

## GENERAL SPECIFICATIONS FOR SW3000s

## B

**Electrical Capacity (Resistive & Inductive Load)**

**Power Level:** Shown in the following tables

**Other Ratings**

**Contact Resistance:** 10 milliohms maximum  
**Insulation Resistance:** 1,000 megohms minimum @ 500V DC  
**Dielectric Strength:** 2,000V AC minimum for 1 minute minimum  
**Mechanical Life:** 30,000 operations minimum  
**Electrical Life:** 10,000 operations minimum  
**Angle of Throw ( $\alpha$ ):** Shown on drawings or following tables

**Materials & Finishes**

**Rocker:** Urea resin; all rockers are white.  
**Mounting Frame:** Steel with chromate plating over zinc plating  
**Case Cover/Insulator:** Phenolic resin  
**Case:** Melamine phenol  
**Movable Contactor Plate:** Copper with silver plating  
**Movable & Stationary Contacts:** Silver alloy plus copper with silver plating  
**Terminals:** Copper with tin plating

**Environmental Data**

**Operating Temp Range:** -10°C through +70°C (+14°F through +158°F)  
**Sealing:** Dustproof cover of silicone rubber on SW3006A, SW3007A, & SW3008A

**Installation**

**Maximum Panel Thickness:** Shown with following drawings  
**Soldering Time & Temperature:** Manual Soldering: See Profile A in Supplement section.

**Standards & Certifications**

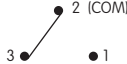
- UL:** File No. E44145 - Recognized only when ordered with marking on switch.  
 Add "/U" or "/CUL" to end of part number to order UL recognized switch.  
 UL or cULus recognition designated beside part numbers on following pages.  
 See Supplement section to find UL or cULus rating details.
- CSA:** File No. 023535\_0\_000 - Certified only when ordered with marking on switch.  
 Add "/C" to end of part number to order CSA certified switch.  
 CSA certification designated beside part numbers on following pages.  
 See Supplement section to find CSA rating details.
- VDE:** License No. 40028826 - Approved only when ordered with marking on switch.  
 Add "/V" to end of part number to order VDE approved switch.  
 SW3006A at 20A @ 125V AC & 10A @ 250V AC

## SINGLE POLE WITH SOLDER LUG

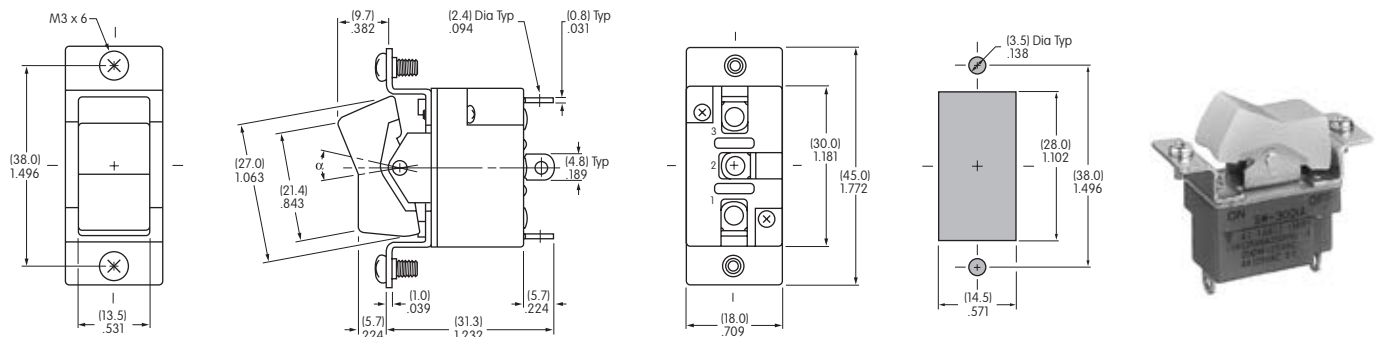
| * UL & CSA recognized only when ordered with marking on switch (see General Specs) |             |     | Rocker Position/Connected Terminals |        |        |        | Electrical Capacity |         |        |                | $\alpha$ = Angle of Throw |
|------------------------------------------------------------------------------------|-------------|-----|-------------------------------------|--------|--------|--------|---------------------|---------|--------|----------------|---------------------------|
| Model                                                                              | * Approvals |     | Pole                                | Down   | Center | Up     | Resistive           |         |        | Inductive      |                           |
|                                                                                    | UL          | CSA |                                     |        |        |        | AC 125V             | AC 250V | DC 30V | AC 125V PF 0.6 |                           |
| SW3001A                                                                            | ✓           | ✓   | SPST                                | ON 1-3 | NONE   | OFF —  | 15A                 | 6A      | 15A    | 10A            | 24°                       |
| SW3002A                                                                            | ✓           | ✓   | SPDT                                | ON 2-3 | NONE   | ON 2-1 | 15A                 | 6A      | 15A    | 10A            | 24°                       |
| SW3003A                                                                            | ✓           | ✓   | SPDT                                | ON 2-3 | OFF    | ON 2-1 | 15A                 | 6A      | 15A    | 10A            | 28°                       |

