

**ROCKER SWITCHES**

- Save Space and Weight
- SPDT, DPDT, 3PDT, and 4DPT Circuitry
- Choice of Actuators, Bushings and Terminations
- PC and Panel Mount Versions

Page

**ROCKER AND PADDLE SWITCHES**

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Sub-Miniature .....	Series 47C .....	15
Sealed Sub-Miniature .....	Series 47D .....	18

**Typical Applications:**

- Computers and Peripherals
- Instrumentation
- Medical Equipment
- Telecommunications
- Test and Measurement Equipment

**ROCKER AND PADDLE SWITCHES**

Series	47A	47B	47C	47D
Page Number	2	9	15	18
Size	Miniature	Miniature	Sub-Miniature	Sub-Miniature
Circuitry	SPDT, DPDT, 3PDT, 4PDT	SPDT, DPDT, 3PDT	SPDT, DPDT	SPDT, DPDT
Max Contact Rating	5A	5A	3A	3A
Process Sealed		Yes		Yes
<b>Mounting Options</b>				
PC Vertical	Yes	Yes	Yes	Yes
PC Vertical w/ Support Bracket	Yes	Yes	Yes	Yes
PC Right Angle	Yes	Yes	Yes	Yes
PC Right Angle Vertical	Yes	Yes	Yes	Yes
Panel	Yes	Yes	Yes	
<b>Termination Options</b>				
Solder Lug	Yes	Yes	Yes	
PC Mount	Yes	Yes	Yes	Yes
PC Mount, Quick Connect	Yes	Yes		

## SERIES 47A Miniature Rocker and Paddle Switches

### FEATURES

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



### MODELS In inches (and millimeters)

MODEL NO.	SWITCH 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

( )=MOMENTARY  
02COMM.

**SPDT**

**Schematic**

MODEL NO.	SWITCH 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

( )=MOMENTARY  
02COMM. 05COMM.

**DPDT**

**Schematic**

MODEL NO.	SWITCH 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	OPEN	2-1,5-4

( )=MOMENTARY  
02COMM. 05COMM. 08COMM.

**3PDT**

**Schematic**

Rocker and Paddle Switches

**MODELS** In inches (and millimeters)

**4PDT**

MODEL NO.	SWITCH 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	OPEN	2-1,5-4

( )=MOMENTARY

02COMM. 05COMM. 08COMM.

