

General Specifications

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

| | | | | |
|----------|---------------------------|---------------------------------|---|--|
| B | CWSA | Electrical Capacity | Power Level: For Resistive Load 6A @ 250V AC | |
| | | Other Ratings | | |
| | | Contact Resistance: | 20 milliohms maximum | |
| | | Insulation Resistance: | 500 megohms minimum @ 500V DC | |
| | | Dielectric Strength: | 1,500V AC minimum between contacts for 1 minute minimum 3,000V AC minimum between contacts & case for 1 minute minimum | |
| | | Mechanical Life: | 30,000 operations minimum | |
| | | Electrical Life: | 10,000 operations minimum with Resistive Load & 6,000 operations with Inductive Load | |
| | | Nominal Operating Force: | 2.50N | |
| | | Angle of Throw: | 30° | Operating Temperature Range: -10°C ~ +70°C (+14°F ~ +158°F) |
| | | Materials & Finishes | | |
| | Rocker: | Polycarbonate | Stationary Contacts: | Silver alloy |
| | Housing: | Polyamide | Base: | Laminated thermosetting sheets |
| | Movable Contactor: | Brass with silver alloy plating | Contact Terminals: | Copper with silver plating |
| | Movable Contacts: | Silver alloy | Common Terminals: | Brass with silver plating |

| | | | | |
|--|---------------------------|---|---|--|
| | CWSB | Electrical Capacity | Power Level: For Resistive Load 6A @ 250V AC | |
| | | Other Ratings | | |
| | | Contact Resistance: | 20 milliohms maximum | |
| | | Insulation Resistance: | 500 megohms minimum @ 500V DC | |
| | | Dielectric Strength: | 1,500V AC minimum between contacts for 1 minute minimum 3,000V AC minimum between contacts & case for 1 minute minimum | |
| | | Mechanical Life: | 30,000 operations minimum | |
| | | Electrical Life: | 10,000 operations minimum with Resistive Load & 6,000 operations with Inductive Load | |
| | | Nominal Operating Force: | 6.50N for single pole models; 10.0N for double pole models | |
| | | Angle of Throw: | 30° | Operating Temperature Range: -10°C ~ +70°C (+14°F ~ +158°F) |
| | | Materials & Finishes | | |
| | Rocker: | Polycarbonate | Stationary Contacts: | Silver alloy |
| | Housing: | Polyamide | Base: | Laminated thermosetting sheets |
| | Movable Contactor: | Beryllium copper w/silver alloy plating | Terminals: | Brass with silver plating |
| | Movable Contacts: | Silver | | |

| | | | | |
|--|---------------------------|----------------------------------|---|--|
| | CWT | Electrical Capacity | Power Level: For Resistive Load 6A @ 125V AC; 3A @ 250V AC; 4A @ 30V DC | |
| | | Other Ratings | | |
| | | Contact Resistance: | 20 milliohms maximum | |
| | | Insulation Resistance: | 1,000 megohms minimum @ 500V DC | |
| | | Dielectric Strength: | 1,000V AC minimum between contacts for 1 minute minimum 1,500V AC minimum between contacts & case for 1 minute minimum | |
| | | Mechanical Life: | 50,000 operations minimum | |
| | | Electrical Life: | 25,000 operations minimum | |
| | | Nominal Operating Force: | 2.0N | |
| | | Angle of Throw: | 30° | Operating Temperature Range: -25°C ~ +70°C (-13°F ~ +158°F) |
| | | Materials & Finishes | | |
| | Rocker: | Glass fiber reinforced polyamide | Base: | LCP (Liquid Crystal Polymer) |
| | Housing: | Polyamide | Contact Terminals: | Brass + silver with silver plating |
| | Movable Contactor: | Phosphor bronze w/silver plating | Common Terminals: | Brass with silver plating |
| | Movable Contacts: | Silver alloy | | |

Distinctive Characteristics

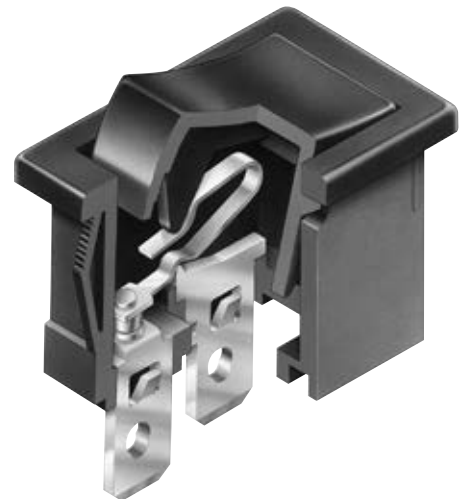
CWSA

- Low cost molded rocker.
- See-saw contact mechanism
- Stable stationary contact construction for high reliability.
- Easily installed with snap-in mounting.
- Large terminal hole dimensioned .067" x .098" (1.7mm x 2.5mm) simplifies wiring and soldering.
- Wave Soldering (PC version): See Profile A in Supplement section.
- Manual Soldering: See Profile A in Supplement section.



