

# General Specifications

## Electrical Capacity (Resistive Load)

**Power Level:** 9A @ 125V AC or 6A @ 250V AC

## Other Ratings

<b>Contact Resistance:</b>	20 milliohms maximum
<b>Insulation Resistance:</b>	500 megohms minimum @ 500V DC
<b>Dielectric Strength:</b>	1,500V AC minimum between contacts for 1 minute minimum; 3,000V AC minimum between contacts & case for 1 minute minimum
<b>Mechanical Life:</b>	30,000 operations minimum
<b>Electrical Life:</b>	10,000 operations minimum
<b>Nominal Operating Force:</b>	Single Pole 4.50N; Double Pole 10.0N
<b>Angle of Throw:</b>	33°

## Materials & Finishes

<b>Rocker:</b>	Polycarbonate
<b>Housing:</b>	Polyamide
<b>Movable Contactor:</b>	Beryllium copper with silver plating
<b>Movable Contacts:</b>	Silver alloy
<b>Stationary Contacts:</b>	Silver alloy
<b>Switch Terminals:</b>	Brass with silver plating
<b>Lamp Terminals:</b>	Brass with silver plating

## Environmental Data

<b>Operating Temp Range:</b>	-10°C through +50°C (+14°F through +122°F)
<b>Humidity:</b>	90 ~ 95% humidity for 96 hours @ 40°C (104°F)
<b>Vibration:</b>	10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
<b>Shock:</b>	50G (490m/s <sup>2</sup> ) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

## Installation

**Soldering Time & Temp:** Manual Soldering: See Profile A in Supplement section.

## Standards & Certifications

**UL:** File No. E44145  
All models recognized at 9A @ 125V AC & 6A @ 250V AC.  
cULus marking on case is standard.

# Distinctive Characteristics

Full face, bright LED illumination in choice of red, amber, or green for visible status indication.

9-amp or 6-amp electrical capacity in compact body.

Interior shield prevents contamination of the rocker by carbon from arcing.

Front panel, snap-in mounting assures labor-saving installation.

Single-break, snap-acting contact mechanism gives smooth actuation and audible feedback.

Quick-make, quick-break characteristic limits arcing and prolongs electrical life.

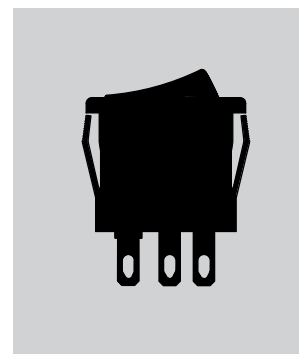
Stable stationary contact construction for high reliability.

Offset terminal alignment gives outstanding insulation resistance and dielectric strength.

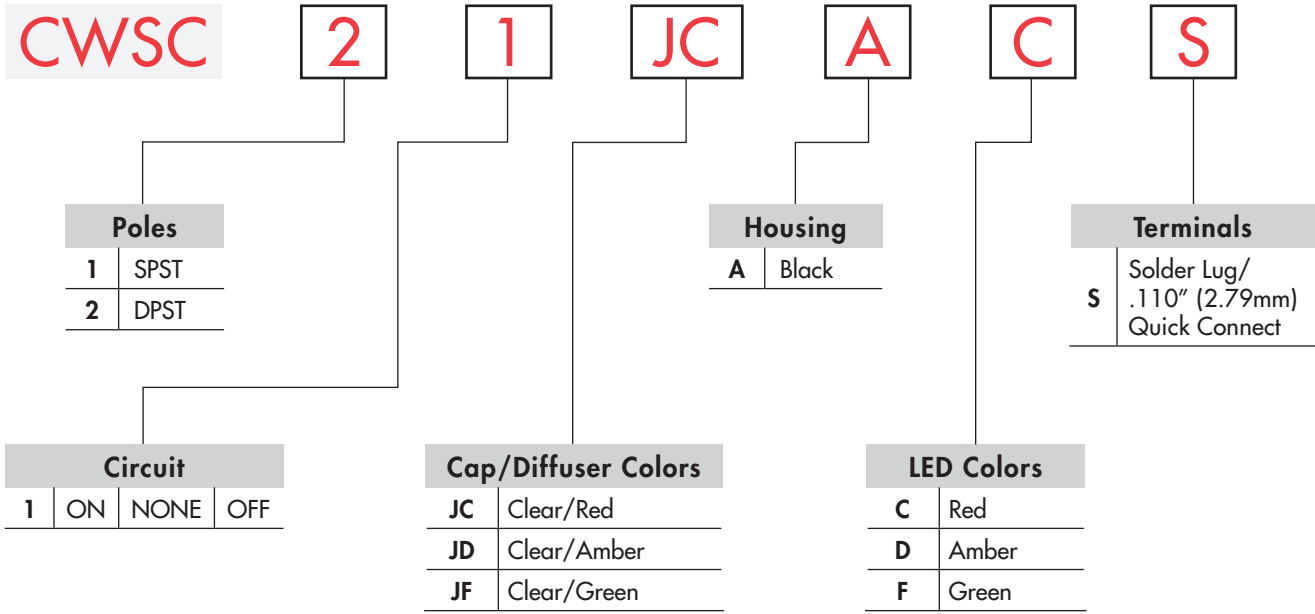
Solder lug/.110" quick connect terminals can be used with connectors.



