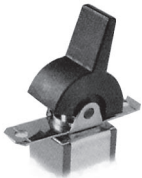
1/ 3 • 4/ 6 • 7/ 9 • 10/ 12 •

**ACTUATOR OPTIONS: For Panel Mount Only** In inches (and millimeters)

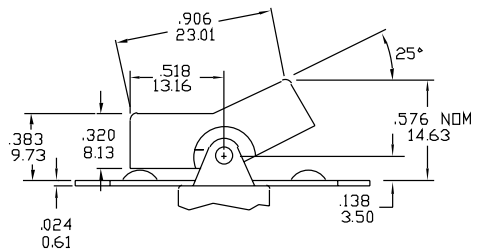
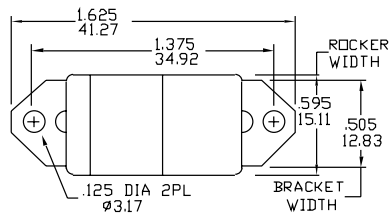
**R1**



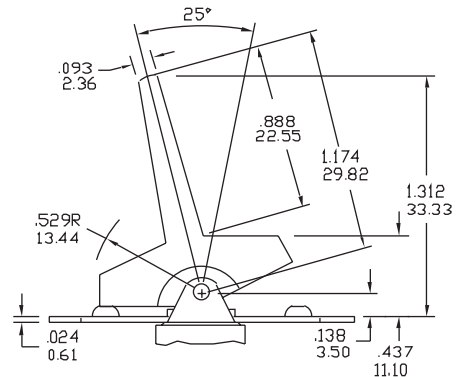
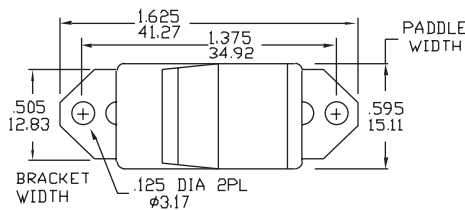
**R2**




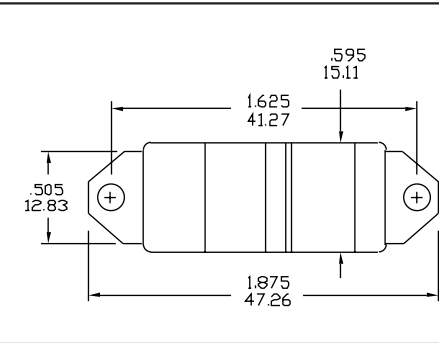
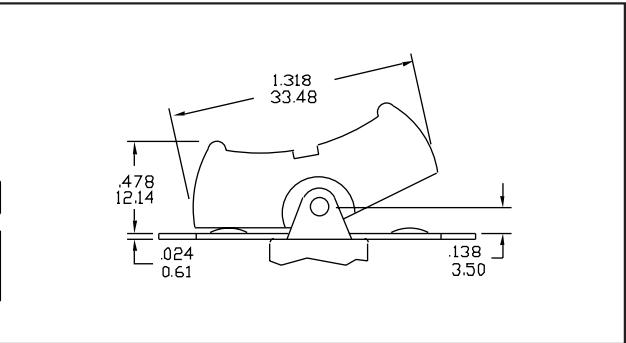
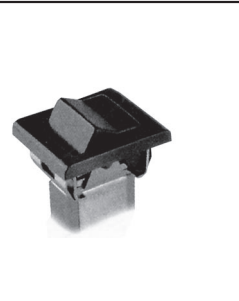
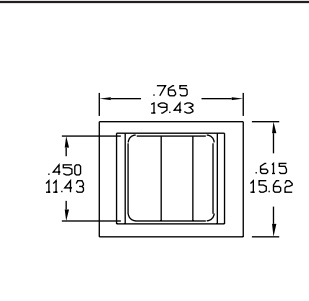
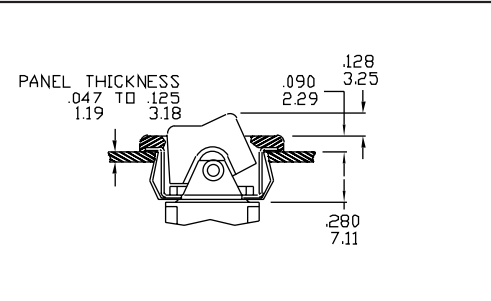
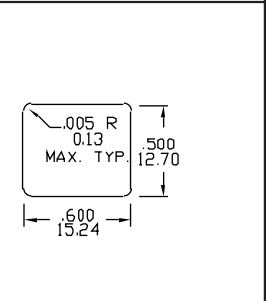

