

## SERIES 47B

### Sealed Miniature Rocker and Paddle Switches

#### FEATURES

- Save Space and Weight
- SPDT, DPDT and 3PDT Circuitry
- Choice of Actuators and Terminations
- Sealed per IP-67



#### MODELS In inches (and millimeters)

| MODEL NO.   | SWITCH POSITION                                                                   |                                                                                   |                                                                                   |
|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|             |  |  |  |
| WSP1        | ON                                                                                | NONE                                                                              | ON                                                                                |
| WSP2        | ON                                                                                | NONE                                                                              | (ON)                                                                              |
| WSP3        | ON                                                                                | OFF                                                                               | ON                                                                                |
| WSP4        | (ON)                                                                              | OFF                                                                               | (ON)                                                                              |
| WSP5        | ON                                                                                | OFF                                                                               | (ON)                                                                              |
| TERM. COMM. | 2-3                                                                               | OPEN                                                                              | 2-1                                                                               |

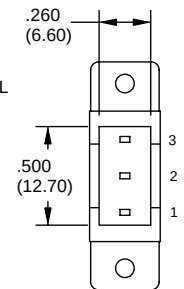
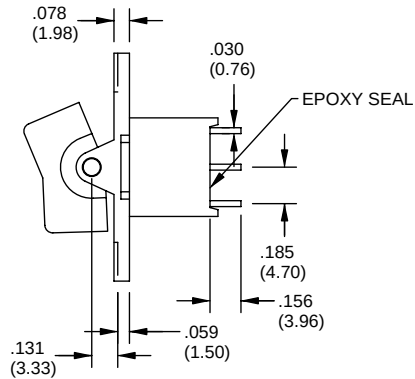
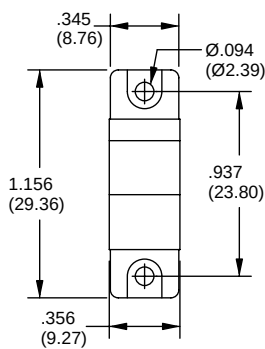
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02COMM.

SCHEMATIC



#### SPDT

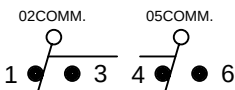


| MODEL NO.   | SWITCH POSITION                                                                     |                                                                                     |                                                                                     |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             |  |  |  |
| WDP1        | ON                                                                                  | NONE                                                                                | ON                                                                                  |
| WDP2        | ON                                                                                  | NONE                                                                                | (ON)                                                                                |
| WDP3        | ON                                                                                  | OFF                                                                                 | ON                                                                                  |
| WDP4        | (ON)                                                                                | OFF                                                                                 | (ON)                                                                                |
| WDP5        | ON                                                                                  | OFF                                                                                 | (ON)                                                                                |
| TERM. COMM. | 2-3,5-6                                                                             | OPEN                                                                                | 2-1,5-4                                                                             |

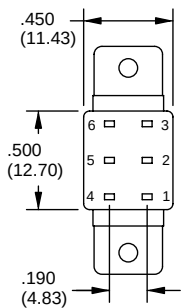
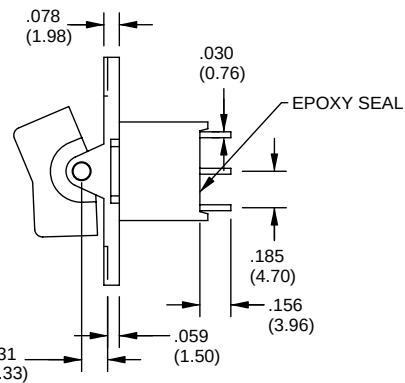
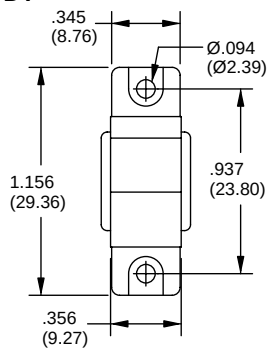
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02COMM. 05COMM.