SCHEMATIC

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

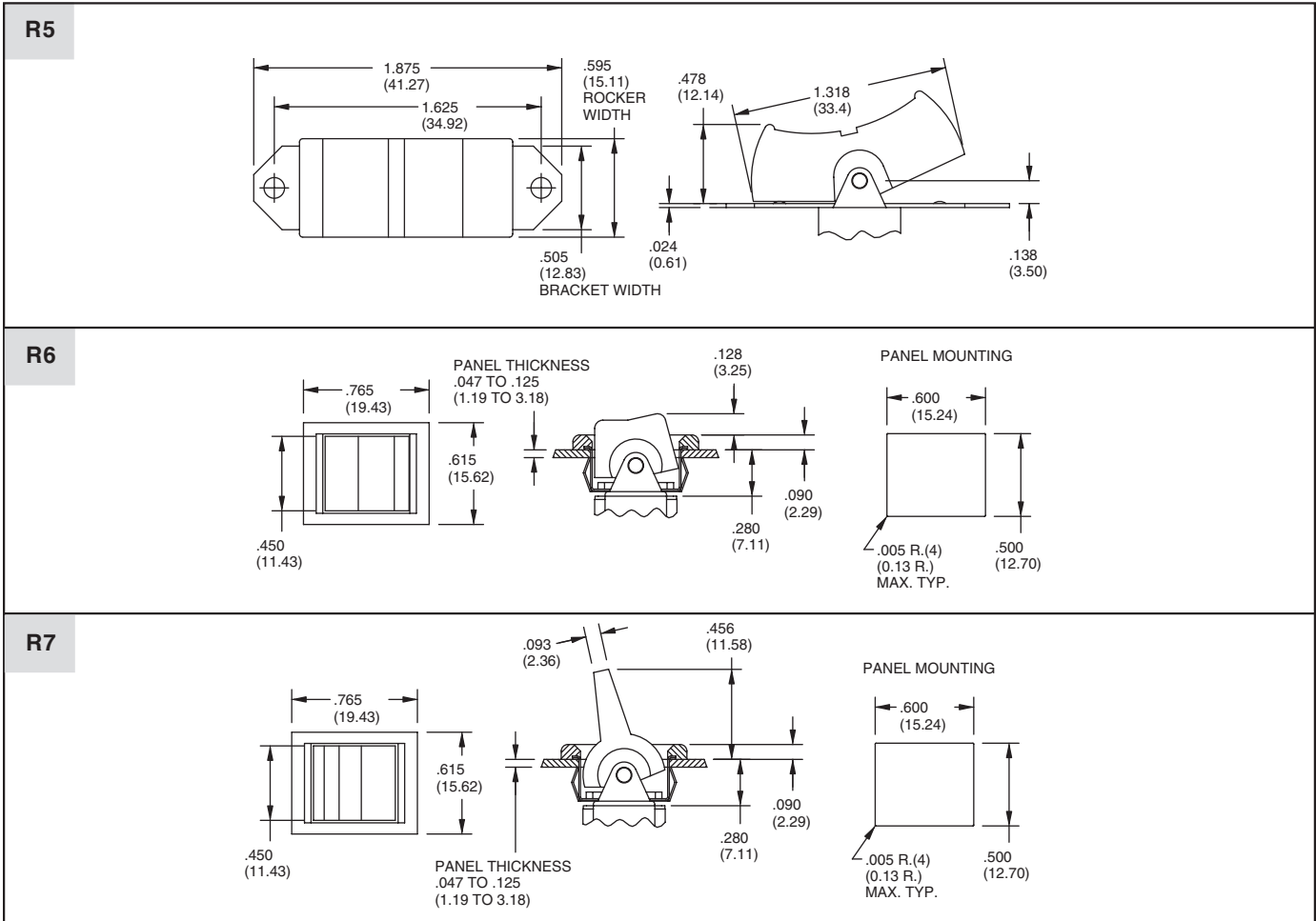
**R1**

**R2**

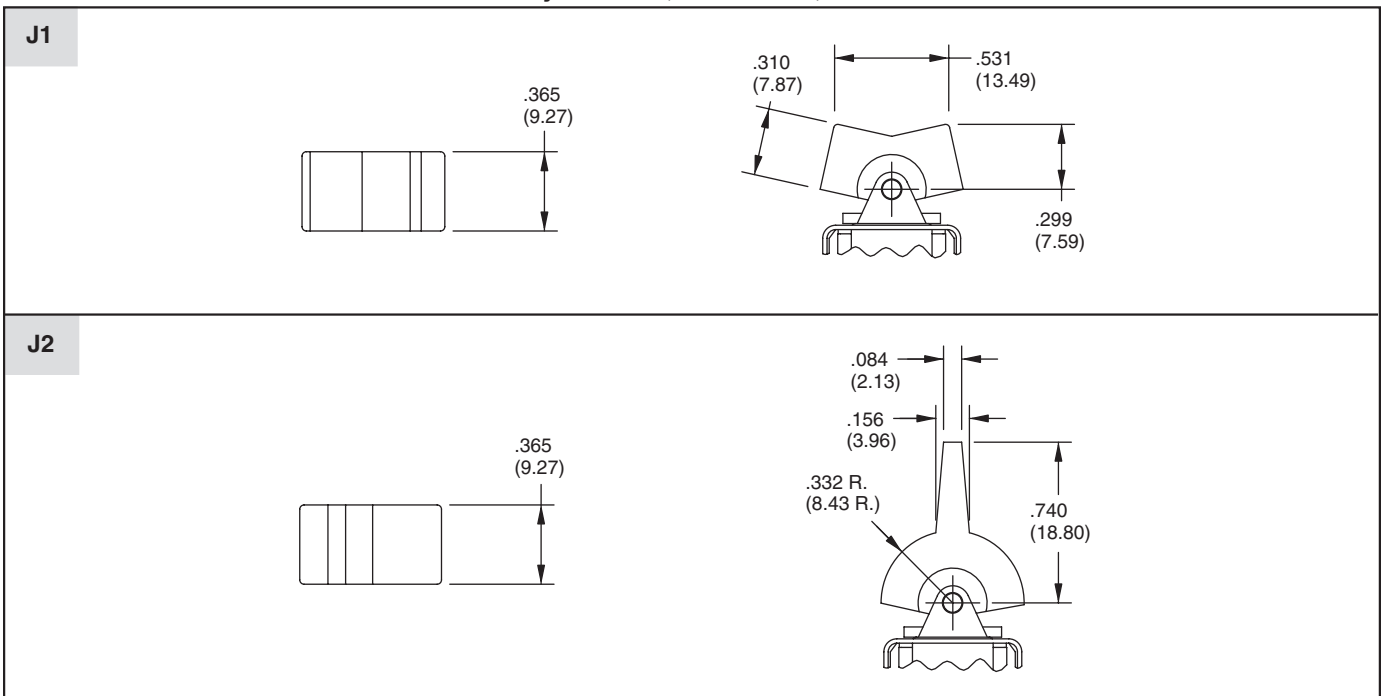
**R3**

**R4**

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

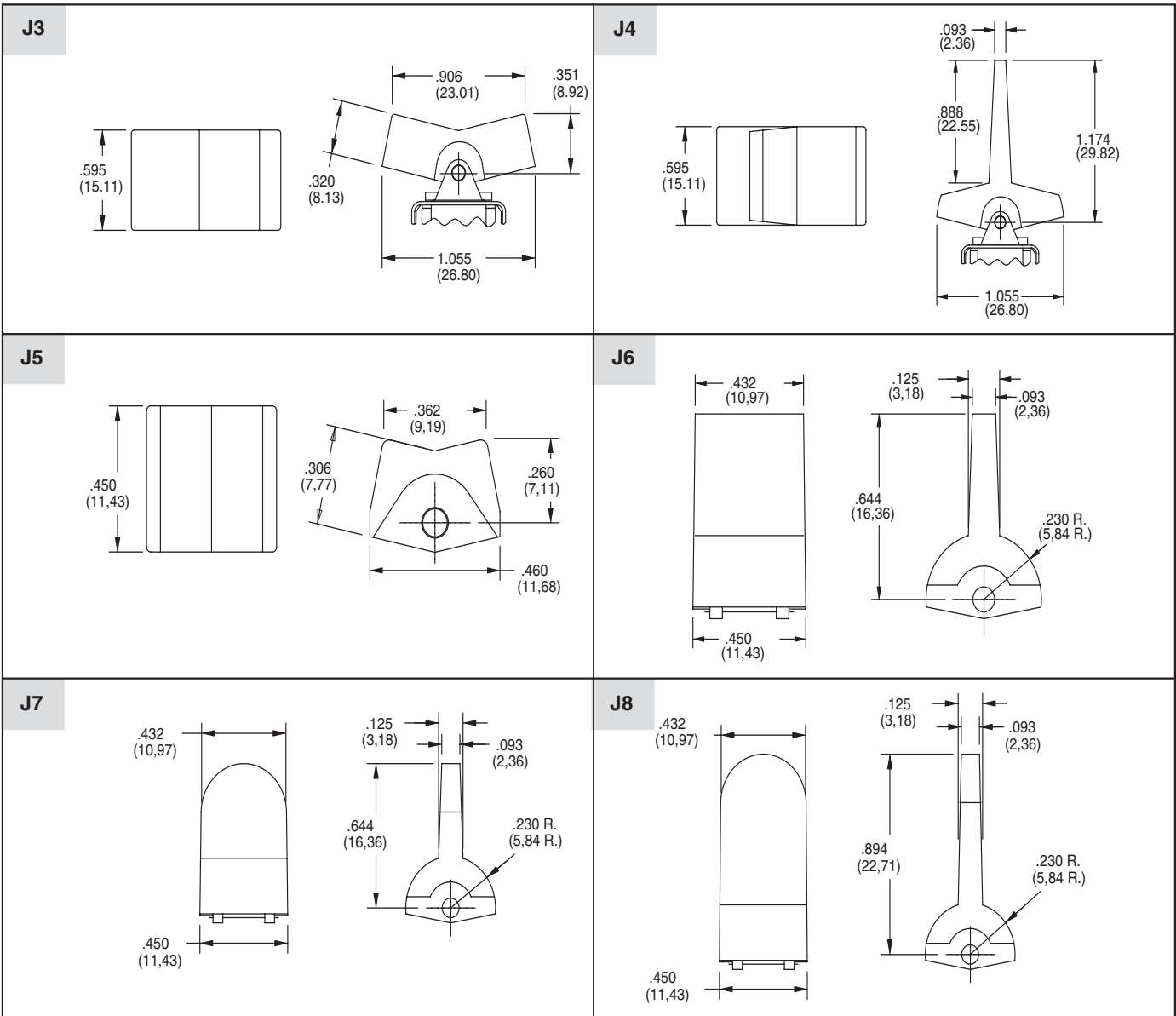


**ACTUATOR OPTIONS: For P.C. Mount Only** In inches (and millimeters)

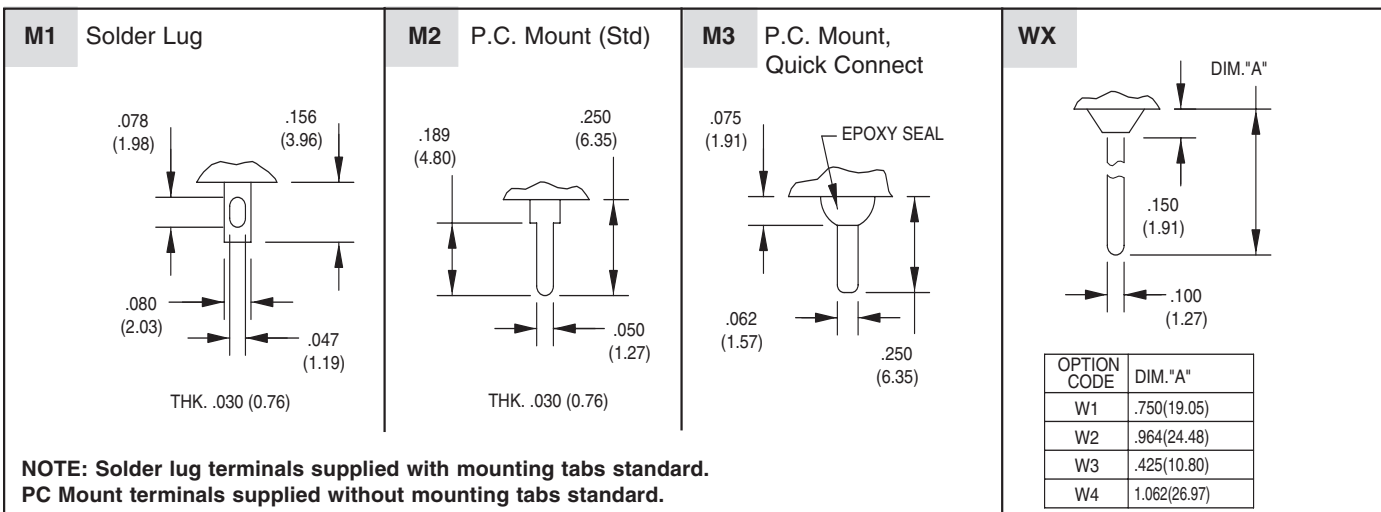


Rocker and Paddle Switches

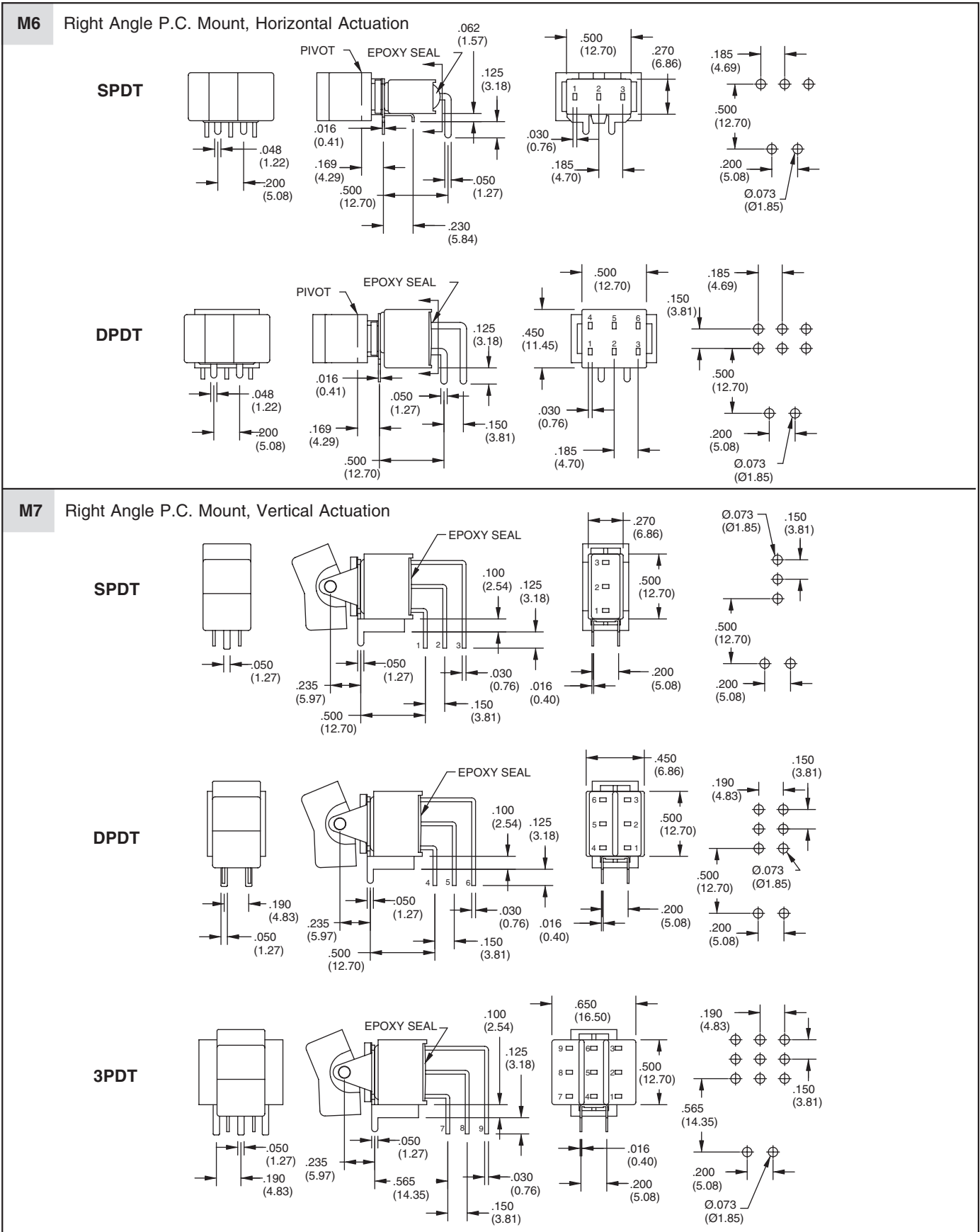
**ACTUATOR OPTIONS: For P.C. Mount Only** In inches (and millimeters)