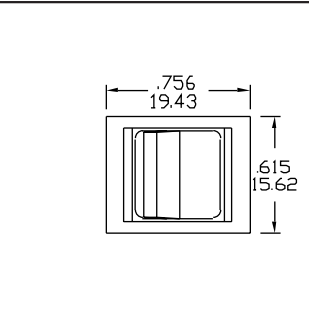
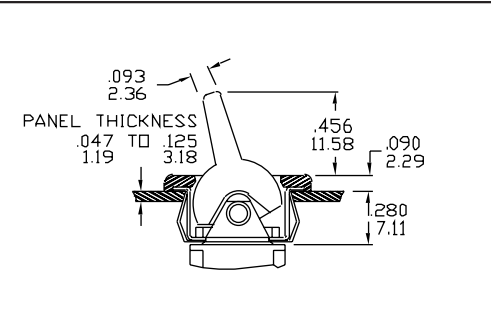
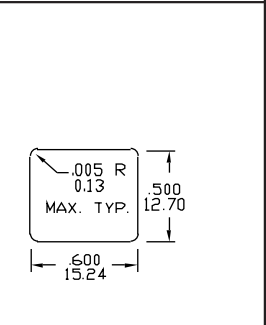
**R3**




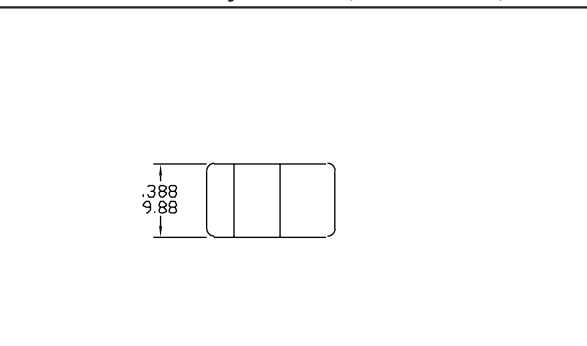
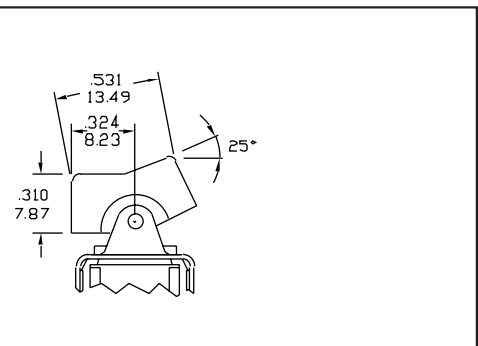

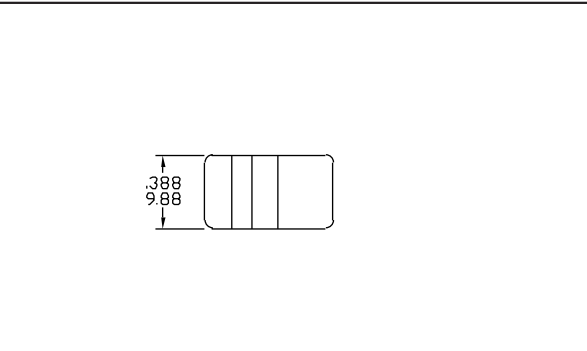
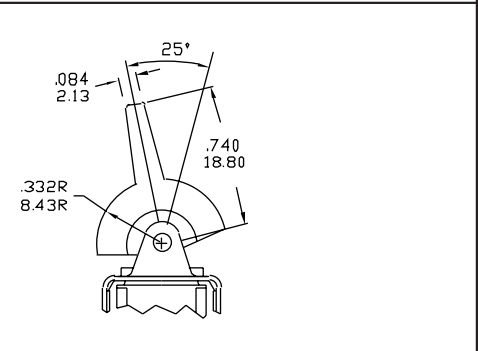
**R4**