SCHEMATIC



#### DPDT

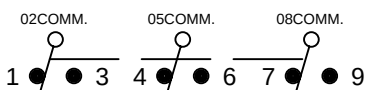


| MODEL NO.   | SWITCH POSITION                                                                     |                                                                                     |                                                                                     |
|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|             |  |  |  |
| W3P1        | ON                                                                                  | NONE                                                                                | ON                                                                                  |
| W3P2        | ON                                                                                  | NONE                                                                                | (ON)                                                                                |
| W3P3        | ON                                                                                  | OFF                                                                                 | ON                                                                                  |
| W3P4        | (ON)                                                                                | OFF                                                                                 | (ON)                                                                                |
| W3P5        | ON                                                                                  | OFF                                                                                 | (ON)                                                                                |
| TERM. COMM. | 2-3,5-6                                                                             | OPEN                                                                                | 2-1,5-4                                                                             |

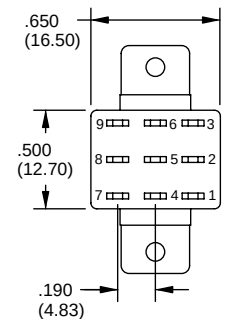
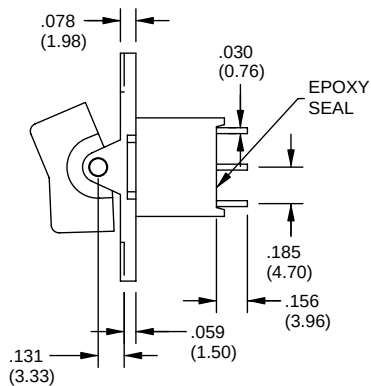
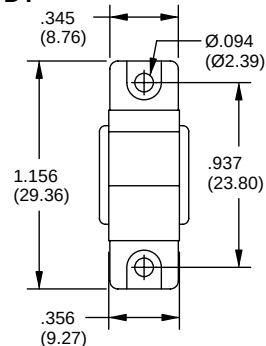
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02COMM. 05COMM. 08COMM.