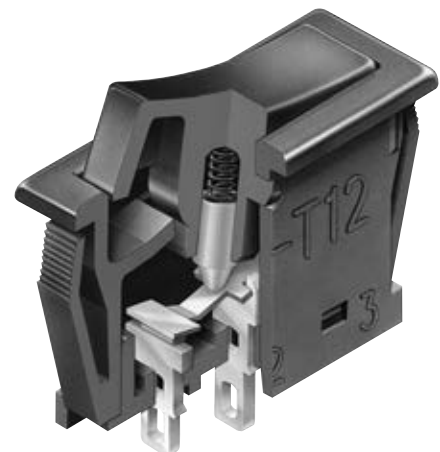
CWSB

- Low cost molded rocker.
- Snap-acting contact mechanism gives smooth actuation and audible feedback.
- Stable stationary contact construction for high reliability.
- Front panel, snap-in mounting for labor-saving installation.
- Solder lug/quick connect terminals can be used with connectors.
- Manual Soldering: See Profile B in Supplement section.



CWT

- Low cost molded rocker in compact, slim design.
- See-saw contact mechanism
- Outstanding insulation resistance and dielectric strength.
- Dust proof construction protects contact area.
- Stable stationary contact construction for high reliability.
- Front panel, snap-in mounting for labor-saving installation.
- Terminals are molded in and epoxy sealed to lock out flux, dust, and other contaminants.
- Manual Soldering: See Profile A in Supplement section.



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- B** Rockers
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STANDARDS & CERTIFICATIONS

CWSA



Specific CWSA models listed below are qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

| Model | Ratings @ AC | cULus File No. | Marking on Case |
|--------|--------------|----------------|-----------------|
| CWSA11 | 6A @ 250V | E44145 | Standard |
| CWSA12 | 6A @ 250V | E44145 | Standard |

CWSB



Specific CWSB models listed below are qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

| Model | Ratings @ AC | cULus File No. | Marking on Case |
|--------|--------------|----------------|-----------------|
| CWSB11 | 6A @ 250V | E44145 | Standard |
| CWSB21 | 6A @ 250V | E44145 | Standard |

CWT



Specific CWT model listed below is qualified for Underwriters Laboratories Inc. recognition and Canadian Standards Association certification. cULus marking on case is standard as noted in following table.

| Model | Ratings @ AC | cULus File No. | Marking on Case |
|-------|------------------------|----------------|-----------------|
| CWT12 | 6A @ 125V 3A @ 250V | E44145 | Standard |

TYPICAL SWITCH ORDERING EXAMPLES

CWSA **1** **1** **A** **A** **N** **S**

| Pole | |
|------|-------------|
| 1 | SPST & SPDT |

| Circuits | | | |
|----------|----|------|-----|
| 1 | ON | NONE | OFF |
| 2 | ON | NONE | ON |


| Cap Color | |
|-----------|-------|
| A | Black |

| Housing | |
|---------|-------|
| A | Black |

| Inscription | |
|-----------------|-------------|
| For SPST & SPDT | |
| No Code | None |
| For SPST | |
| 1 | Horizontal |
| 2 | Vertical |
| 3 | Dot Marking |

| Terminals | |
|-----------|----------------|
| S | Solder Lug |
| H | Right Angle PC |

TYPICAL ORDERING EXAMPLE
CWSA11AANS



CWSB **2** **1** **A** **A** **2** **F**

| Poles | |
|-------|------|
| 1 | SPST |
| 2 | DPST |

| Circuit | | | |
|---------|----|------|-----|
| 1 | ON | NONE | OFF |


| Cap Color | |
|-----------|-------|
| A | Black |

| Housing | |
|---------|-------|
| A | Black |

| Inscription | |
|-------------|-------------------------|
| No Code | None (SPST only) |
| 1 | Horizontal |
| 2 | Vertical |
| 3 | Dot Marking (SPST only) |

| Terminals | |
|-----------|----------------|
| F | Quick Connect |
| H | Right Angle PC |