**ACTUATOR OPTIONS: For Panel Rear Mount Only** In inches (and millimeters)


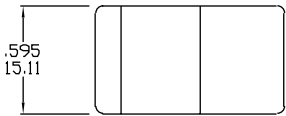
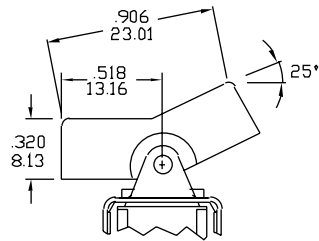

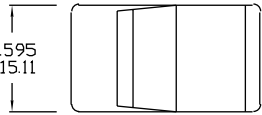
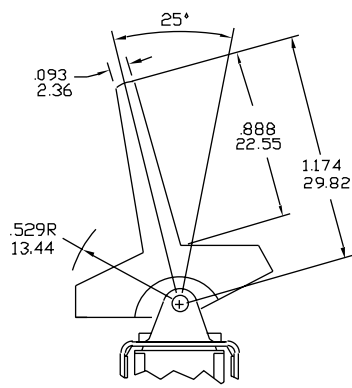

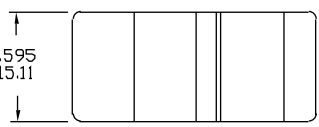
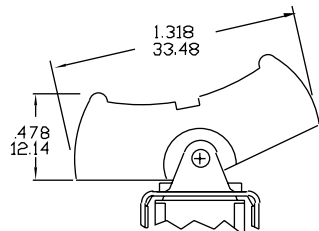
|   |   |   |  |
|---|---|---|--|
| <p><b>R5</b></p>   |  <p>Dimensions: .505 (12.83), 1.625 (41.27), .595 (15.11), 1.875 (47.26)</p> |  <p>Dimensions: 1.318 (33.48), .478 (12.14), .024 (0.61), .138 (3.50)</p>                                 |  |
| <p><b>R6</b></p>   |  <p>Dimensions: .765 (19.43), .450 (11.43), .615 (15.62)</p>                 |  <p>PANEL THICKNESS .047 TO .125 (1.19 TO 3.18), .128 (3.25), .090 (2.29), .280 (7.11)</p>                |  <p>Dimensions: .005 R, 0.13 MAX. TYP., .500 (12.70), .600 (15.24)</p>  |
| <p><b>R7</b></p>  |  <p>Dimensions: .756 (19.43), .615 (15.62)</p>                              |  <p>PANEL THICKNESS .047 TO .125 (1.19 TO 3.18), .093 (2.36), .456 (11.58), .090 (2.29), .280 (7.11)</p> |  <p>Dimensions: .005 R, 0.13 MAX. TYP., .500 (12.70), .600 (15.24)</p> |

**ACTUATOR OPTIONS: For P.C. Mount Only** In inches (and millimeters)

|  |   |  |
|--|---|--|
| <p><b>R1</b></p>  |  <p>Dimensions: .388 (9.88)</p> |  <p>Dimensions: .531 (13.49), .324 (8.23), .310 (7.87), 25°</p>   |
| <p><b>R2</b></p>  |  <p>Dimensions: .388 (9.88)</p> |  <p>Dimensions: .084 (2.13), .740 (18.80), .332R (8.43R), 25°</p> |

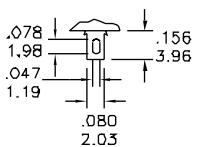
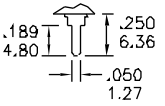
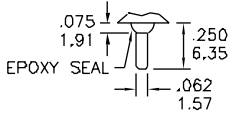
Rocker and Paddle Switches

**ACTUATOR OPTIONS: For P.C. Mount Only** In inches (and millimeters)

|   |  |
|---|--|
| <p><b>R3</b></p>          |  |
| <p><b>R4</b></p>          |  |
| <p><b>R5</b></p>    |  |

