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^2) 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.

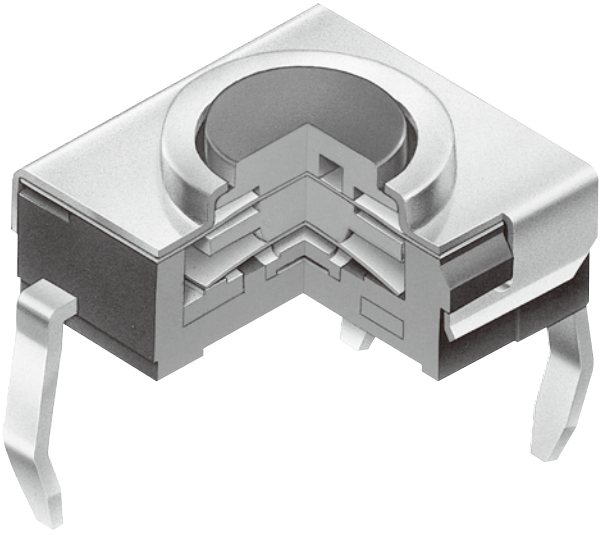
Standards & Certifications

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.

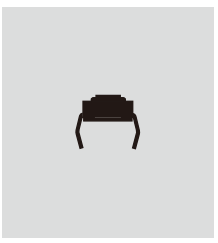
Dome contact gives crisp tactile feedback to positively indicate circuit transfer and assures high reliability and long life – more than 100,000 operations.

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			
15	SPST	OFF	(ON)
( ) = Momentary			

Actuator	
F	Flat Button

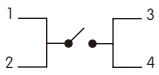
Terminals	
P	Straight PC

Packaging	
S	Stick-Tube 50 Pieces/Tube
No Code	Partitioned Tray

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

CB15FP

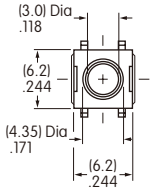
POLE & CIRCUIT

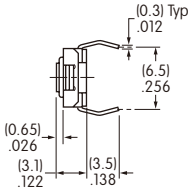
		Actuator Position ( ) = Momentary		Switch Throw & Schematic	
Pole	Model	Normal	Down		
SP	CB15	OFF	(ON)	SPST 	Note: Terminal numbers are not actually on the switch.

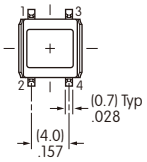
TYPICAL SWITCH DIMENSIONS

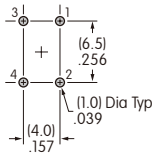
Single Pole • Single Throw

CB15FP





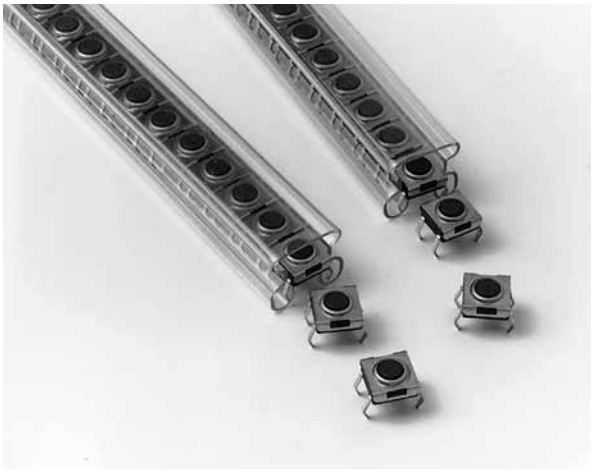




PACKAGING

S **Stick-Tube**

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

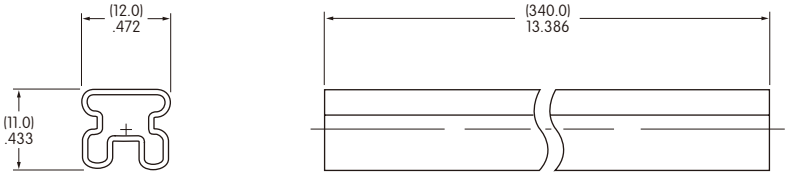


No Code **Partitioned Tray**

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

Stick-Tube Dimensions

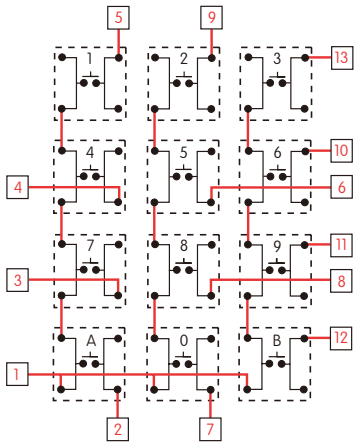
Each stick-tube contains 50 switches

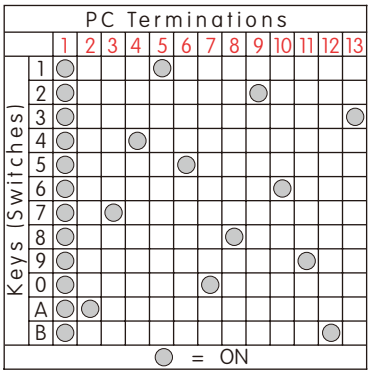


KEYBOARD MATRIX

Common Bus Matrix

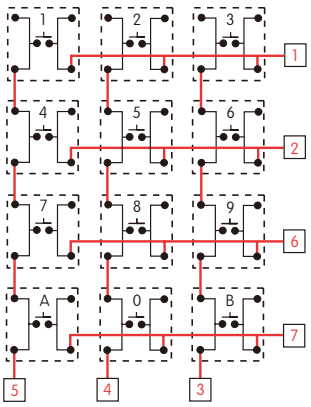
These single pole, single throw switches can be used in a keyboard matrix and, using strapped terminals, achieve a common bus electrical configuration on a single-sided PC board.

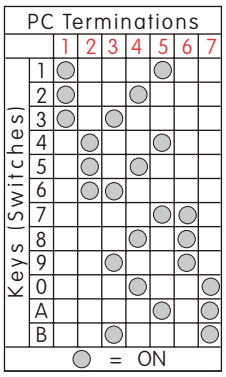




X-Y Matrix

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