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE



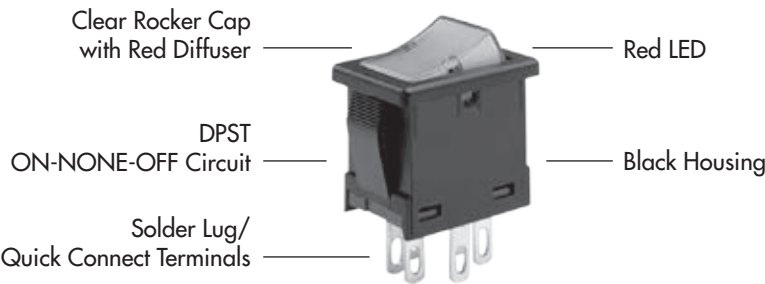
IMPORTANT:









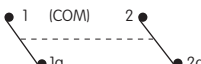

Switches are supplied with cULus marking on the case. Specific models & ratings noted on the General Specifications page.

TYPICAL ORDERING EXAMPLE

**CWSC21JCACS**



## POLE &amp; CIRCUITS

		Rocker Position			Connected Terminals			Throw & Switch/Lamp Schematics
Pole	Model	Down 	Center	Up 	Down 	Center	Up 	Notes: Terminal numbers and polarity are actually on the switch.
SP	CWSC11	ON	NONE	OFF	1-1a	OPEN	OPEN	SPST  
DP	CWSC21	ON	NONE	OFF	1-1a 2-2a	OPEN	OPEN	DPST  

## CAP TYPES &amp; COLORS

Rocker  
Cap/Diffuser

Caps are factory assembled and are not available separately.



## Cap/Diffuser Colors Available

- JC** Clear/Red
- JD** Clear/Amber
- JF** Clear/Green

## HOUSING

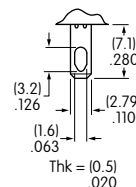
- A** Black Housing with Snap-in Mounting

On Off (I O) symbols are molded on the bezel.



## TERMINALS

- S** Solder Lug/.110" (2.79mm) Quick Connect




## LED SPECIFICATIONS &amp; COLORS

The LED is factory assembled and not available separately. LED circuit is isolated and requires an external power source. Polarity marks are on the bottom of the switch.

The electrical specifications shown are determined at a basic temperature of 25°C.

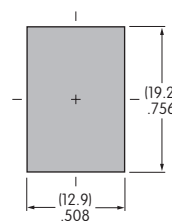
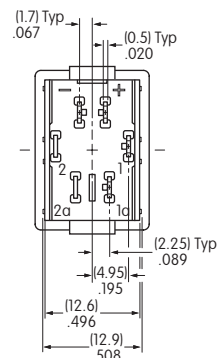
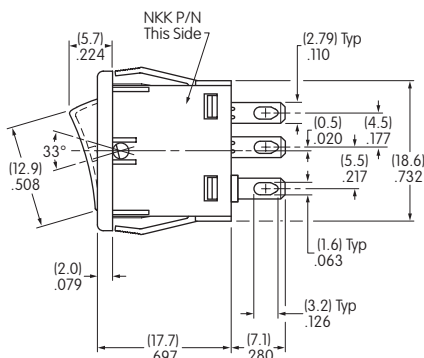
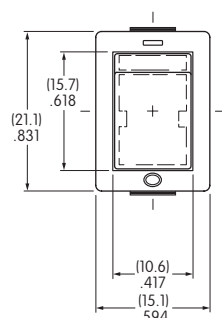
If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula in the Supplement.

		<b>C</b> Red	<b>D</b> Amber	<b>F</b> Green
 Colors:				
Maximum Forward Current	$I_{FM}$	30mA	30mA	30mA
Typical Forward Current	$I_F$	20mA	20mA	20mA
Forward Voltage	$V_F$	1.95V	2.0V	2.1V
Maximum Reverse Voltage	$V_{RM}$	5V	5V	5V
Current Reduction Rate above 25°C	$\Delta I_F$	0.41mA/°C	0.29mA/°C	0.39mA/°C
Ambient Temperature Range		-10°C ~ +50°C		

### TYPICAL SWITCH DIMENSIONS

#### LED Illuminated

#### Single Pole

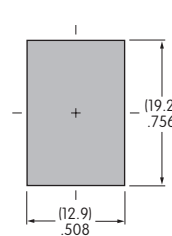
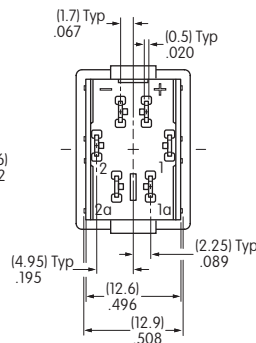
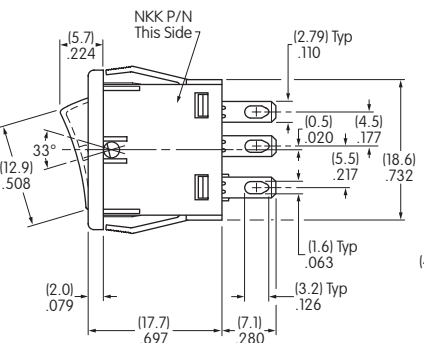
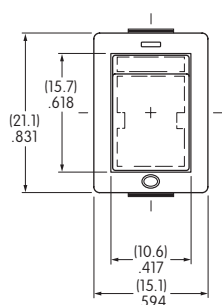


Panel Thickness  
.030" ~ .079"  
(0.75mm ~ 2.0mm)

CWSC11JCACS

#### LED Illuminated

#### Double Pole



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

CWSC21JCACS