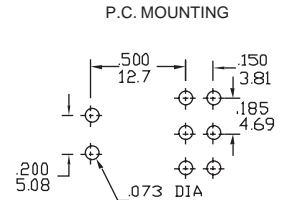
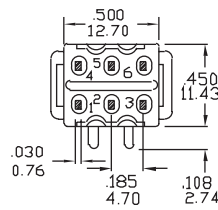
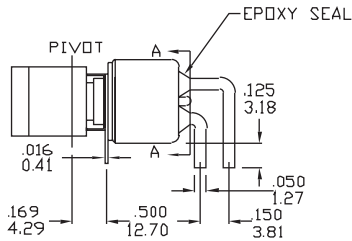
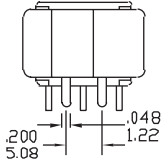
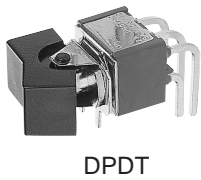
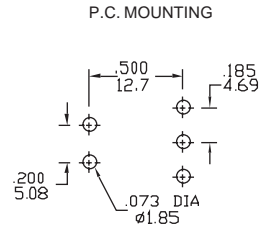
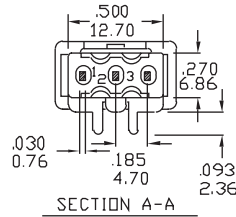
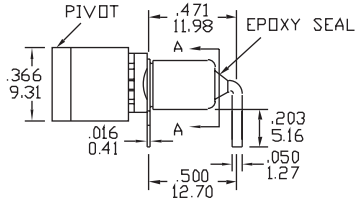
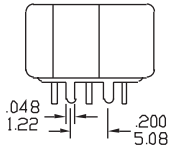
Rocker and Paddle Switches

**TERMINATION OPTIONS** In inches (and millimeters)

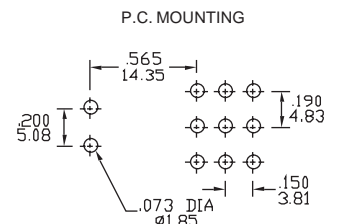
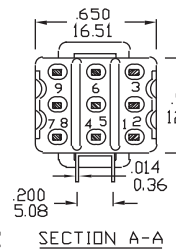
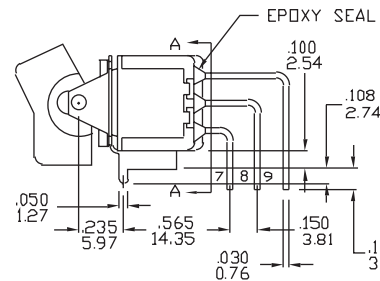
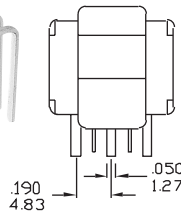
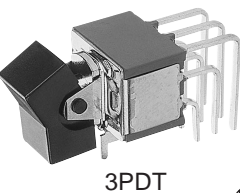
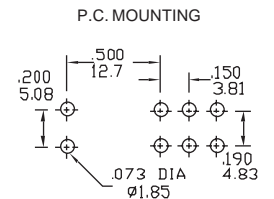
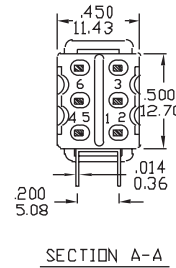
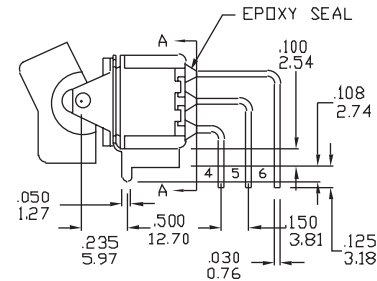
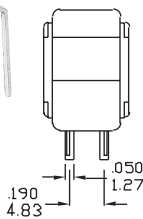
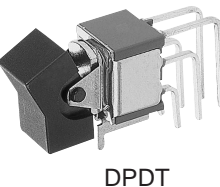
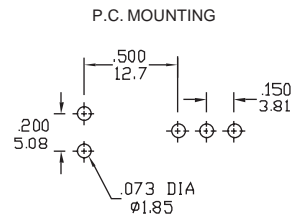
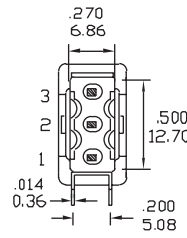
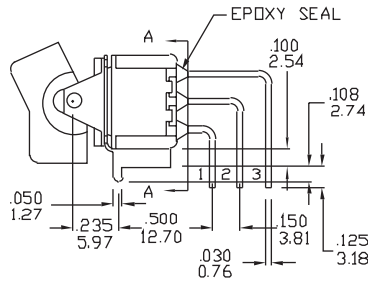
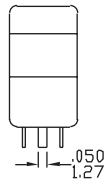
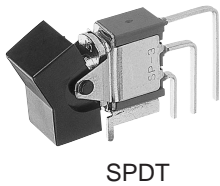
|  |  |  |
|--|--|--|
| <p><b>M1 Solder Lug</b></p>  <p>THK .030 (0.76)</p> | <p><b>M2 P.C. Mount (Std)</b></p>  <p>THK .030 (0.76)</p> | <p><b>M3 P.C. Mount, Quick Connect</b></p>  <p>EPOXY SEAL</p> |
|--|--|--|

