Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

General Specifications

Electrical Capacity (Resistive Load)

Low/Logic Level: 50mA @ 24V DC

Other Ratings

Contact Resistance: 50 milliohms maximum
Insulation Resistance: 500 megohms minimum @ 250V DC
Dielectric Strength: 250V AC minimum for 1 minute minimum
Mechanical Life: 500,000 operations minimum
Electrical Life: 500,000 operations minimum
Nominal Operating Force: 1.96N for sculptured actuator
2.0N for piano actuator
3.0N for square & round flush actuators
Total Travel: Flush Actuators .016" (0.4mm)
Sculptured & Piano Actuators .031" (0.8mm)

Materials & Finishes

Actuator: Polyamide
Case: Glass fiber reinforced polyamide
Seal: Nitrile butadiene rubber
Base: Glass fiber reinforced polyester
Movable Contact: Phosphor bronze with silver plating
Stationary Contacts: Brass with silver plating
Terminals: Brass with silver plating

Environmental Data

Operating Temperature Range: –25°C through +85°C (–13°F through +185°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

The JF 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

Extremely low profile of 5mm from PCB to top of switch.

Rubber seal construction prevents contact contamination and allows automated soldering and cleaning.

Minimal operating force and short stroke permit light touch operation.

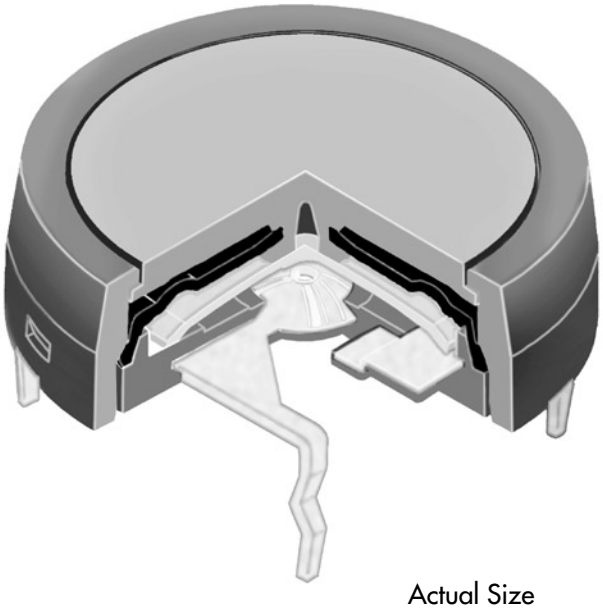
Dome contact gives crisp tactile and audible feedback to positively indicate circuit transfer and assures high reliability and long life.

Wide choice of body shapes and colors.

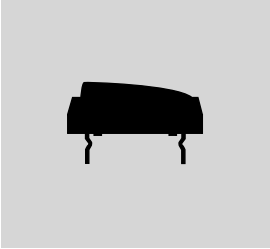
Crimped terminals provide a spring type action to ensure secure mounting and prevent dislodging during wave soldering.

Space saving body dimensions provide for compact, side-by-side mounting on a standard grid.

Terminal spacing conforms to standard .100" (2.54mm) PCB grid.

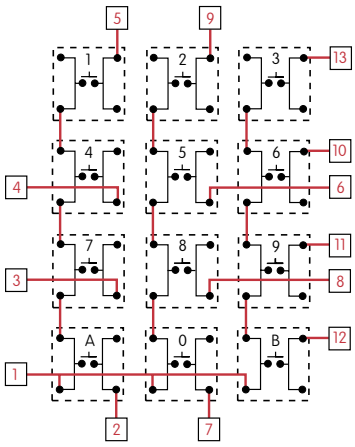


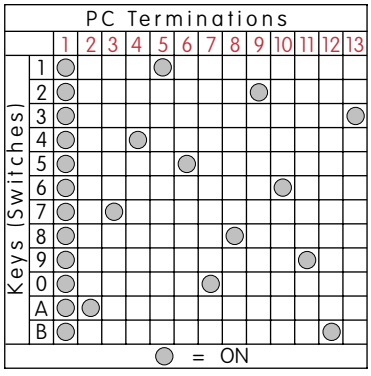
Actual Size



Common Bus Matrix

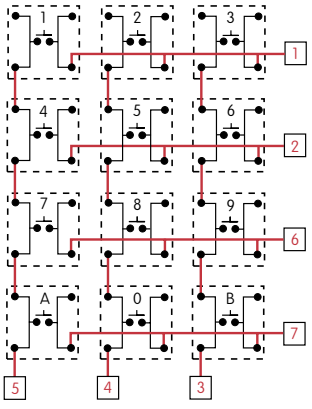
These single pole, single throw switches can be used in a keyboard matrix and, using strapped terminals, achieve a common bus electrical configuration on a single-sided PC board.