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



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



Rocker and Paddle Switches



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

**4PDT**

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

**SPDT**

OPTION CODE	DIM."A"
V2	.460 (11.68)
V3	.630 (16.00)

**DPDT**

OPTION CODE	DIM."A"
V2	.460 (11.68)
V3	.630 (16.00)

**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:** 40,000 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:** 1,000 V RMS @ sea level

**Operating Temperature:** -30°C to 85°C

**UL Recognition:** File number is E35289

**MATERIALS**

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

**Rockers:** Nylon (UL 94V-0)

**Bushing:** Stainless steel

**Switch Support:** Brass, tin-plated

**Terminal/Contacts:** Brass with silver or gold plate

**Terminal Seal:** Epoxy

**ORDERING INFORMATION**

47ASP1J2M6RT

Series 47A Miniature Rocker and Paddle Switches

Model: SPDT: SP1, SP2, SP3, SP4, SP5  
 DPDT: DP1, DP2, DP3, DP4, DP5  
 3PDT: 3P1, 3P2, 3P3, 3P4, 3P5  
 4PDT: 4P1, 4P2, 4P3, 4P4, 4P5  
 (See Model options.)

Actuator: R1, R2, R3, R4, R5, R6, R7  
 J1, J2, J3, J4, J5, J6, J7, J8 (See actuator options.)

Termination Options: M1, M2, M3, M6, M7, S6, V2, V3, W1, W2, W3, W4  
 (See Termination options.)

RoHS Compliant

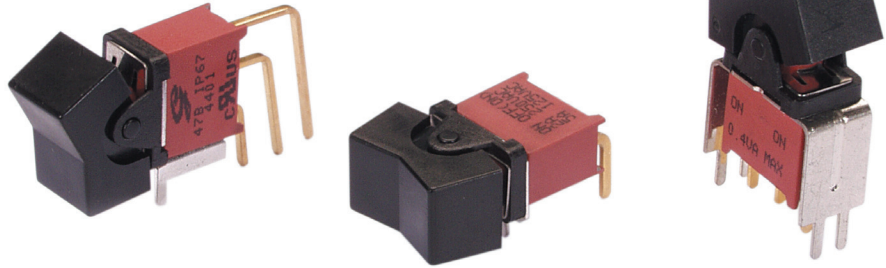
Contact: R = Brass alloy, gold plate over nickel plate  
 Q = Brass alloy, silver plated

Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

**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

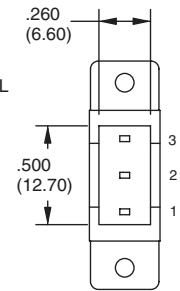
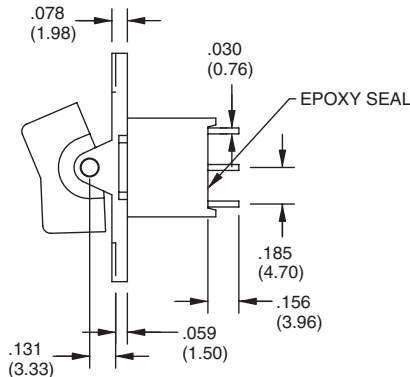
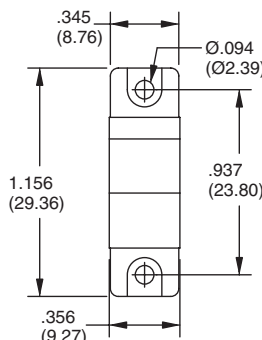
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02COMM.

SCHEMATIC



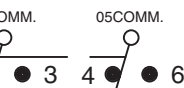
**SPDT**



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

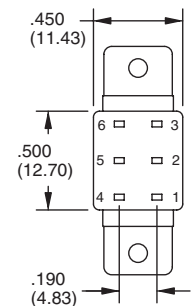
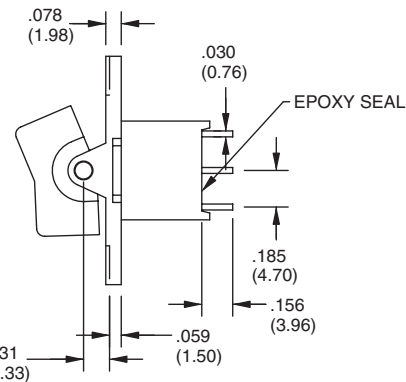
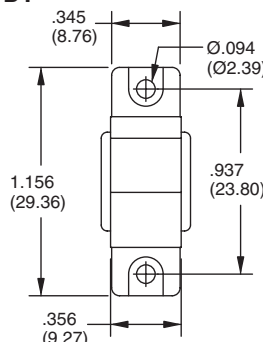
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02COMM. 05COMM.



SCHEMATIC

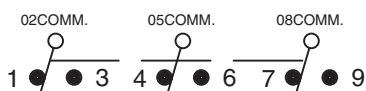
**DPDT**



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

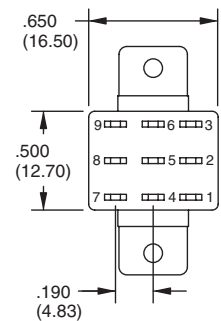
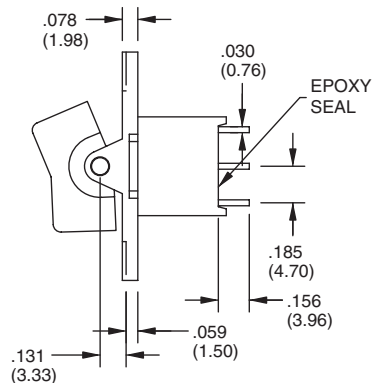
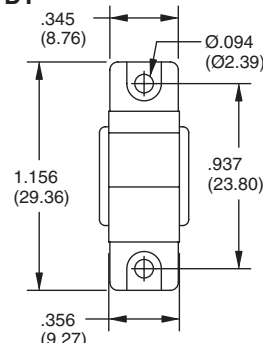
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02COMM. 05COMM. 08COMM.



SCHEMATIC

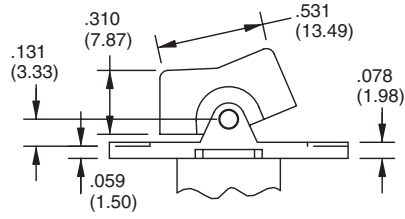
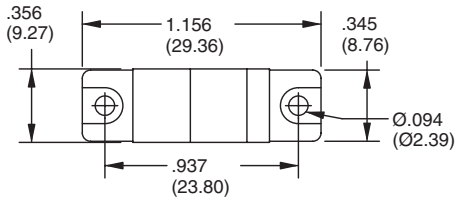
**3PDT**



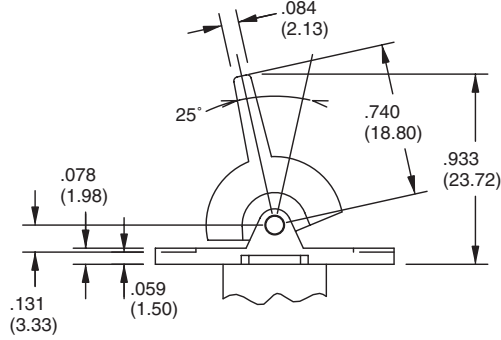
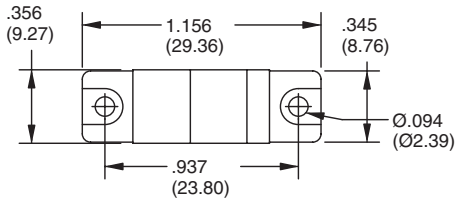
Rocker and Paddle Switches

