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.

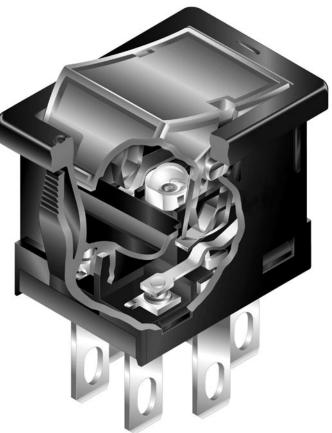
Single-break, snap-acting contact mechanism gives smooth actuation and audible feedback.

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.







General Specifications

Electrical Capacity (Resistive Load)

Power Level: 9A @ 125V AC or 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 |
| Nominal Operating Force: | Single Pole 4.50N; Double Pole 10.0N |
| Angle of Throw: | 33° |

Materials & Finishes

| Rocker: | Polycarbonate |
|---------------------------|--------------------------------------|
| Housing: | Polyamide |
| Movable Contactor: | Beryllium copper with silver plating |
| Movable Contacts: | Silver alloy |
| Stationary Contacts: | Silver alloy |
| Switch Terminals: | Brass with silver plating |
| Lamp Terminals: | Brass with silver plating |

Environmental Data

| Operating Temp Range: | –10°C through +50°C (+14°F through +122°F) |
|---|--|
| Humidity: 90 ~ 95% humidity for 96 hours @ 40°C (104°F) | |
| Vibration: | 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 |
| Shock: | 50G (490m/s ²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction) |
| | |

Installation

Soldering Time & Temp:

4 seconds maximum @ 410°C maximum for manual soldering

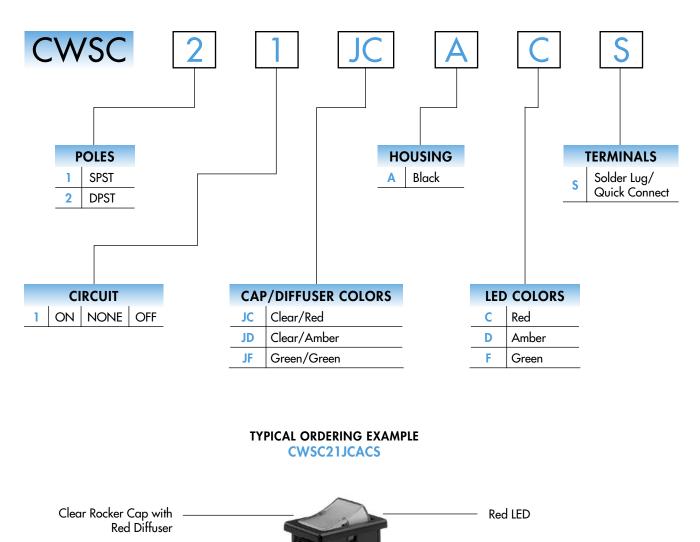
Standards & Certifications

UL & C-UL Recognized: C SULUS
All models recognized at 9A @ 125V AC & 6A @ 250V AC; UL File No. WOYR2.E44145; C-UL File No. WOYR8.E44145; C-UL File No. WOYR8.E44145; C-UL File No. WOYR8.E44145;



LED Miniature Power Rockers Series CWSC

TYPICAL SWITCH ORDERING EXAMPLE



0

DPST **ON-NONE-OFF** Circuit

Solder Lug/ Quick Connect Terminals

Black Housing



LED Miniature Power Rockers Series CWSC

| | POLE & CIRCUITS | | | | | | | | |
|------|-----------------|------------------------|--------|-----|---------------------|--------|------|--|--|
| | | Rocker Position | | | Connected Terminals | | | Throw & Switch/Lamp Schematics | |
| | | Down | Center | Up | Down | Center | Up | Notes: Terminal numbers and polarity are | |
| Pole | Model | | | | | | | actually on the switch. | |
| SP | CWSC11 | ON | NONE | OFF | 1-1a | OPEN | OPEN | SPST 1 (COM) • 1a (+)0 0 (-) | |
| DP | CWSC21 | ON | NONE | OFF | 1-1a 2-2a | OPEN | OPEN | | |

CAP TYPES & COLORS

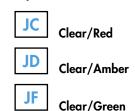
LED SPECIFICATIONS & COLORS

Rocker Cap/Diffuser

Caps are factory assembled and are not available separately.



Cap/Diffuser Colors Available



HOUSING



Black Housing with Snap-in Mounting

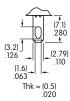
On Off (I O) symbols are molded on the bezel.



TERMINALS

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

Oblong shaped .063" x .126" (1.6mm x 3.2mm) terminal hole accommodates 1 solid 16-gauge wire or 2 stranded 18-gauge wires.



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.

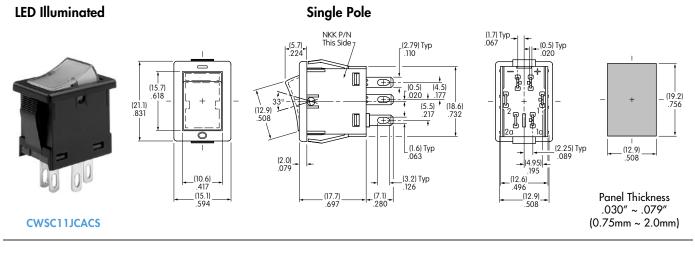
If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula in the Supplement.

| (+)0-0(-) | Colors: | C Red | D Amber | F Green |
|--------------------------------------|-----------------|-----------|------------|-------------------|
| Forward Peak Current | I _{FM} | 30mA | 30mA | 30mA |
| Continuous Forward Current | I _F | 20mA | 20mA | 20mA |
| Forward Voltage | $V_{\rm F}$ | 1.95V | 2.0V | 2.1V |
| Reverse Peak Voltage | V _{RM} | 5V | 5V | 5V |
| Current Reduction Rate above 25°C | ΔI_{F} | 0.41mA/°C | 0.29mA/°C | 0.39mA/°C |
| Ambient Temperature Range | −10°C ~ +50°C | | | |



LED Miniature Power Rockers Series CWSC

TYPICAL SWITCH DIMENSIONS



LED Illuminated

Double Pole