**Throw & Schematics:**

SPST: 

SPDT: 

Note: Terminal numbers are actually on the switch.



Maximum Effective Panel Thickness:

SW3001A does not have terminal 2. .197" (5.0mm) for SW3001A & SW3002A models; .177" (4.5mm) for SW3003A models **SW3001A**

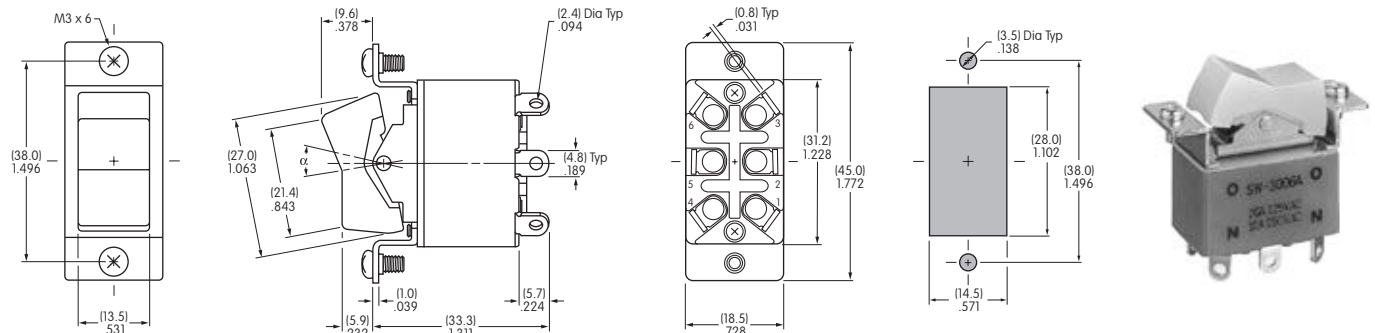
## DOUBLE POLE WITH SOLDER LUG

| * UL, cULus & CSA recognized only when ordered with marking on switch (see General Specs) |             |     | Rocker Position/Connected Terminals ( ) = Momentary |              |        |              | Electrical Capacity |         |        |                | $\alpha$ = Angle of Throw |
|-------------------------------------------------------------------------------------------|-------------|-----|-----------------------------------------------------|--------------|--------|--------------|---------------------|---------|--------|----------------|---------------------------|
| Model                                                                                     | * Approvals |     | Pole                                                | Down         | Center | Up           | Resistive           |         |        | Inductive      |                           |
|                                                                                           | UL          | CSA |                                                     |              |        |              | AC 125V             | AC 250V | DC 30V | AC 125V PF 0.6 |                           |
| SW3006A                                                                                   | ✓           | ✓   | DPDT                                                | ON 2-3 5-6   | NONE   | ON 2-1 5-4   | 20A                 | 10A     | 20A    | 10A            | 24°                       |
| SW3007A                                                                                   | —           | —   | DPDT                                                | ON 2-3 5-6   | OFF    | ON 2-1 5-4   | 15A                 | 6A      | 15A    | 10A            | 28°                       |
| SW3008A                                                                                   | —           | —   | DPDT                                                | (ON) 2-3 5-6 | OFF    | (ON) 2-1 5-4 | 15A                 | 6A      | 15A    | 10A            | 24°                       |

**Throw & Schematic:**

DPDT: 

Note: Terminal numbers are actually on the switch.