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

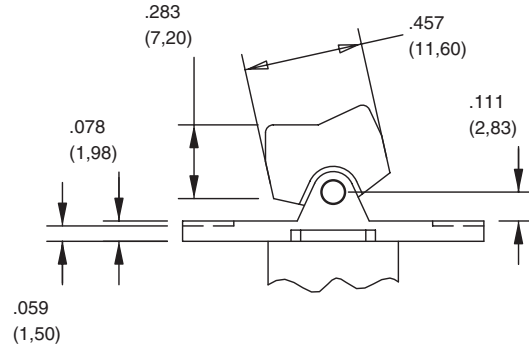
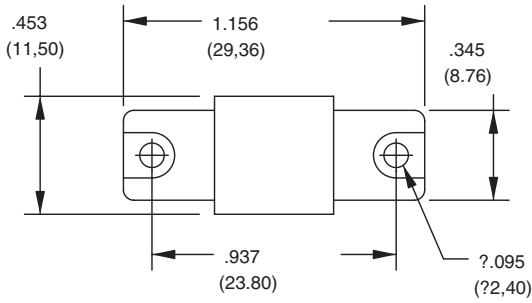
**R1**



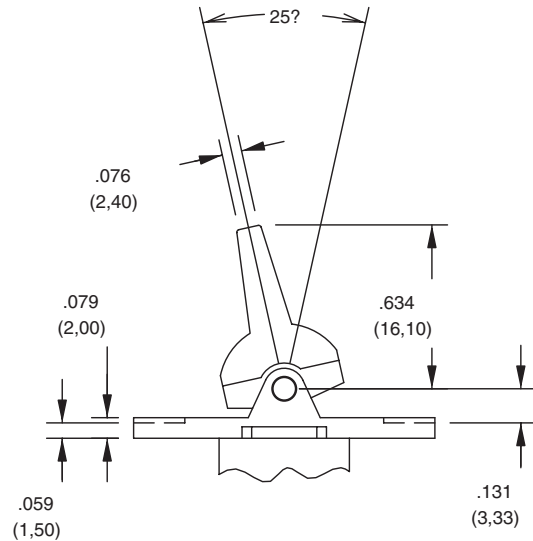
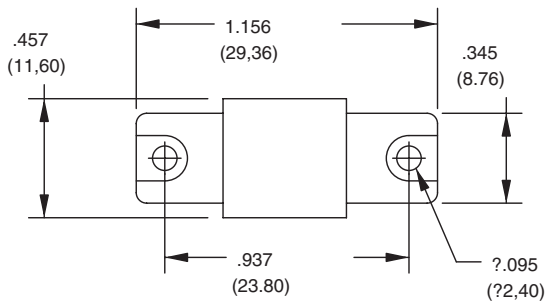
**R2**



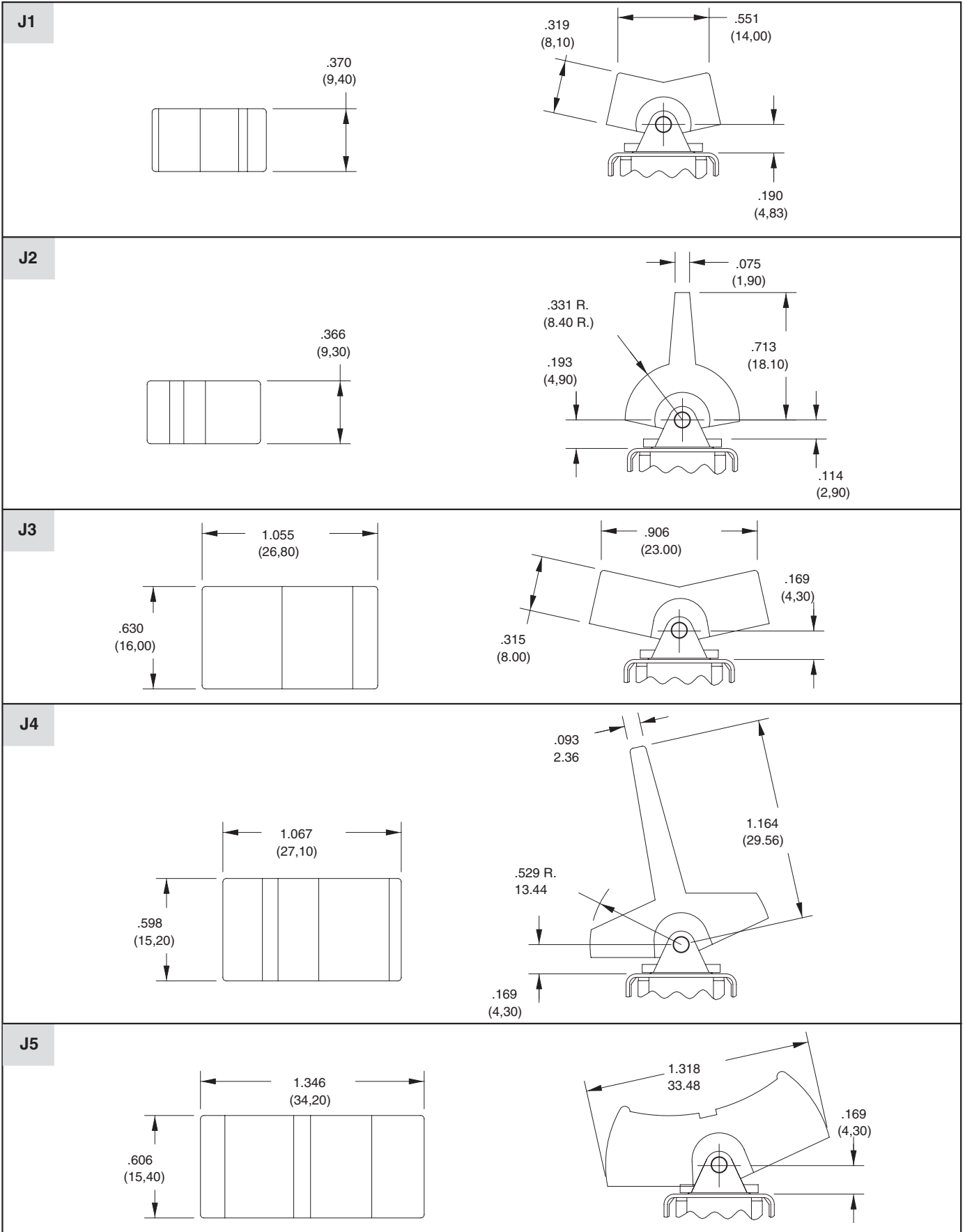
**R3**



**R4**



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



Rocker and Paddle Switches

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

**M1**

**M2**

**M3**

**WX**

OPTION CODE	DIM. "A"
W1	.750(19.05)
W2	.964(24.48)
W3	.425(10.80)
W4	1.062(26.97)