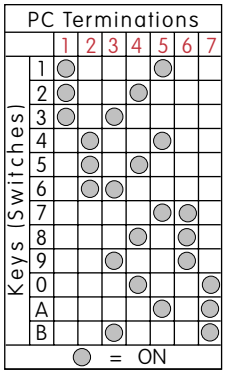




X-Y Matrix

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

TYPICAL SWITCH ORDERING EXAMPLE

JF 15 S P 2 C

Pole & Circuit

15	SPST	OFF	(ON)

( ) = Momentary

Housing Shapes

C	Round (with round actuator only)
S	Square

Terminals

P	Straight PC

Actuator Types

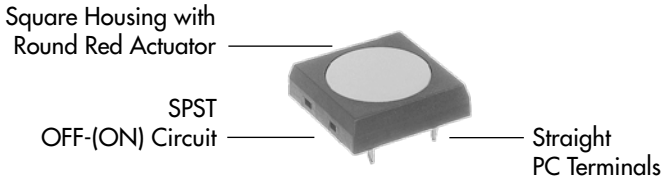
1	Square
2	Round
3	Sculptured
4	Piano

Actuator Colors

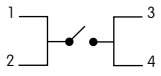
C	Red
D	Orange
F	Green
G	Blue
H	Gray

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

JF15SP2C



POLE & CIRCUIT

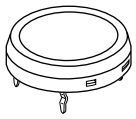
		Actuator Position ( ) = Momentary		Switch Throw & Schematic	
Pole	**Model**	**Normal**	**Down**		
SP	**JF15**	OFF	(ON)	SPST 	Note: Terminal numbers are shown on the switch.

HOUSING SHAPES & ACTUATOR TYPES

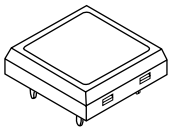
C Round Housing

S Square Housing

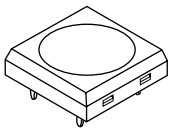
2 Round Actuator



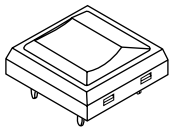
1 Square Actuator



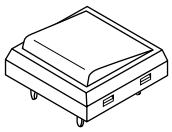
2 Round Actuator



3 Sculptured Actuator



4 Piano Actuator



Actuator Colors Available:

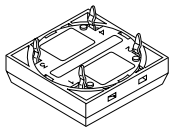
C Red **D** Orange **F** Green **G** Blue **H** Gray

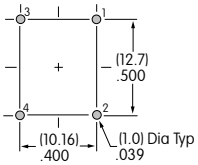
Housing is Black

TERMINALS & PANEL DESIGN

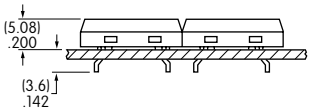
P Straight PC

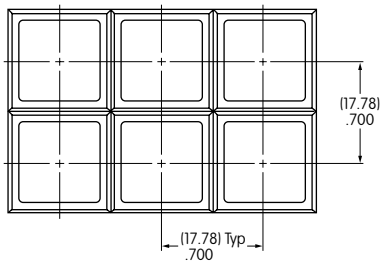
Additional details in Typical Switch Dimensions





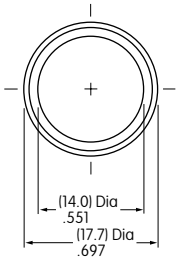
Versatile panel arrangements can be made to fit individual design needs.