Maximum Effective Panel Thickness:

.197" (5.0mm) for SW3006A & SW3008A models; .177" (4.5mm) for SW3007A models **SW3006A**

## GENERAL SPECIFICATIONS FOR SW3800s

### B Electrical Capacity (Resistive & Inductive Load)

**Power Level:** Shown in the following tables  
Note: See Supplement section for details of design for inductive DC loads.

### Other Ratings

**Contact Resistance:** 10 milliohms maximum  
**Insulation Resistance:** 1,000 megohms minimum @ 500V DC  
**Dielectric Strength:** 2,000V AC minimum for 1 minute minimum  
**Mechanical Life:** 50,000 operations minimum  
**Electrical Life:** 25,000 operations minimum  
**Angle of Throw:** Shown on following drawings  
**Nominal Operating Force:** 1,800 grams for SW3822  
2,200 grams for SW3823 Off to On  
800 grams for SW3823 On to Off

### Materials & Finishes

**Rocker:** Urea resin; all rockers are white.  
**Mounting Frame:** Steel with chromate plating over zinc plating  
**Case Cover/Insulator:** Phenolic resin  
**Case:** Melamine phenol  
**Movable Contacts:** Copper with silver plating  
**Stationary Contacts:** Silver alloy plus copper with silver plating  
**Terminals:** Brass (terminal screws of brass with nickel plating)

### Environmental Data

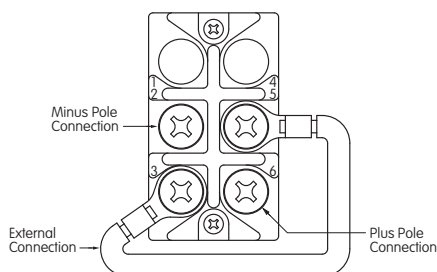
**Operating Temp Range:** -10°C through +70°C (+14°F through +158°F)

### Standards & Certifications

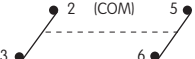
**UL:** **File No. E44145 - Recognized only when ordered with marking on switch.**  
Add "/U" or "/CUL" to end of part number to order UL recognized switch.  
UL or cULus recognition designated beside part numbers on following pages.  
See Supplement section to find UL or cULus rating details.

**CSA:** **File No. 023535\_0\_000 - Certified only when ordered with marking on switch.**  
Add "/C" to end of part number to order CSA certified switch.  
CSA certification designated beside part numbers on following pages.  
See Supplement section to find CSA rating details.