SCHEMATIC

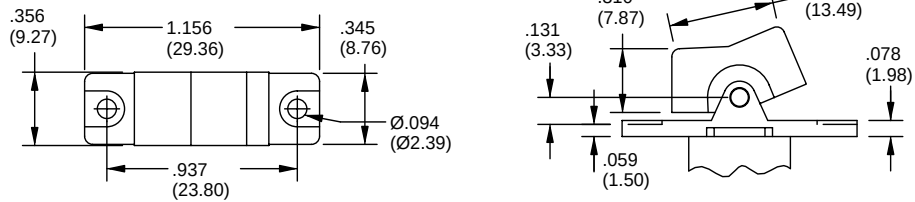


#### 3PDT

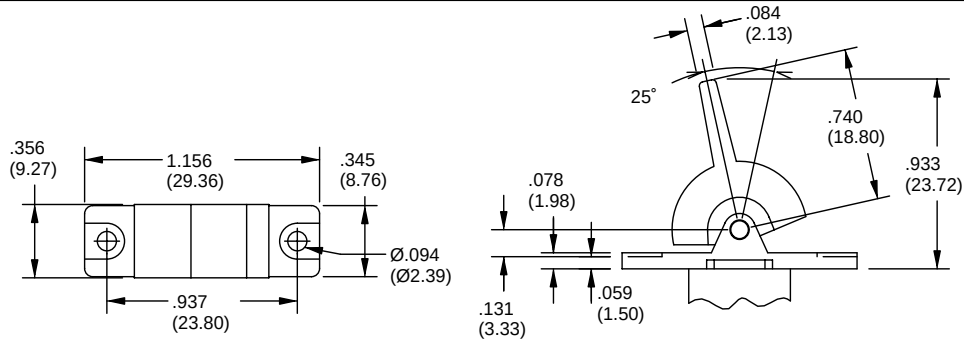


## ACTUATOR OPTIONS In inches (and millimeters)

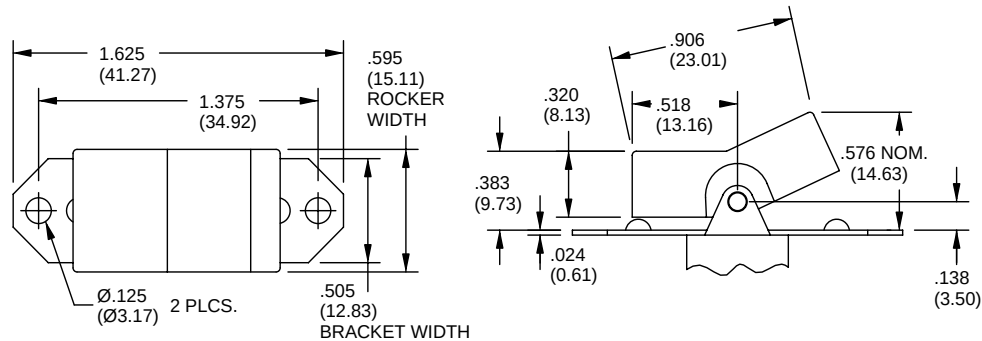
R1



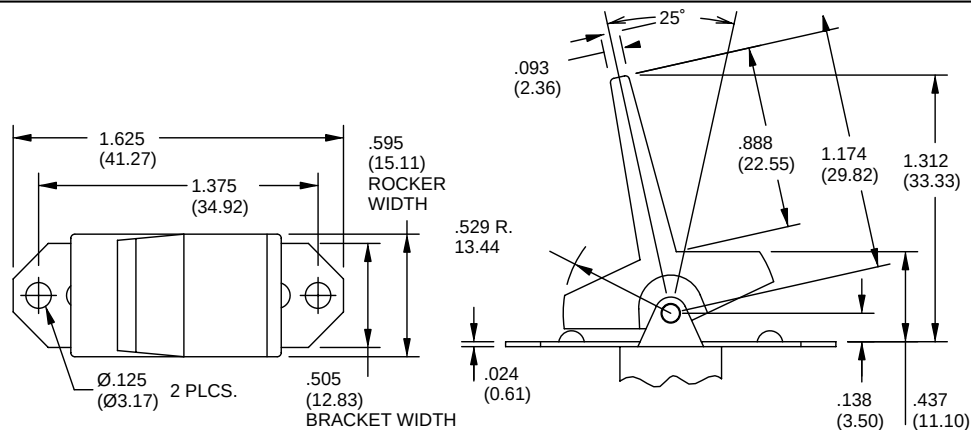
R2



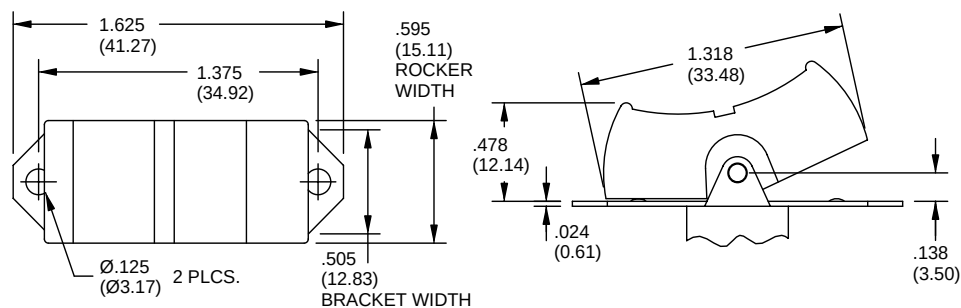
R3



R4



R5

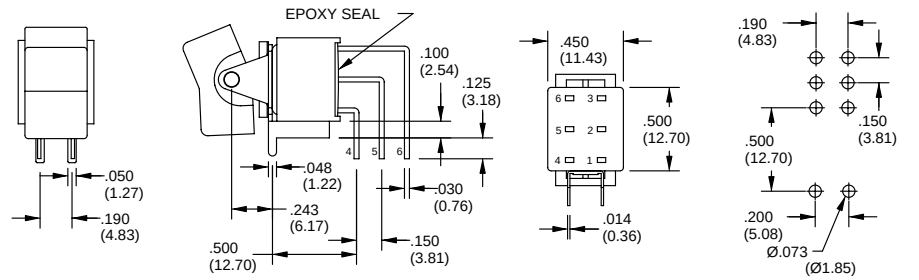


| <b>M1 Solder Lug</b><br>Note: Solder lug terminals supplied with mounting tabs standard.                               | <b>M2 P.C. Mount</b><br>PC mount terminals supplied without mounting tabs standard                  | <b>M3 P.C. Mount, Quick Connect</b>                                          |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>M6</b><br><br><b>SPDT</b><br><br>Right Angle P.C. Mount, Horizontal Actuation<br><br><b>DPDT</b><br><br><b>3PDT</b> | PIVOT<br>EPOXY SEAL<br>.078 (1.98)<br>.156 (3.96)<br>.047 (1.19)<br>.080 (2.03)<br>THK. .030 (0.76) | EPOXY SEAL<br>.075 (1.91)<br>.250 (6.350)<br>.062 (1.57)<br>THK. .030 (0.76) |
| <b>M7 Right Angle P.C. Mount, Vertical Actuation</b><br><br><b>SPDT</b>                                                | PIVOT<br>EPOXY SEAL<br>.189 (4.80)<br>.250 (6.350)<br>.050 (1.27)<br>THK. .030 (0.76)               | EPOXY SEAL<br>.075 (1.91)<br>.250 (6.350)<br>.062 (1.57)<br>THK. .030 (0.76) |

