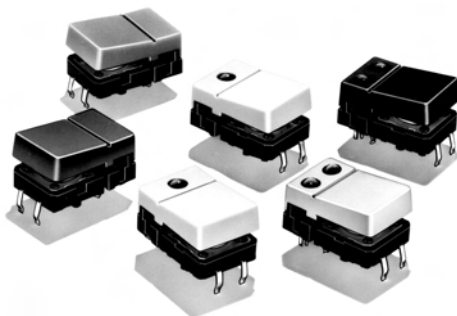


Hinged Design Developed through Ergonomics

- ROHS compliant.
- 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).



Ordering Information

Colour	No LED	One LED			Two LEDs (left and right)		
		Red	Yellow	Green	Red/Yellow	Red/Green	Yellow/Green
Light grey	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

Note: Orders must be made in multiples of the minimum order unit (multiples of 300). Switches are not sold individually.

Specifications

■ Ratings/Characteristics

Switching capacity	1 to 50 mA, 5 to 24 VDC (resistive load)
Ambient temperature	-25°C to 70°C, at 60% maximum (with no icing)
Ambient humidity	35% to 85% (for +5°C to 35°C)
Contact configuration	SPST-NO
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 ² {approx. 100G} max. Malfunction: 100 m/s ² {approx. 10G} max.
Life expectancy	3,000,000 operations min.
Weight	Approx. 1.5 to 1.7 g

Tactile Switch (Hinged Type) – B3J

■ 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 ^{+0.2} / _{-0.1} mm

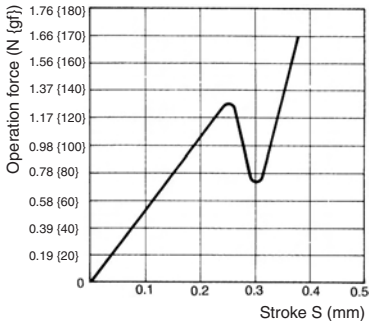
■ Built-in LED Performance

Item		Red	Yellow	Green
Forward voltage VF	Standard value (V)	2.0	2.0	2.1
Forward current IF	Standard value (mA)	20	20	20
Permissible loss P	Absolute maximum value (mW)	84	84	84
Reverse voltage VR	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)

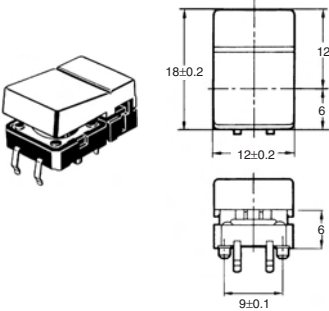


Tactile Switch (Hinged Type) – B3J

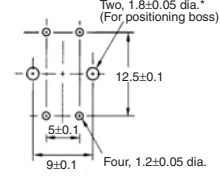
Dimensions

Note: All units are in millimetres unless otherwise indicated. Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

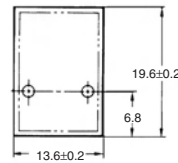
Types with no LED B3J-1□00



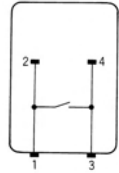
PCB Mounting (Top View)



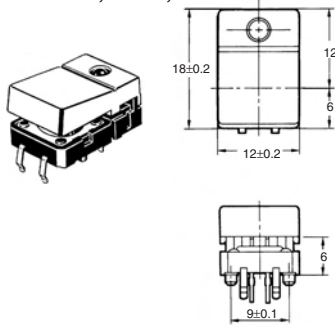
Panel Cutout



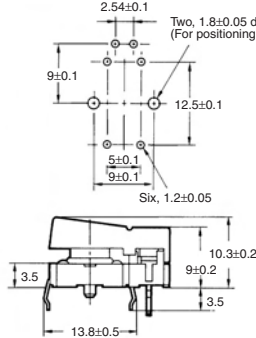
Terminal Arrangement /Internal Connections (Top View)



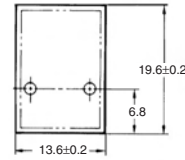
1 LED Types B3J-2□00, -3□00, -4□00



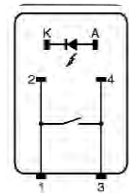
PCB Mounting (Top View)



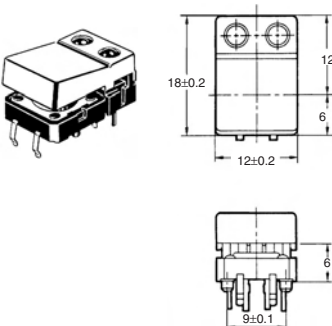
Panel Cutout



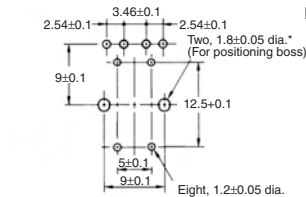
Terminal Arrangement /Internal Connections (Top View)



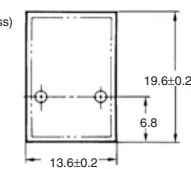
2 LED Types B3J-5□00, -6□00, -7□00



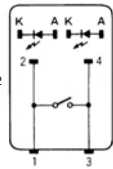
PCB Mounting (Top View)



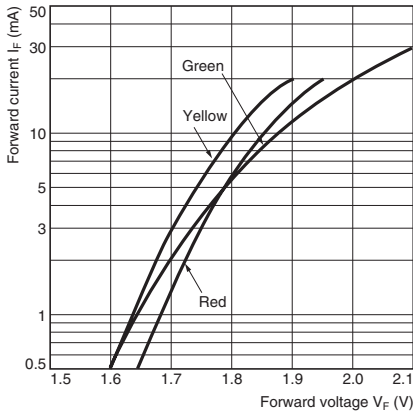
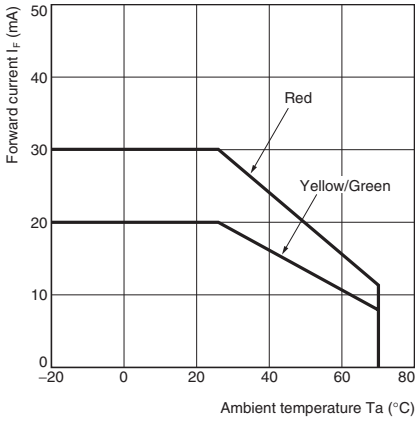
Panel Cutout



Terminal Arrangement /Internal Connections (Top View)



Tactile Switch (Hinged Type) – B3J



LEDs (B3J)

Make sure that the polarity of the LEDs is correct. The polarity is not indicated on the Switch, but the positive pole is located on the back surface of the Switch on the side without the OMRON mark.

Connect limiting resistors to the LEDs. The Switch does not have built-in limiting resistors, so satisfy the LED characteristics by obtaining the limiting resistance according to the following formula based on the voltage to be used.

$$\text{Limiting resistance (R)} = \frac{\text{Voltage used (E) - LED forward voltage (V}_F\text{)}}{\text{LED forward current (I}_F\text{)}} \quad (\Omega)$$