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

**SPDT**

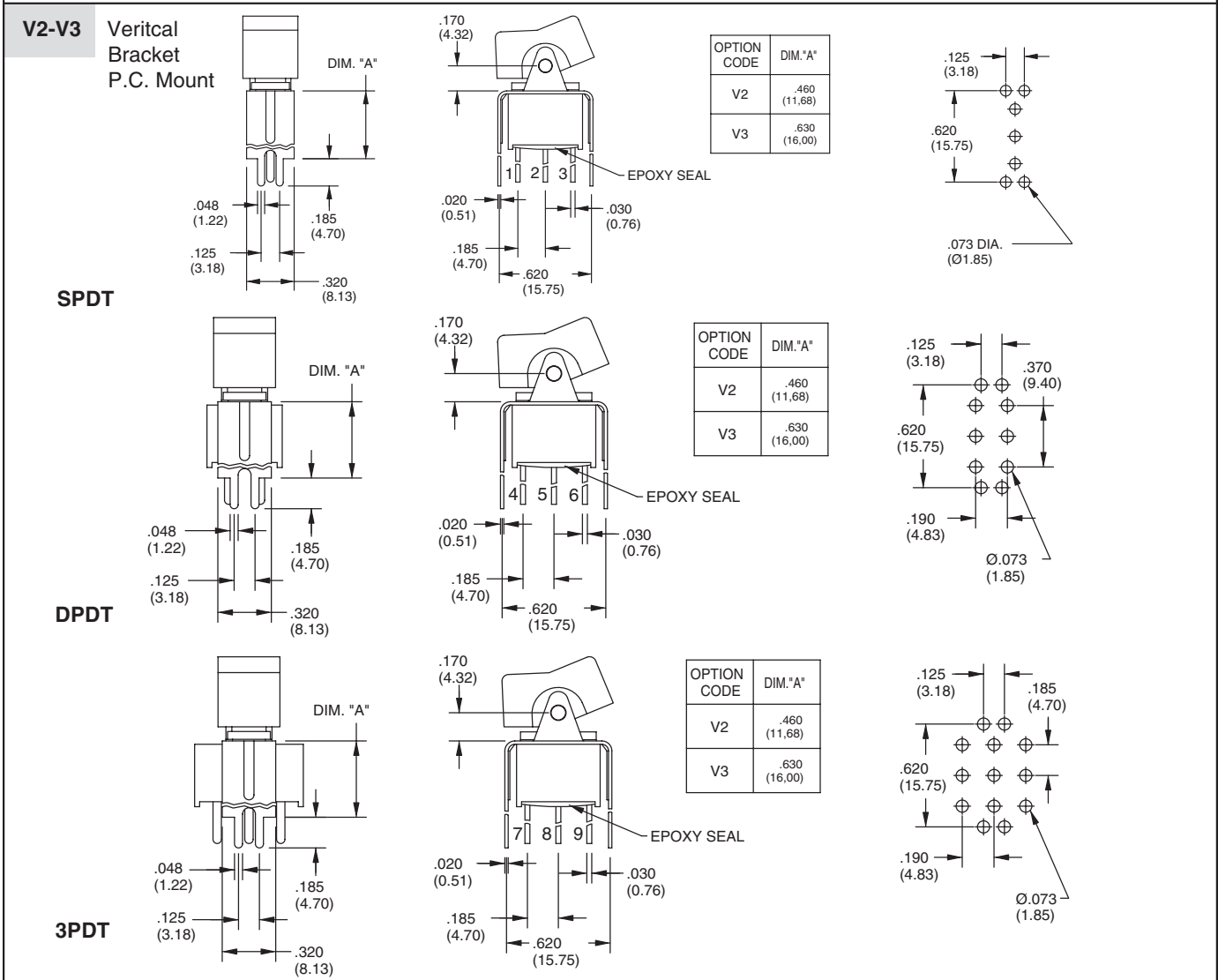
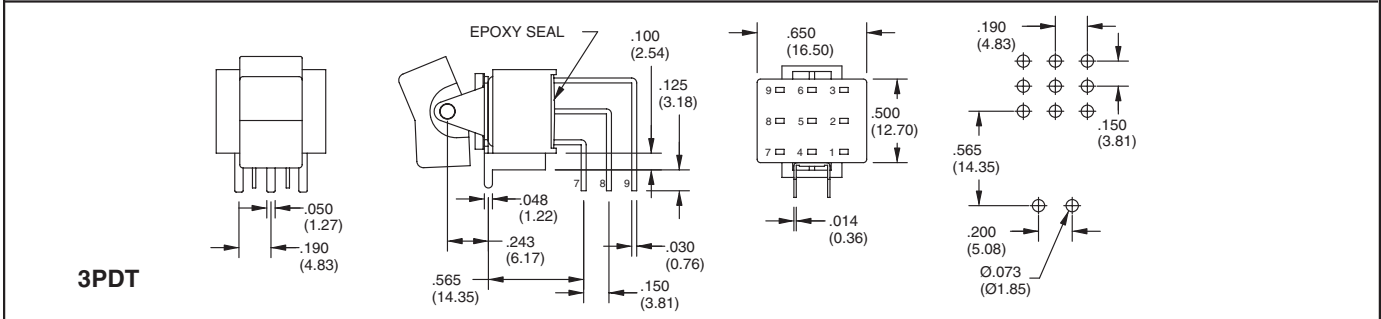
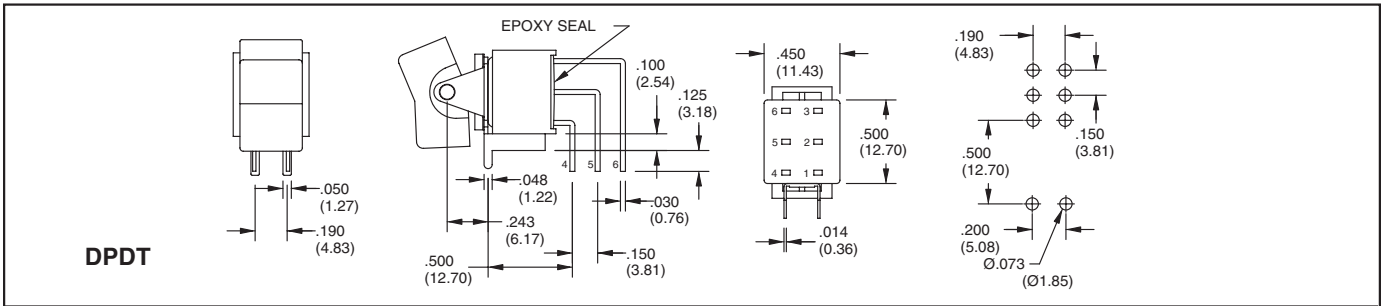
**DPDT**

**3PDT**

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

**SPDT**

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



Rocker and Paddle Switches

**SPECIFICATIONS**

**RATINGS**

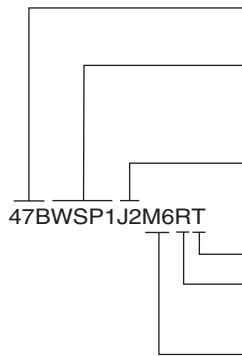
**Contact Rating:** Q option - 5A with resistive load @ 125 VAC or 28 VDC; 2A with resistive load @ 250 VAC. R option - 0.4 VA max @ 20 Vmax (AC or DC)  
**Electrical Life:** 50,000 make-and-break cycles at full load

**Contact Resistance:** Below 10 milliohms max. initial @ 2-4 VDC, 100 mA  
**Insulation Resistance:** 1,000 megaohms minimum  
**Dielectric Strength:** 1,500 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  
**Terminal/Contacts:** Copper alloy with gold plate over nickel or silver plate

**ORDERING INFORMATION**



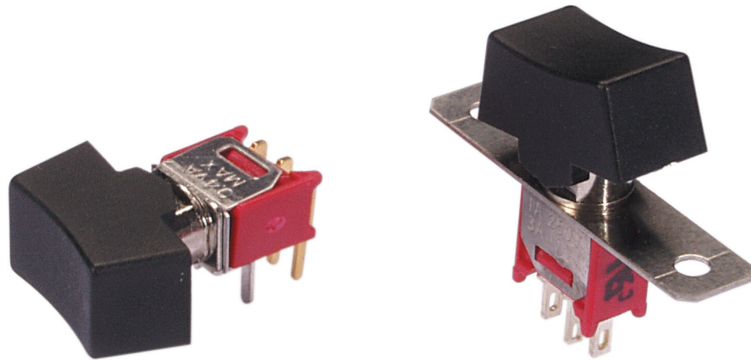
Series Sealed Miniature Rocker and Paddle Switches  
 Model: SPDT: WSP1, WSP2, WSP3, WSP4, WSP5  
 DPDT: WDP1, WDP2, WDP3, WDP4, WDP5  
 3PDT: W3P1, W3P2, W3P3, W3P4, W3P5  
 (See Model options.)  
 Actuator: R1, R2, R3, R4, J1, J2, J3, J4, J5  
 (See Actuator options)  
 RoHS Compliant  
 Contact: R = Copper alloy, gold plate over nickel plate,  
 Q = Copper alloy, gold plate over silver plate  
 Termination Options: M1, M2, M6, M7, V2, V3, W1, W2, W3, W4  
 (See Termination options)

Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

**SERIES 47C**  
Sub-Miniature Rocker Switches

**FEATURES**

- Save Space and Weight
- SPDT and DPDT Circuitry
- Choice of Actuators and Terminations
- UL Recognized



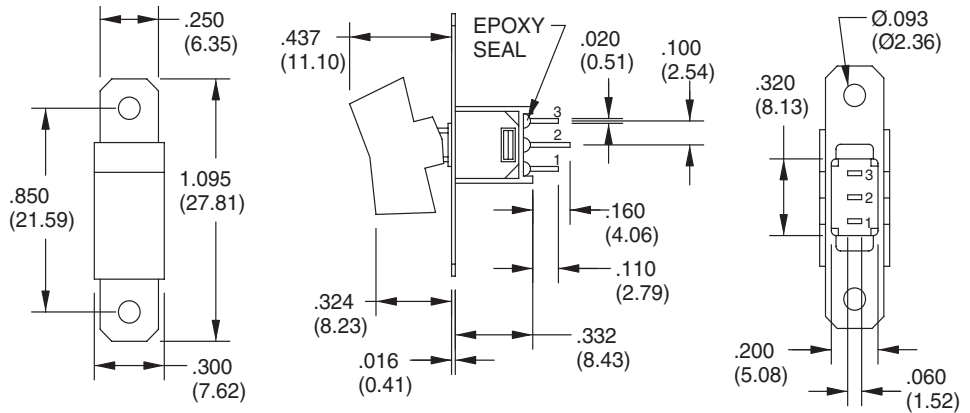
**MODELS** In inches (and millimeters)

**SPDT**

MODEL NO.	SWITCH POSITION		
MSP1	ON	NONE	ON
MSP2	ON	NONE	(ON)
MSP3	ON	OFF	ON
MSP4	(ON)	OFF	(ON)
MSP5	ON	OFF	(ON)
TERM. COMM.	2-3	OPEN	2-1

( )=MOMENTARY

02COMM.