TYPICAL ORDERING EXAMPLE
CWSB21AA2F



CWT **1** **2** **A** **A** **S1**

| Pole | |
|------|------|
| 1 | SPDT |


| Circuit | | | |
|---------|----|------|----|
| 2 | ON | NONE | ON |

| Cap Color | |
|-----------|-------|
| A | Black |

| Housing | |
|---------|-------|
| A | Black |

| Terminals | |
|-----------|------------|
| S1 | Solder Lug |

TYPICAL ORDERING EXAMPLE
CWT12AAS1



INSCRIPTIONS

No Code

None

Not available in double pole.

1

Horizontal Orientation

Only On-None-Off models are available with the horizontal inscription.

2

Vertical Orientation

Only On-None-Off models are available with the vertical inscription.

3

Dot Marking

Only Single Pole On-None-Off models are available with the dot inscription.

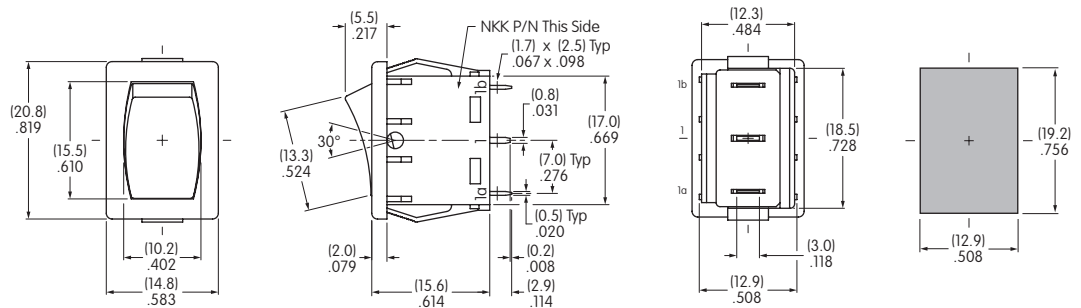


The IEC symbols for On-Off are supplied with Single Throw models only. Orientation of inscription must be selected. Inscription color is white ink on black.

TYPICAL SWITCH DIMENSIONS FOR CWSA

Solder Lug

Single Pole • No Inscription



CWSA12AANS

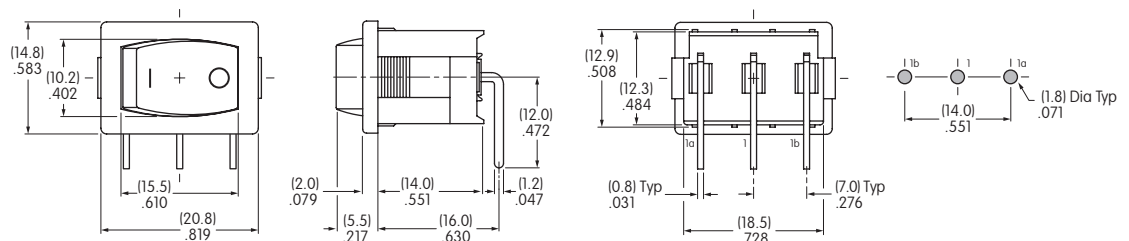
Single throw model does not have terminal 1b

Terminal numbers are on side of switch body

Panel Thickness .030" ~ .079" (0.75mm ~ 2.0mm)

Right Angle

Single Pole • Horizontal On-Off Inscription



CWSA11AAN1H

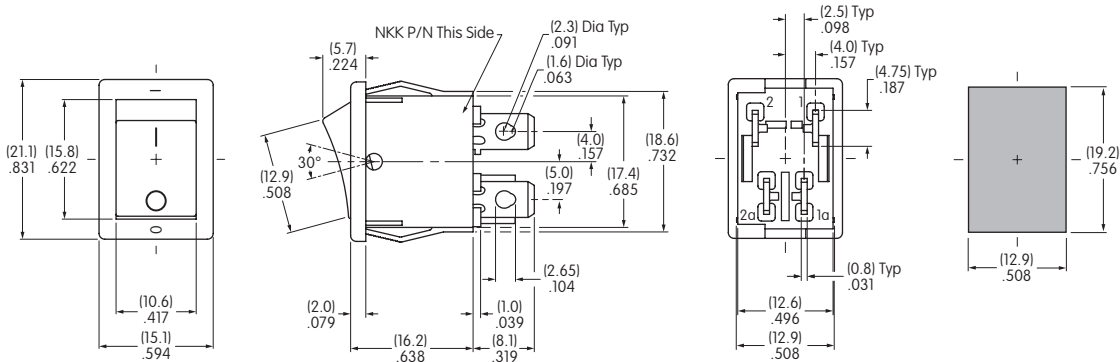
Single throw model does not have terminal 1b