**TERMINATION OPTIONS** In inches (and millimeters)

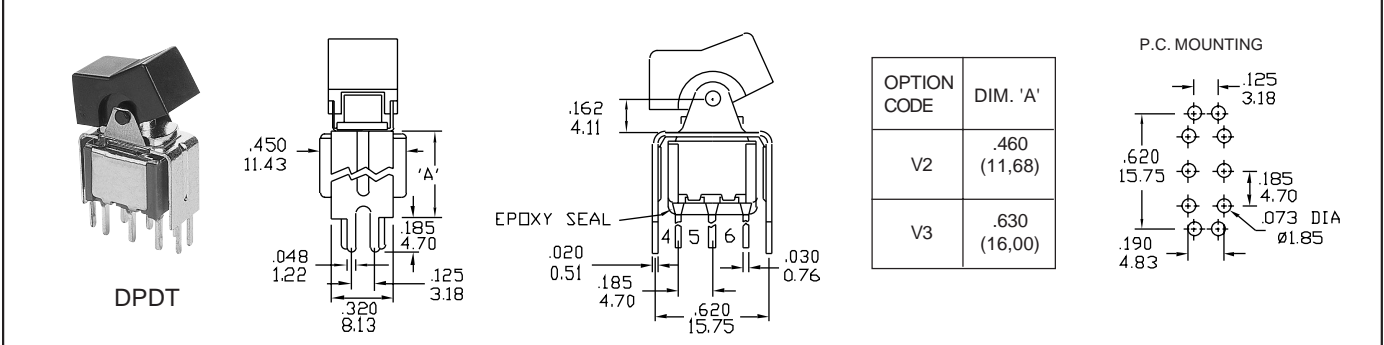
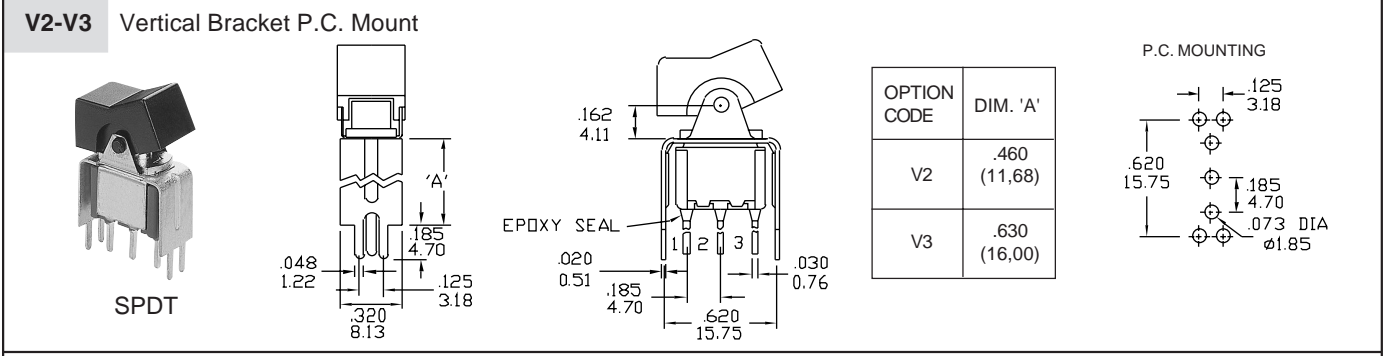
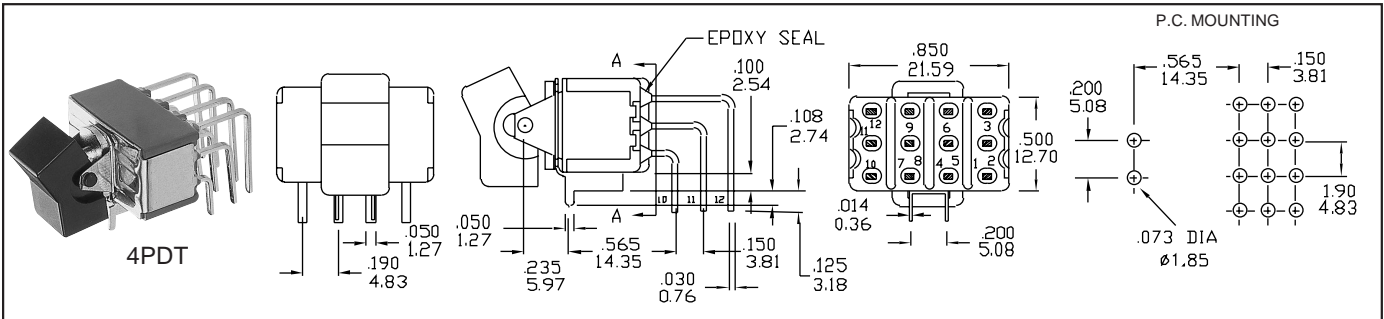
**M6 Right Angle P.C. Mount, Horizontal Actuation**