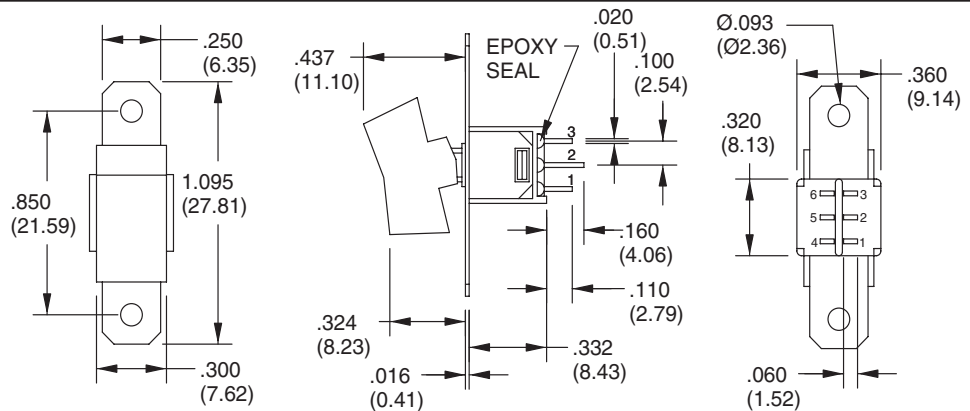
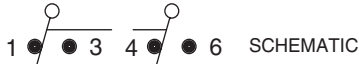
**DPDT**

MODEL NO.	SWITCH POSITION		
MDP1	ON	NONE	ON
MDP2	ON	NONE	(ON)
MDP3	ON	OFF	ON
MDP4	(ON)	OFF	(ON)
MDP5	ON	OFF	(ON)
TERM. COMM.	2-3,5-6	OPEN	2-1,5-4

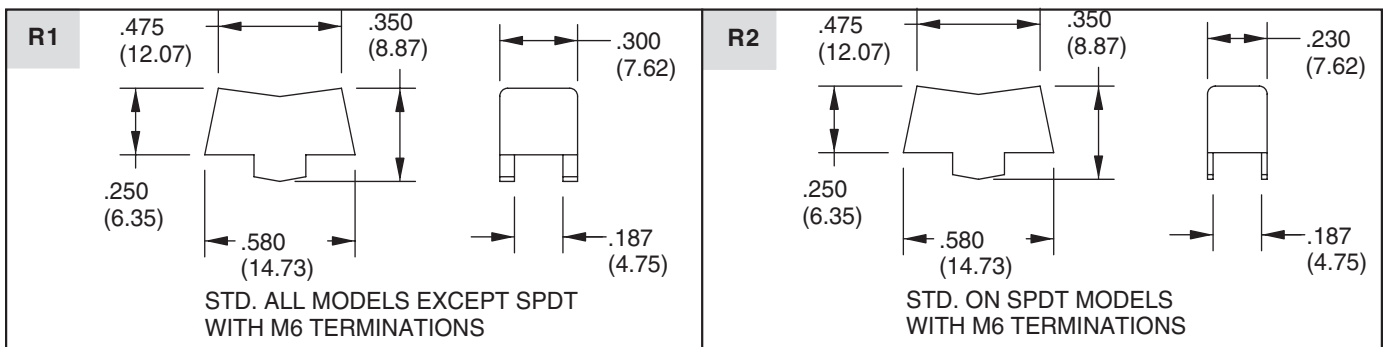
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02COMM.

05COMM.



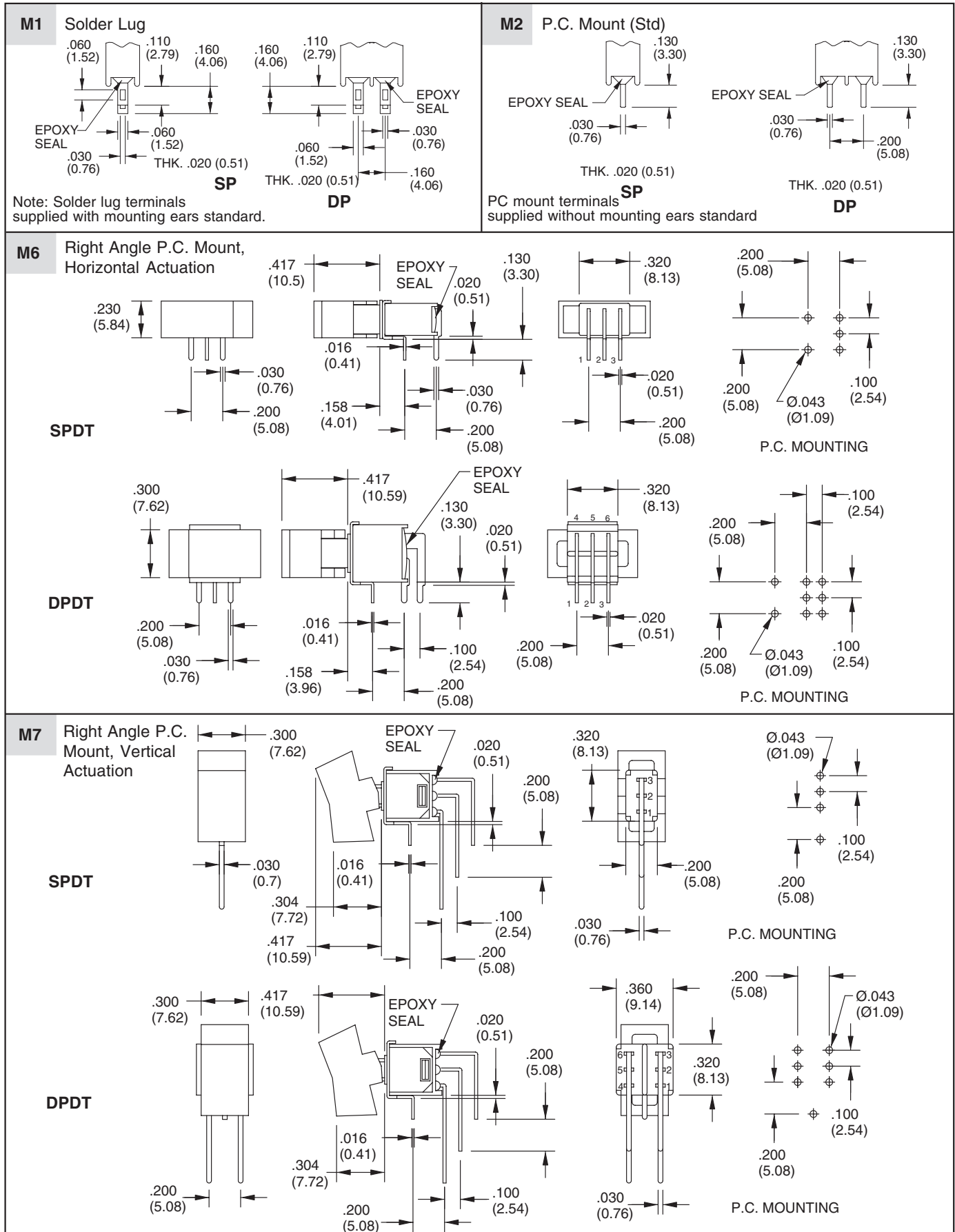
**ACTUATOR OPTIONS** In inches (and millimeters)