Terminal numbers are on side of switch body

TYPICAL SWITCH DIMENSIONS FOR CWSB

Double Pole • Vertical On-Off Inscription

Quick Connect



Terminal numbers are on bottom of switch

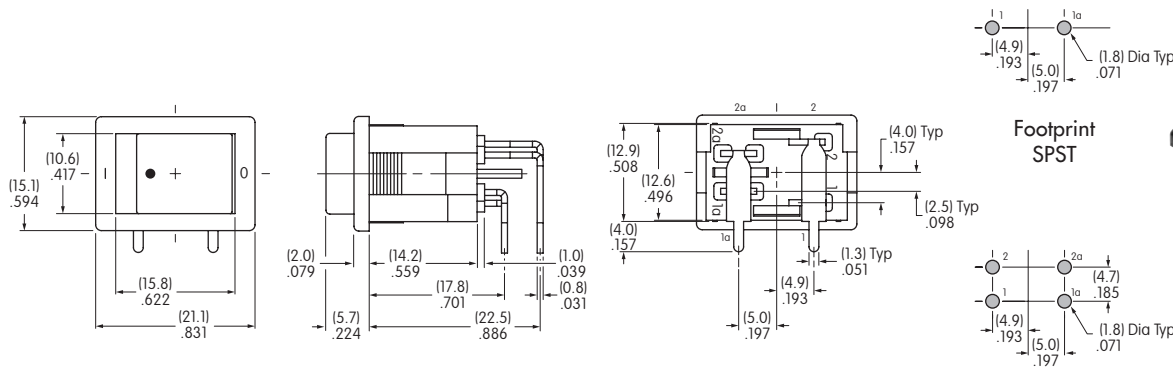
Panel Thickness
.030" ~ .079"
(0.75mm ~ 2.0mm)

CWSB21AA2F



Single Pole • Dot Inscription

Right Angle



Terminal numbers are on bottom of switch

Footprint
SPST

Footprint
DPST

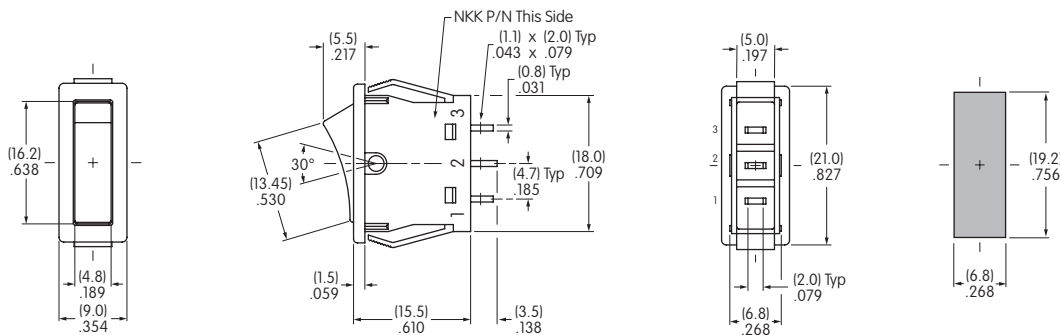
CWSB11AA3H



TYPICAL SWITCH DIMENSIONS FOR CWT

Single Pole • No Inscription

Solder Lug



Terminal numbers are on side of switch body

Panel Thickness
.030" ~ .079"
(0.75mm ~ 2.0mm)

CWT12AAS1



Mouser Electronics

Authorized Distributor

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[CWSB11AA1F](#) [CWSB11AA3F](#) [CWSB11AA2F](#) [CWSB21AA2F](#) [CWSB21CACF](#) [CWSB21AA1F](#) [CWSB21FAFF](#)
[CWSB21DADF](#) [CWSA11AANH](#) [CWSA11AAN1H](#) [CWSA11AAN2H](#) [CWSA12AANH](#) [CWSB11AAH](#) [CWSB11AA1H](#)
[CWSB11AA3H](#) [CWSB21AA1H](#) [CWT12AAS1/U](#) [CWT12AAS1/UC](#) [CWSB21AA2H](#) [CWSB21AA3F](#)