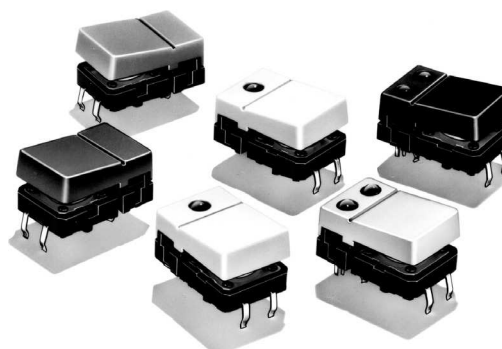


# Tactile Switch (Hinged Type)

# B3J

## Hinged Design Developed through Ergonomics

- Quick, superior snap action through hook-type hinge construction.
- Available with 1 or 2 LEDs or without LEDs.
- The hinge button is available in a wide variety of colors (five standard colors).
- RoHS Compliant.



## Ordering Information

Color of hinged button	No LED	One LED			Two LEDs (left and right)		
		Red	Yellow	Green	Red/Yellow	Red/Green	Yellow/Green
Light gray	B3J-1000	B3J-2000	B3J-3000	B3J-4000	B3J-5000	B3J-6000	B3J-7000
Black	B3J-1100	B3J-2100	B3J-3100	B3J-4100	B3J-5100	B3J-6100	B3J-7100
Orange	B3J-1200	B3J-2200	B3J-3200	B3J-4200	B3J-5200	B3J-6200	B3J-7200
Yellow	B3J-1300	B3J-2300	B3J-3300	B3J-4300	B3J-5300	B3J-6300	B3J-7300
Blue	B3J-1400	B3J-2400	B3J-3400	B3J-4400	B3J-5400	B3J-6400	B3J-7400

## Specifications

### ■ Ratings/Characteristics

Contact form	SPST-NO
Switching capacity	1 to 50 mA, 5 to 24 VDC (resistive load)
Contact resistance	100 mΩ max. (rated: 1 mA, 5 VDC)
Insulation resistance	100 MΩ min. (at 250 VDC)
Dielectric strength	500 VAC, 50/60 Hz for 1 min.
Bounce time	5 ms max.
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> (approx. 100 G) max. Malfunction: 100 m/s <sup>2</sup> (approx. 10 G) max.
Life expectancy	3,000,000 operations min.
Ambient operating temperature	-25°C to 70°C (at 60% RH max.) with no icing or condensation
Ambient operating humidity	35% to 85% (at 5 to 35°C)
Weight	Approx. 1.5 to 1.7 g

### ■ Operating Characteristics

Operating force (OF)	1.27±0.49 N (130 ± 50 gf)
Releasing force (RF)	0.29 N (30 gf) min.
Pretravel (PT)	0.3 <sup>+0.2</sup> / <sub>-0.1</sub> mm

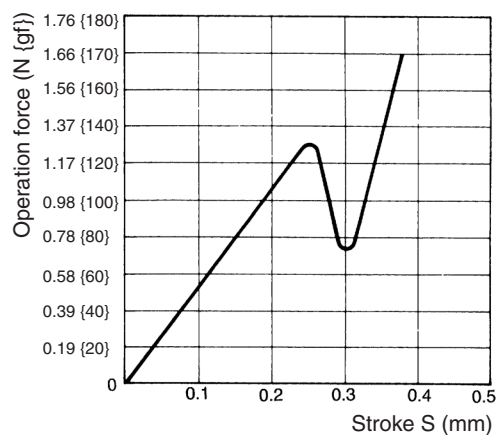
## ■ Built-in LED Performance

Item		Red	Yellow	Green
Forward voltage $V_F$	Standard value (V)	2.0	2.0	2.1
Forward current $I_F$	Standard value (mA)	20	20	20
Permissible loss P	Absolute maximum value (mW)	84	84	84
Reverse voltage $V_R$	Absolute maximum value (V)	5	5	5

**Note:** Since the built-in LED does not contain any limiting resistors, externally connect limiting resistors within the limits shown in the above table.