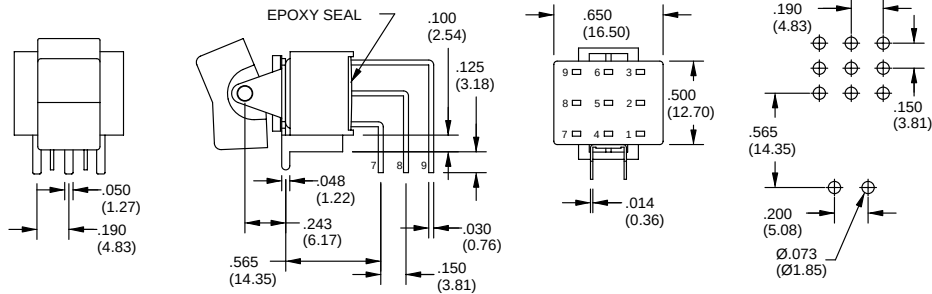
The figure provides detailed technical specifications for seven different switch mounting configurations. Each configuration includes a top view, a side view showing the pivot and epoxy seal, and a front view showing the terminal layout. Dimensions are provided in both inches and millimeters for precision. The configurations are: M1 (Solder Lug), M2 (P.C. Mount), M3 (P.C. Mount, Quick Connect), M6 (Right Angle P.C. Mount, Horizontal Actuation), and M7 (Right Angle P.C. Mount, Vertical Actuation). Each of M6 and M7 is shown for SPDT, DPDT, and 3PDT switch types. The drawings illustrate the physical layout of the switch components, including the pivot point, epoxy seal, and terminal positions, ensuring accurate manufacturing and assembly.