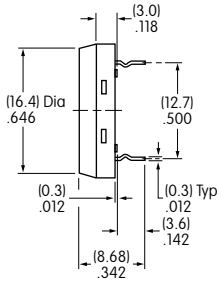


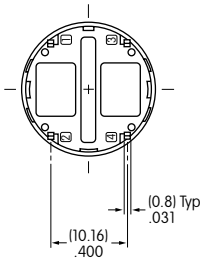


TYPICAL SWITCH DIMENSIONS

Round Actuator



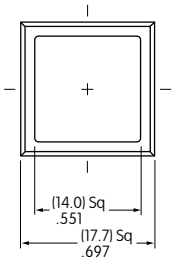


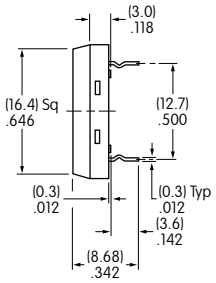


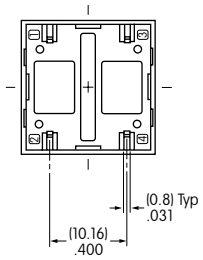
JF15CP2C

TYPICAL SWITCH DIMENSIONS

Square Actuator

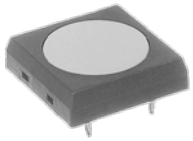


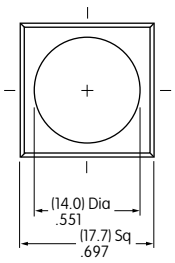


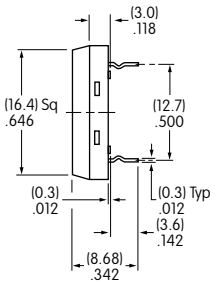


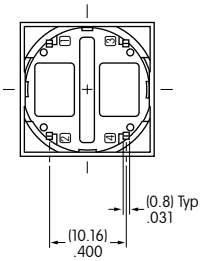
JF15SP1C

Round Actuator



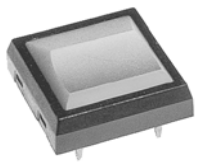


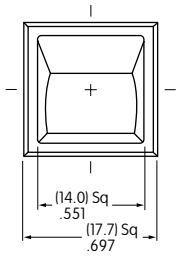


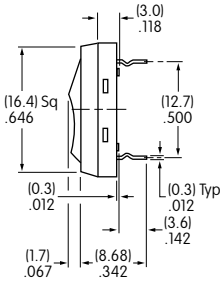


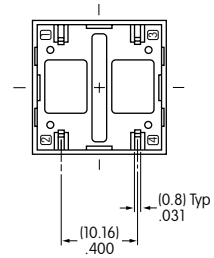
JF15SP2C

Sculptured Actuator



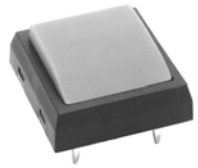


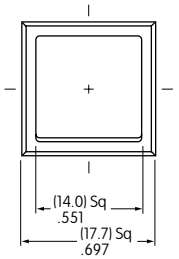


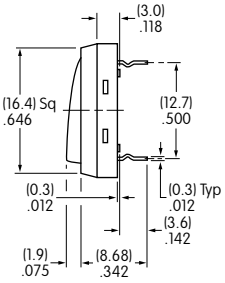


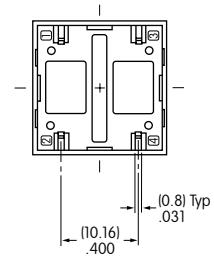
JF15SP3C

Piano Actuator







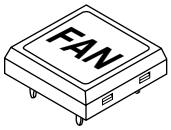


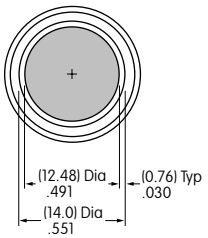
JF15SP4C

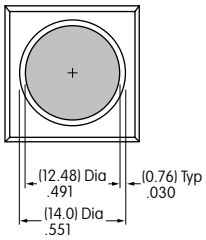
LEGENDS

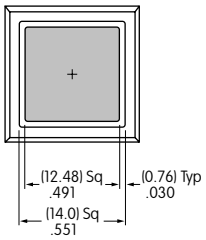
NKK Switches can provide custom legends for caps. Contact factory for more information.

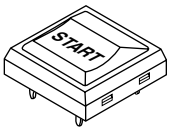
Shaded Areas are Printable Areas

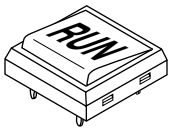


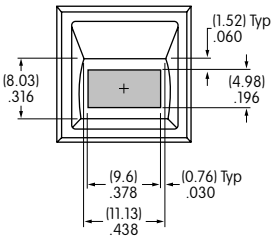


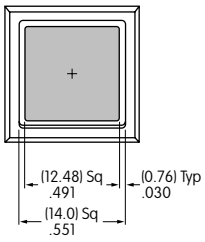












Recommended Print Methods: Screen Print or Pad Print. Epoxy based ink is recommended.