### Wiring for SW3821D with Electrical Capacity of DC400V 10A

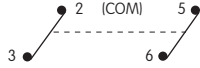


## DOUBLE POLE WITH SCREW LUG

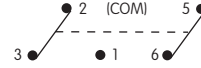
|                     |                                                                                   |                                                                                   |                                                                                   | Rocker Position/Connected Terminals |                                                                                   |                                                                                   |                                                                                   |         |         |         | Electrical Capacity |         |         |         |                |                                                                                    |          |     |           |  |                                                    |  |  |  |
|---------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|---------|---------|---------------------|---------|---------|---------|----------------|------------------------------------------------------------------------------------|----------|-----|-----------|--|----------------------------------------------------|--|--|--|
| Model               | * Approvals                                                                       |                                                                                   |                                                                                   | Pole                                | Down                                                                              |                                                                                   |                                                                                   | Center  | Up      |         | Resistive           |         |         |         |                |                                                                                    |          |     | Inductive |  |                                                    |  |  |  |
|                     |  |  |  |                                     |  |  |  | AC 125V | AC 250V | DC 30V  | DC 48V              | DC 125V | DC 250V | DC 400V | AC 125V PF 0.6 | AC 250V PF 0.6                                                                     |          |     |           |  |                                                    |  |  |  |
| SW3821              | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPST                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | NONE    | OFF     | —       | 30A                 | 30A     | 30A     | —       | 1A             | —                                                                                  | —        | 30A | 15A       |  |                                                    |  |  |  |
| SW3822              | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPDT                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | NONE    | ON      | 2-1 5-4 | 30A                 | 30A     | 30A     | —       | 1A             | —                                                                                  | —        | 30A | 15A       |  |                                                    |  |  |  |
| SW3823              | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPDT                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | OFF     | ON      | 2-1 5-4 | 30A                 | 30A     | 30A     | —       | 1A             | —                                                                                  | —        | 30A | 15A       |  |                                                    |  |  |  |
| SW3821D             | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPST                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | NONE    | OFF     | —       | —                   | —       | 30A     | 30A     | 20A            | 15A                                                                                | 4A (10A) | —   | —         |  |                                                    |  |  |  |
| SW3822D             | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPDT                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | NONE    | ON      | 2-1 5-4 | —                   | —       | 30A     | 30A     | 20A            | 15A                                                                                | 4A       | —   | —         |  |                                                    |  |  |  |
| SW3823D             | ✓                                                                                 | ✓                                                                                 | ✓                                                                                 | DPDT                                | ON                                                                                | 2-3                                                                               | 5-6                                                                               | OFF     | ON      | 2-1 5-4 | —                   | —       | 30A     | 30A     | 15A            | —                                                                                  | —        | —   | —         |  |                                                    |  |  |  |
| Throw & Schematics: | DPST                                                                              |                                                                                   |                                                                                   |                                     |  |                                                                                   |                                                                                   |         |         |         |                     | DPDT    |         |         |                |  |          |     |           |  | Note: Terminal numbers are actually on the switch. |  |  |  |

Throw & Schematics:

DPST



DPDT

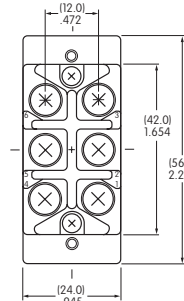
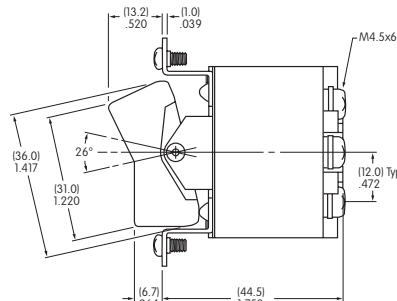
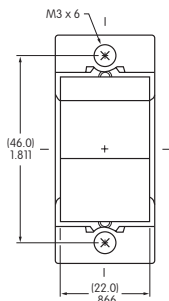


Note: Terminal numbers are actually on the switch.

\* UL/CUL & CSA for the following ratings: UL/CUL: 30A @ 30V DC, 15A @ 125V DC; CSA: 30A @ 30V DC, 15A @ 125V DC

\* UL, cULus & CSA recognized only when ordered with marking on switch (see General Specs)

( ) capacity is due to series wiring, see General Specifications page.



SW3821 & SW3821D do not have terminals 1 & 4.

Maximum Effective Panel Thickness .177" (4.5mm). Panel cutout shown below.