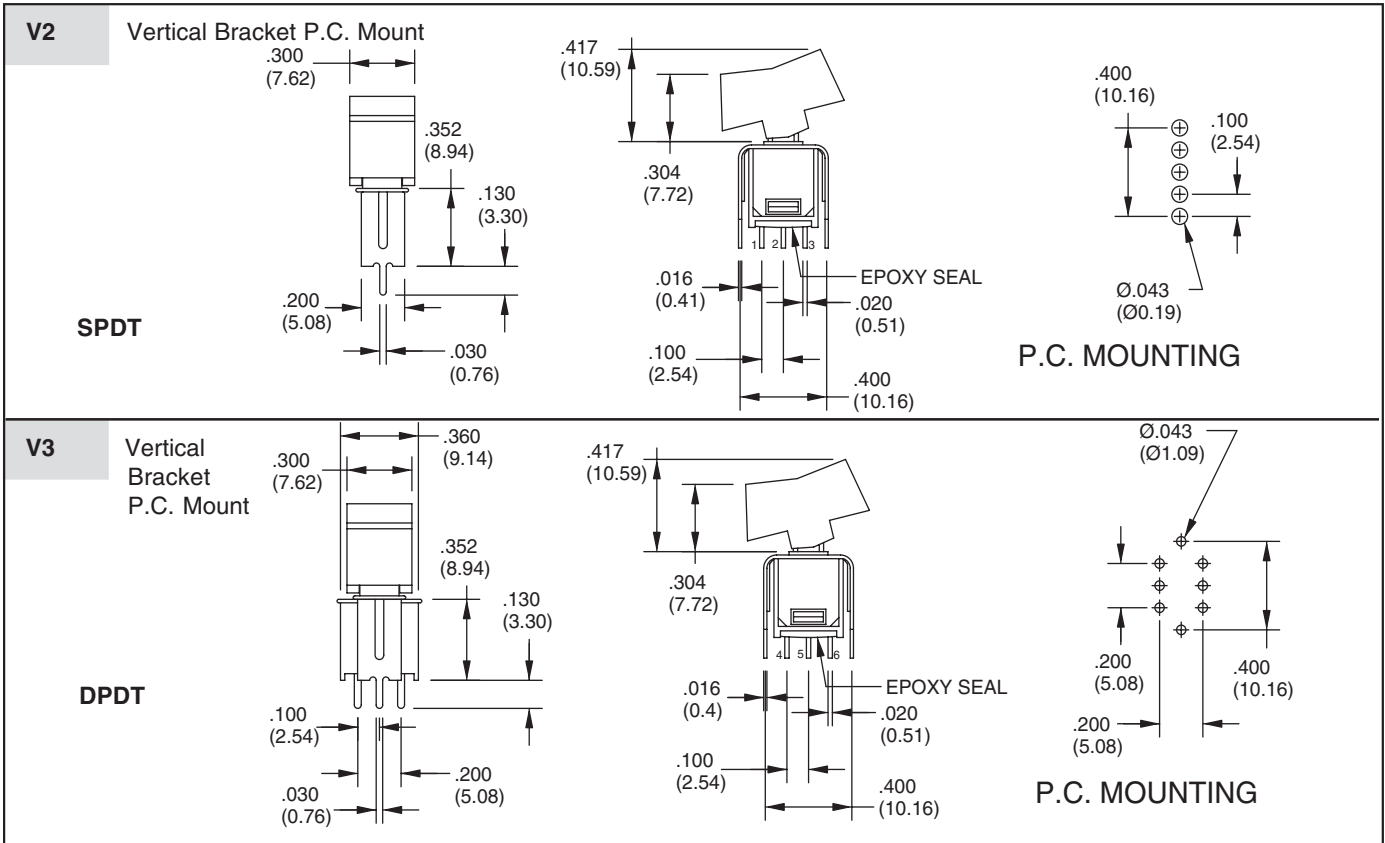
Rocker and Paddle Switches



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



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



**SPECIFICATIONS RATINGS**

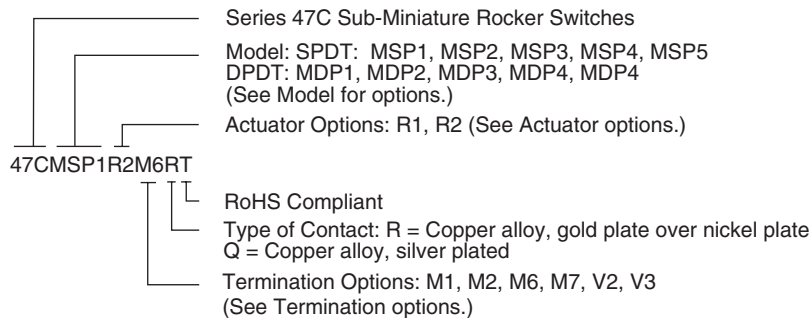
**Contact Rating:** Q option - 3A with resistive load @ 125 VAC or 28 VDC; 1.5A with resistive load @ 250 VAC. R option - 0.4 VA max @ 20 Vmax (AC or DC)  
**Electrical Life:** 30,000 make-and-break cycles at full load

**Contact Resistance:** 20 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  
**UL Recognition:** File number is E35289

**MATERIALS**

**Case:** Diallyl phthalate (DAP) (UL94V-0)  
**Rocker:** Nylon  
**Bushing:** Brass, nickel plated  
**Housing:** Stainless steel  
**Switch Support:** Brass, electrotin plated  
**Terminal/Contacts:** Copper alloy with silver or gold plating  
**Terminal Seal:** Epoxy

**ORDERING INFORMATION**

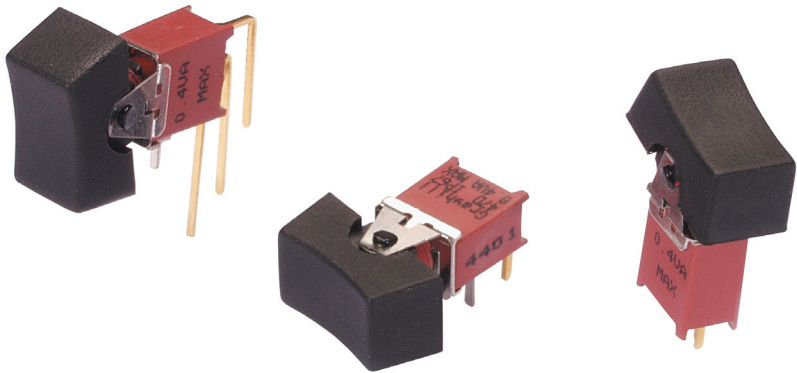


Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

**SERIES 47D**  
Sealed Sub-Miniature Rocker Switches

**FEATURES**

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

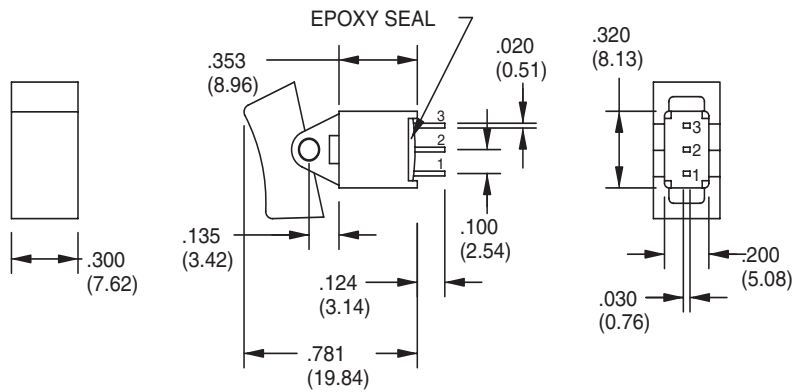


**MODELS** In inches (and millimeters)

**SPDT**

MODEL NO.	SWITCH POSITION		
WMSP1	ON	NONE	ON
WMSP2	ON	NONE	(ON)
WMSP3	ON	OFF	ON
WMSP4	(ON)	OFF	(ON)
WMSP5	ON	OFF	(ON)
TERM. COMM.	2-3	OPEN	2-1

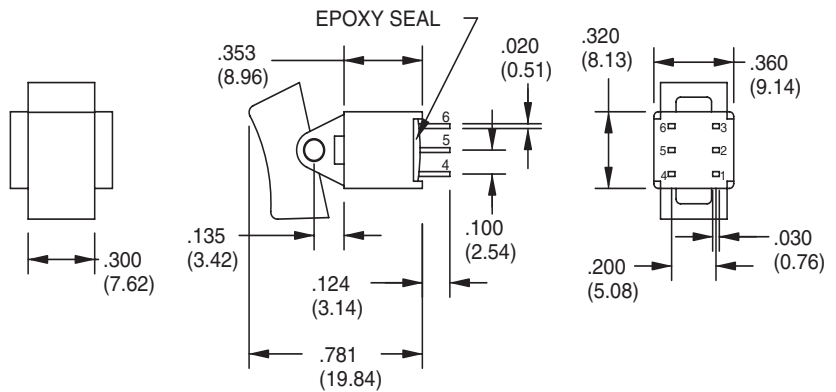
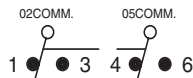
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**DPDT**

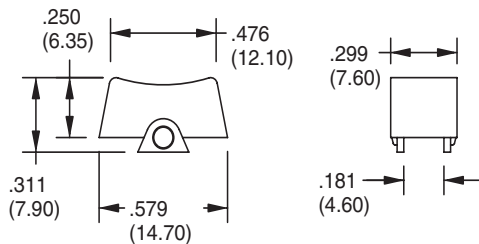
MODEL NO.	SWITCH POSITION		
WMDP1	ON	NONE	ON
WMDP2	ON	NONE	(ON)
WMDP3	ON	OFF	ON
WMDP4	(ON)	OFF	(ON)
WMDP5	ON	OFF	(ON)
TERM. COMM.	2-3,5-6	OPEN	2-1,5-4