**M7 Right Angle P.C. Mount, Vertical Actuation**



**TERMINATION OPTIONS** In inches (and millimeters)



**SPECIFICATIONS**

**RATINGS**  
**Contact Rating:** Q option- 5A with resistive load @125 VAC or 28 VDC; 2A with resistive load @ 250 VAC. R option- 0.4VA max @ 20 Vmax (AC or DC)  
**Electrical Life:** 50,000 make-and-break cycles at full load  
**Contact Resistance:** 10 milliohms max.

initial @ 2-4 VDC, 100 mA  
**Insulation Resistance:** 1,000 megaohms minimum  
**Dielectric Strength:** 1,500 V RMS @ sea level  
**Operating Temperature:** -30°C to 85°C

**MATERIALS**  
**Case:** Diallyl phthalate (DAP) (UL 94V-0)

**Rockers:** Nylon (UL 94V-0)  
**Bushing:** Stainless steel  
**Bushing:** Stainless steel  
**Terminal/Switch Support:** 3/4 Brass, electrotin plated  
**Contacts:** Copper alloy, gold plate over nickel plate  
**Center Contact and Terminals:** Copper alloy, gold plated  
**Terminal Seal:** Epoxy

**ORDERING INFORMATION**

| SERIES                                     | MODEL NO.  | ACTUATOR   | TERMINATION   | CONTACT  | SEAL           |
|--|--|--|---|--|----------------|
| 47A  | SP1  | R2   | M6  | R  | E              |
| 47A = Miniature Rocker and Paddle Switches | Options: SP1, SP2, SP3, SP4, SP5, DP1, DP2, DP3, DP4, DP5, 3P1, 3P2, 3P3, 3P4, 3P5, 4P1, 4P2, 4P3, 4P4, 4P5 (see models for switching positions) | Options: R1, R2, R3, R4, R5, R6, R7 (see actuator options) | Options: M1, M2, M3, M6, M7, V2, V3 (see termination options) | R = Copper alloy, gold plate over nickel plate.<br>Q = End terminal contact surface: coin silver<br>Center terminal contact surface: copper alloy, silver plated | E = Epoxy seal |
| <b>Example Part Number:</b> 47ASP1R2M6RE   |  |  |   |  |                |

Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor In Beijing, CHINA, Phone:(010)6858-5001, Fax:(010)6851-9889, Homepage: <http://www.hmcs.com.cn>

Rocker and Paddle Switches