SW3822

## THREE POLE WITH SCREW LUG

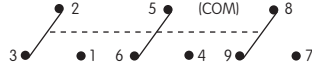
|                     |                                                                                     |                                                                                     |                                                                                     | Rocker Position/Connected Terminals                                                 |                                                                                     |     |     |      |        |                                                                                     |     | Electrical Capacity                                                                  |     |           |         |                                                    |        |           |                |                |  |
|---------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----|-----|------|--------|-------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------|-----|-----------|---------|----------------------------------------------------|--------|-----------|----------------|----------------|--|
| Model               | *Approvals                                                                          |                                                                                     |                                                                                     | Pole                                                                                | Down                                                                                |     |     |      | Center | Up                                                                                  |     |                                                                                      |     | Resistive |         |                                                    |        | Inductive |                |                |  |
|                     |  |  |  |                                                                                     |  |     |     |      |        |  |     |                                                                                      |     |           | AC 125V | AC 250V                                            | DC 30V | DC 125V   | AC 125V PF 0.6 | AC 250V PF 0.6 |  |
| SW3831              | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PST                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | NONE   | OFF                                                                                 | —   |                                                                                      |     |           | 30A     | 30A                                                | 30A    | 1A        | 30A            | 15A            |  |
| SW3832              | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PDT                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | NONE   | ON                                                                                  | 2-1 | 5-4                                                                                  | 8-7 | 30A       | 30A     | 30A                                                | 1A     | 30A       | 15A            |                |  |
| SW3833              | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PDT                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | OFF    | ON                                                                                  | 2-1 | 5-4                                                                                  | 8-7 | 30A       | 30A     | 30A                                                | 1A     | 30A       | 15A            |                |  |
| SW3831D             | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PST                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | NONE   | OFF                                                                                 | —   |                                                                                      |     |           | —       | —                                                  | 30A    | 15A       | —              | —              |  |
| SW3832D             | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PDT                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | NONE   | ON                                                                                  | 2-1 | 5-4                                                                                  | 8-7 | —         | —       | 30A                                                | 15A    | —         | —              |                |  |
| SW3833D             | ✓                                                                                   | ✓                                                                                   | ✓                                                                                   | 3PDT                                                                                | ON                                                                                  | 2-3 | 5-6 | 8-9  | OFF    | ON                                                                                  | 2-1 | 5-4                                                                                  | 8-7 | —         | —       | 30A                                                | 15A    | —         | —              |                |  |
| Throw & Schematics: | 3PST                                                                                |                                                                                     |                                                                                     |  |                                                                                     |     |     | 3PDT |        |                                                                                     |     |  |     |           |         | Note: Terminal numbers are actually on the switch. |        |           |                |                |  |

Throw & Schematics:

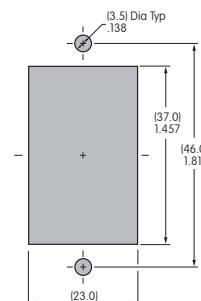
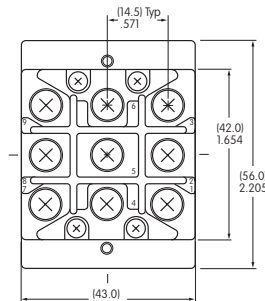
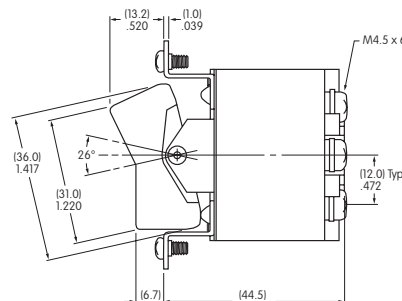
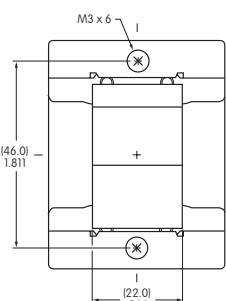
3PST



3PDT



Note: Terminal numbers are actually on the switch.



SW3831 & SW3831D do not have terminals 1, 4 & 7.

Maximum Effective Panel Thickness .177" (4.5mm)

# Mouser Electronics

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[SW3821/U-RO](#) [SW3822/CUL](#) [SW3823/CUL](#) [SW3831/CUL](#) [SW3821/CUL](#) [SW3833/CUL](#) [SW3832Z035](#) [SW3822/A](#)  
[SW3821D/328](#) [SW3821D/U](#) [SW3006A/U](#) [SW3823D/U](#) [SW3833D/UC](#) [SW3831D/UC](#) [SW3831D/U](#) [SW3002A](#)  
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[SW3821/U](#)