( )=MOMENTARY

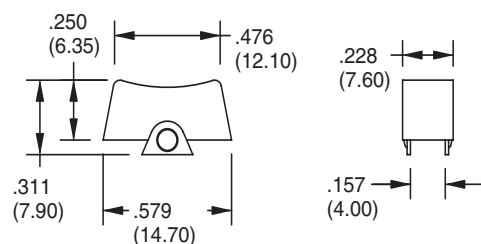


**ACTUATOR OPTIONS** In inches (and millimeters)

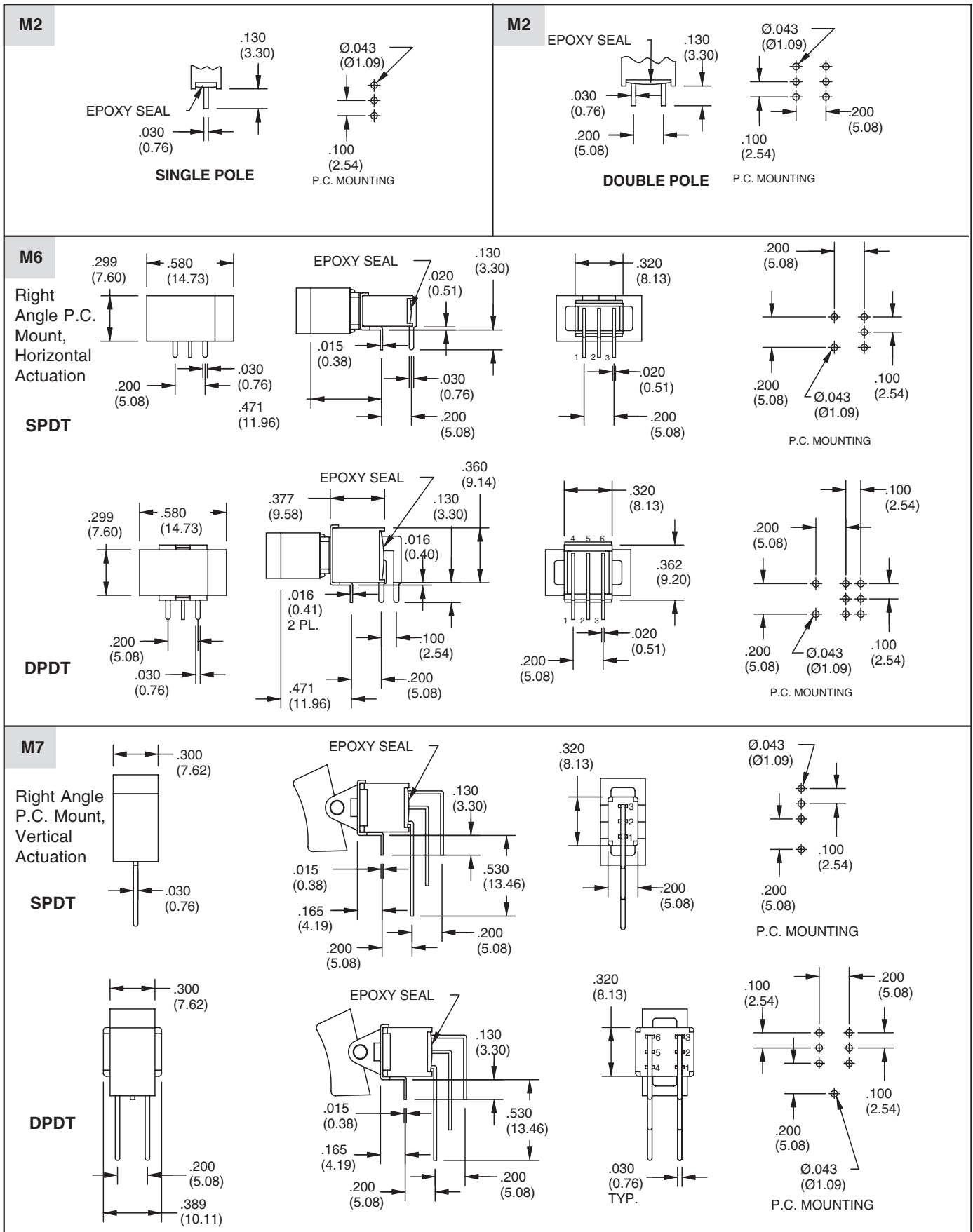
**R1**



**R2**

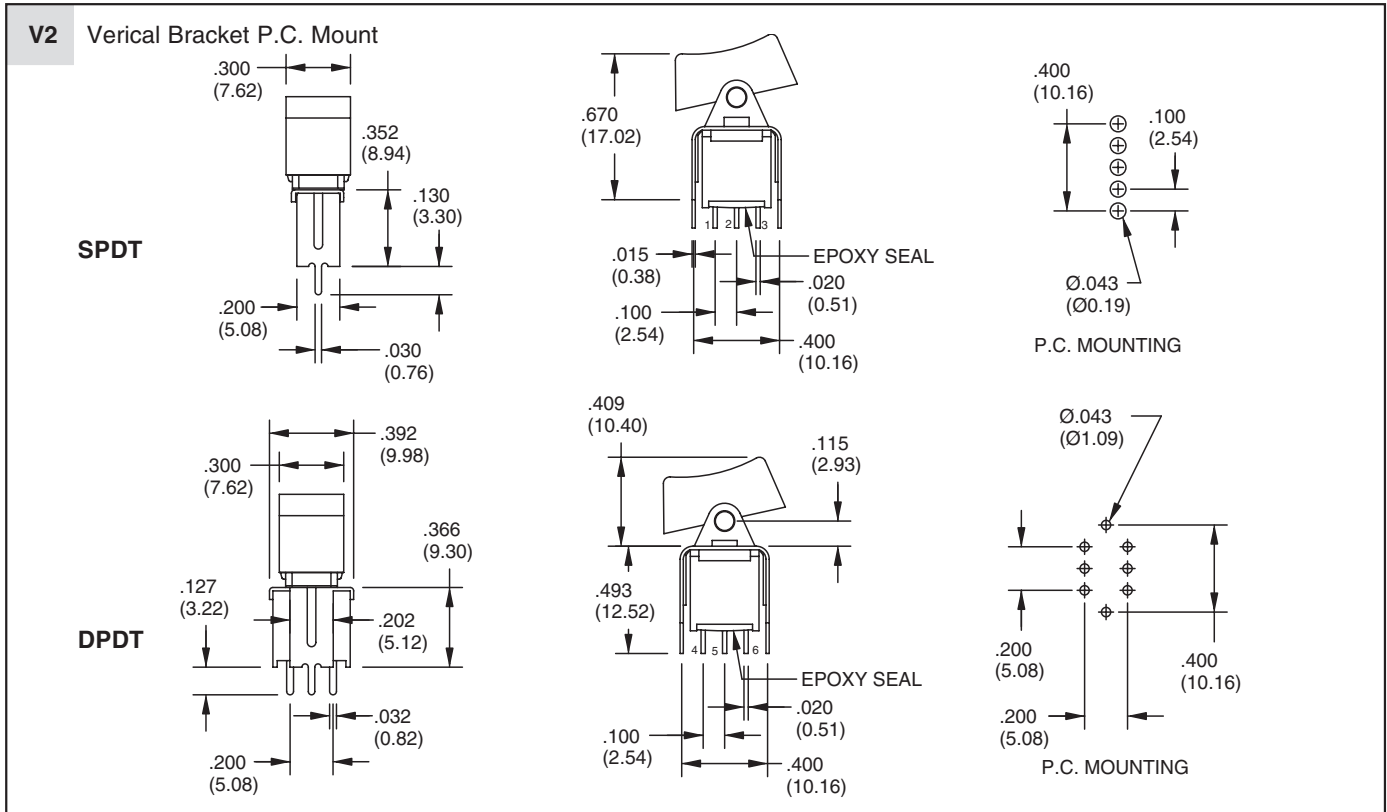


**TERMINATION OPTIONS** In inches (and millimeters)



Rocker and Paddle Switches

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



**SPECIFICATIONS**

**RATINGS**

**Contact Rating:** Q option - 3A with resistive load @ 125 VAC or 28 VDC; 1.5A 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:** 20 milliohms max. initial @ 2-4 VDC, 100 mA

**Insulation Resistance:** 1,000 megaohms minimum

**Dielectric Resistance:** 1,500 V RMS @ sea level

**Operating Temperature:** -30°C to 85°C

**MATERIALS**

**Case and Bushings:** Glass-filled nylon 6/6, flame retardant, heat stabilized (UL94V-0)

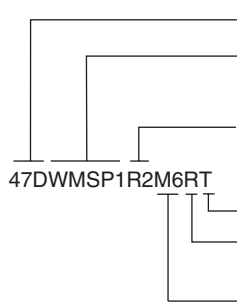
**Actuator:** Nylon, black standard. Internal o-ring seal standard with all actuators.

**Switch Support:** Brass, tin-plated

**Terminal Seal:** Epoxy

**Terminal/Contacts:** Copper alloy with gold plate or silver plate over nickel

**ORDERING INFORMATION**



Series 47D Sealed Sub-Miniature Rocker Switch

Model: SPDT: WMSP1, WMSP2, WMSP3, WMSP4, WMSP5  
DPDT: WMDP1, WMDP2, WMDP3, WMDP4, WMDP5

Actuator Options: R1, R2  
(See Actuator options.)

RoHS Compliant

Contact: R= Copper alloy, gold plate over nickel plate  
Q = Copper alloy, gold plate over silver plate

Termination Options: M2, M6, M7, V2  
(See Termination options.)

Available from your local Grayhill Component Distributor. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.