## Engineering Data

**Operating Force vs. Stroke  
(Typical)**

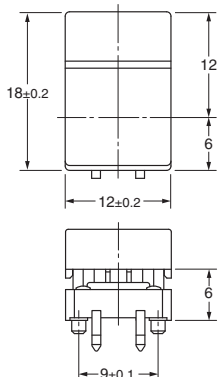
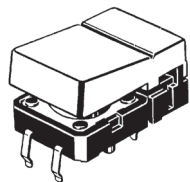


# Dimensions

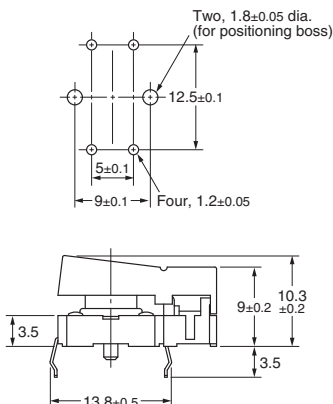
All units are in millimeters unless otherwise indicated. Unless otherwise specified, a tolerance of  $\pm 0.4$  mm applies to all dimensions.

## Types with no LED

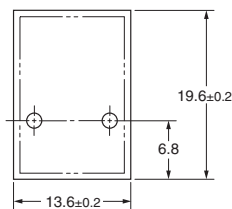
B3J-1□00



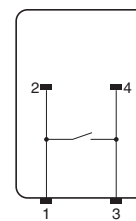
## PCB Mounting (Top View)



## Panel Cutout

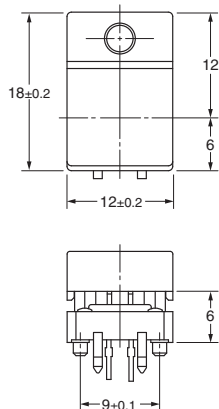
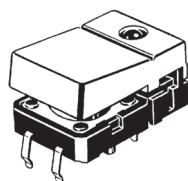


## Terminal Arrangement / Internal Connections (Top View)

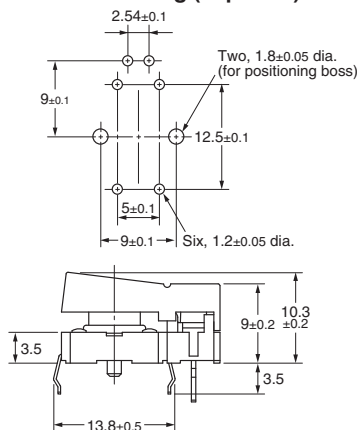


## 1 LED Types

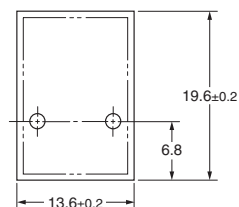
B3J-2□00  
B3J-3□00  
B3J-4□00



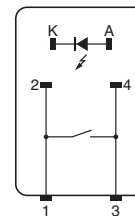
## PCB Mounting (Top View)



## Panel Cutout

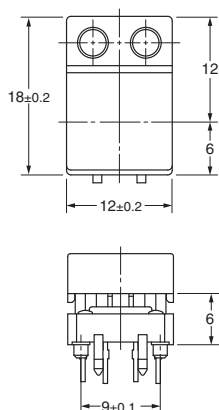
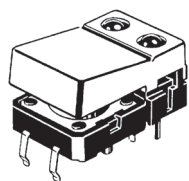


## Terminal Arrangement / Internal Connections (Top View)

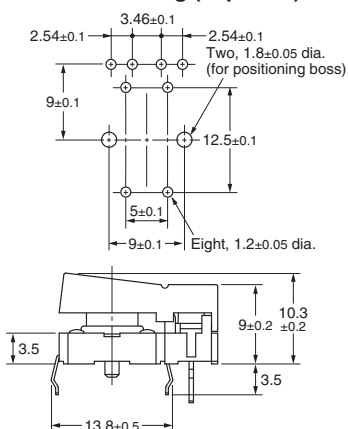


## 2 LED Types

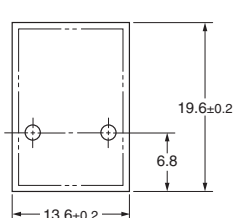
B3J-5□00  
B3J-6□00  
B3J-7□00



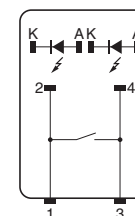
## PCB Mounting (Top View)



## Panel Cutout



## Terminal Arrangement / Internal Connections (Top View)



# Precautions

Be sure to read the precautions common to all Tactile Switches, contained in the Technical User's Guide, "Tactile Switches, Technical Information" for correct use.

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**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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