## TERMINATION OPTIONS In inches (and millimeters)

**DPDT**

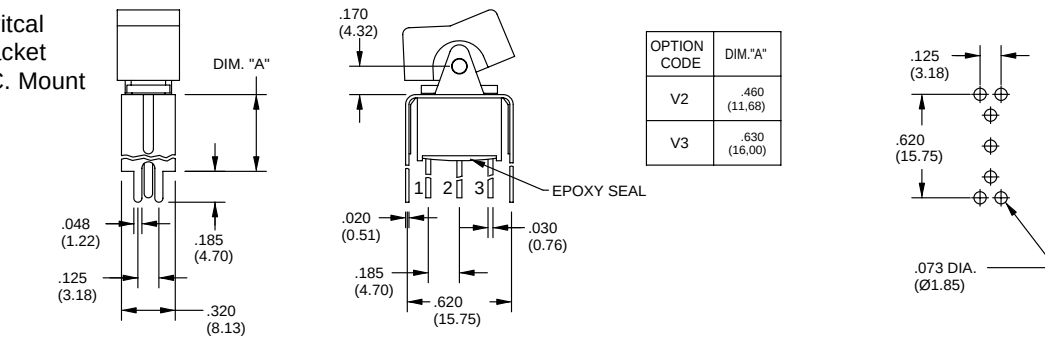


**3PDT**

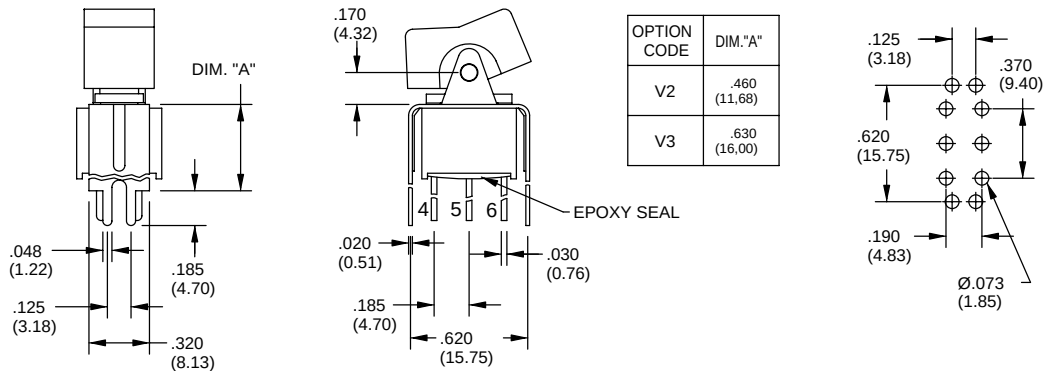


**V2-V3** Vertical Bracket P.C. Mount

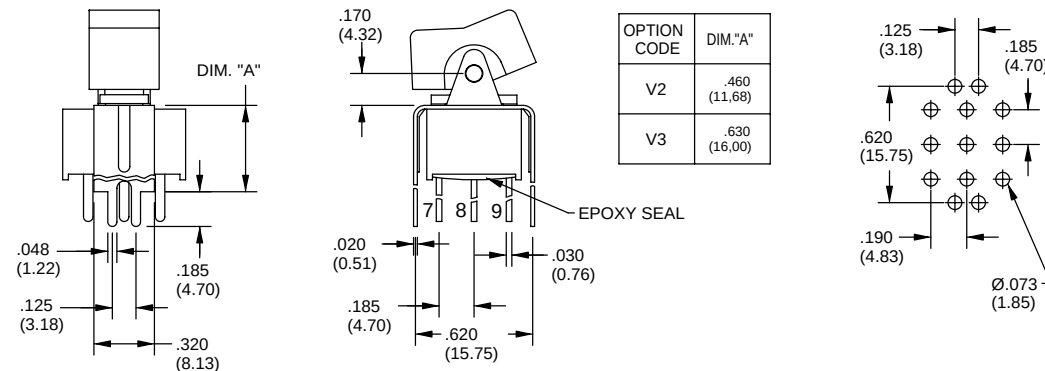
**SPDT**



**DPDT**



**3PDT**



**SPECIFICATIONS**  
**RATINGS**

**Contact Rating:** Q option - 5A with resistive load @ 125 VAC or 28 VDC; 2A with resistive load @ 250 VAC. R option - 0.4 VA max @ 20 Vmax (AC or DC)  
**Electrical Life:** 30,000 make-and-break cycles at full load

**Contact Resistance:** Below 10 milliohms max. initial @ 2-4 VDC, 100 mA  
**Insulation Resistance:** 1,000 megaohms minimum  
**Dielectric Strength:** 1,000 V RMS @ sea level  
**Operating Temperature:** -30°C to 85°C

**MATERIALS**  
**Case and Bushing:** Glass-filled nylon 6/6 , flame retardant, heat stabilized (UL94V-0)  
**Actuator:** Nylon, black standard. Internal O-ring seal standard with all actuators.  
**Frame:** Spring steel, black (standard)  
**Switch Support:** Brass, tin-plated  
**Actuator Pivot & Mounting Bracket:** Nylon (UL 94V-0)  
**Actuator Pivot Retainer:** Stainless Steel  
**Terminal Seal:** Epoxy

**ORDERING INFORMATION**

| SERIES                                                                                                                                                         | MODEL NO.                                                                                                                                 | ACTUATOR                                              | TERMINATION                                                      | CONTACT                                                                                               | SEAL           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------|
| <b>47B</b>                                                                                                                                                     | <b>WSP1</b>                                                                                                                               | <b>R2</b>                                             | <b>M6</b>                                                        | <b>R</b>                                                                                              | <b>E</b>       |
| 47B = Sealed Miniature Rocker and Paddle Switches                                                                                                              | Options: WSP1, WSP2, WSP3, WSP4, WSP5, WDP1, WDP2, WDP3, WDP4, WDP5, W3P1, W3P2, W3P3, W3P4, W3P5<br>(see models for switching positions) | Options: R1, R2, R3, R4, R5<br>(see actuator options) | Options: M1, M2, M3, M6, M7, V2, V3<br>(see termination options) | R = Copper alloy, gold plate over nickel plate.<br><br>Q = Copper alloy, Gold plate over silver plate | E = Epoxy seal |
| Example Part Number: 47BWSP1R2M6RE                                                                                                                             |                                                                                                                                           |                                                       |                                                                  |                                                                                                       |                |
| Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill. |                                                                                                                                           |                                                       |                                                                  |                                                                                                       |                |