

# General Specifications

## Electrical Capacity (Resistive Load)

**Low/Logic Level:** 50mA @ 24V DC maximum

## Other Ratings

**Contact Resistance:** 100 milliohms maximum

**Insulation Resistance:** 100 megohms minimum @ 250V DC

**Dielectric Strength:** 250V AC minimum between contacts & between contacts & case for 1 minute minimum

**Mechanical Life:** 100,000 operations minimum

**Electrical Life:** 100,000 operations minimum

**Nominal Operating Force:** 1.57N

**Total Travel:** .010" (.250mm)

## Materials & Finishes

**Actuator:** Glass fiber reinforced polyamide (UL94V-0)

**Case:** Stainless steel

**Seal:** Polytetrafluoroethylene

**Base:** Polyphthalamide (UL94V-0)

**Movable Contacts:** Beryllium copper with silver plating

**Stationary Contacts:** Brass with silver plating

**Terminals:** Brass with silver plating

## Environmental Data

**Operating Temperature Range:** -25°C through +70°C (-13°F through +158°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<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

## PCB Processing

**Soldering:** Wave Soldering Recommended. See Profile A in Supplement section.

Manual Soldering: See Profile A in Supplement section.

**Cleaning:** Automated cleaning. See Cleaning specifications in Supplement section.

## Standards & Certifications

**Flammability Standards:** UL94V-0 actuator & base

The CB Series tactiles have not been tested for UL recognition or CSA certification.

These switches are designed for use in a low-voltage, low-current, logic-level circuit.

When used as intended in a logic-level circuit, the results do not produce hazardous energy.

# Distinctive Characteristics

Sealed construction prevents contact contamination and allows automated soldering and cleaning.

.244" (6.2mm) square body allows compact mounting.

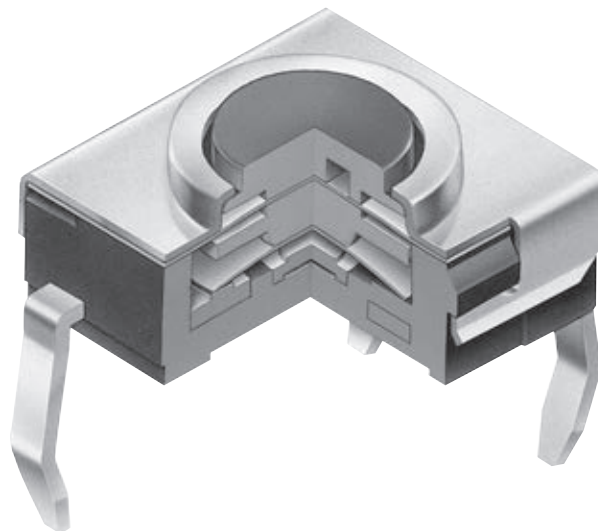
Actuator and base meet UL flammability rating of 94V-0.

Dome contact gives crisp tactile feedback to positively indicate circuit transfer and assures high reliability and long life – more than 100,000 operations.

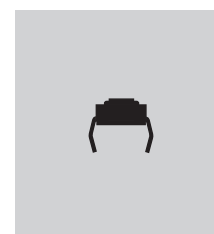
Crimped terminals ensure secure mounting and prevent dislodging during wave soldering.

Insert molded terminals lock out flux, solvents, and other contaminants.

Packaged in stick tube or partitioned tray.



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

CB

15

F

P

Pole & Circuit				Actuator		Terminals		Packaging	
15	SPST	OFF	(ON)	F	Flat Button	P	Straight PC	S	Stick-Tube 50 Pieces/Tube
( ) = Momentary								No Code	Partitioned Tray

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

CB15FP

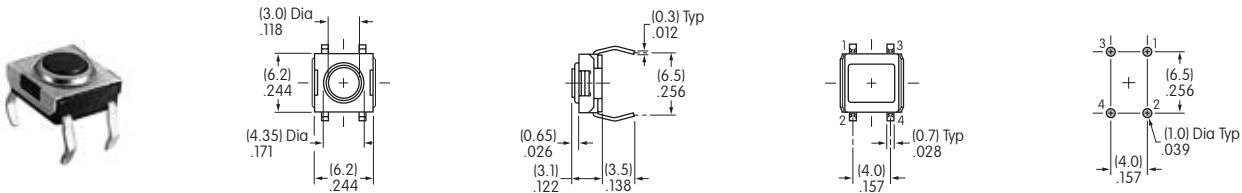


POLE & CIRCUIT

		Actuator Position ( ) = Momentary		Switch Throw & Schematic	Note: Terminal numbers are not actually on the switch.
Pole	Model	Normal	Down		
SP	CB15	OFF	(ON)	SPST	

TYPICAL SWITCH DIMENSIONS

Single Pole • Single Throw



CB15FP

PACKAGING

S

Stick-Tube

Switches must be ordered in 50-piece increments when stick-tube packaging is selected.

No  
Code

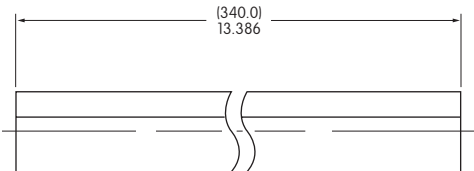
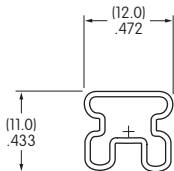
Partitioned Tray

If ordered in less than 50-piece increments, the switches are packaged in a partitioned tray.



Stick-Tube Dimensions

Each stick-tube contains 50 switches



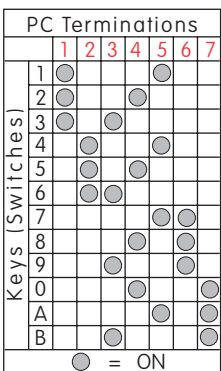
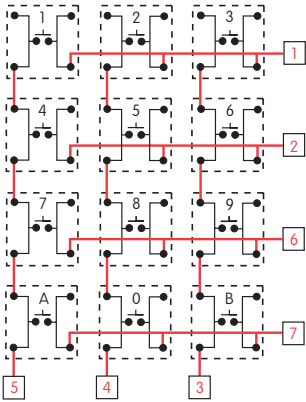
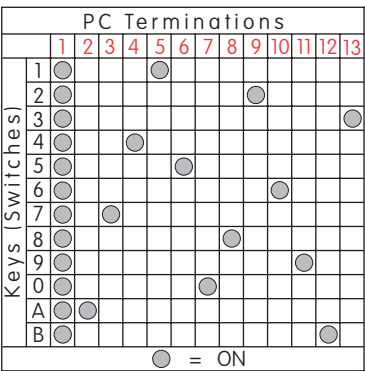
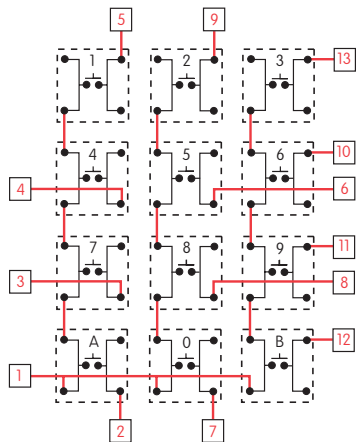
KEYBOARD MATRIX

Common Bus Matrix

These single pole, single throw switches can be used in a keyboard matrix and, using strapped terminals, achieve a common bus electrical configuration on a single-sided PC board.

X-Y Matrix

These single pole, single throw switches can be arranged on a single-sided PC board matrix with strapped terminals to achieve an X-Y type electrical interconnection.



Red = PCB Trace    Black = Switch Circuit

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