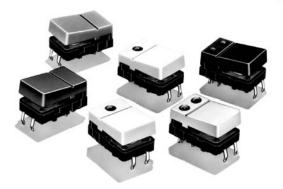
OMRON Hinged Tactile Switch

B3J

Through-hole-mounting Switches with Hinges for a Sharp Snap Action

- 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



List of Models

				Box		
Operation type	Contact material	Operating force (OF)	Color of hinged button	Model	Minimum packing unit	
Non-lighted: B3J-1000 Series	Silver plated	1.27 N {130 gf}	lvory	B3J-1000		
			Black	B3J-1100		
			Orange	B3J-1200	300 pcs	
			Yellow	B3J-1300		
			Blue	B3J-1400		

				Box			
	Contact Operating	Color of	LED color			Minimum	
	material		hinged button	Red	Yellow	Green	packing unit
One LED: Silver plated B3J-2000 Series B3J-3000 Series B3J-4000 Series	Silver plated	ver plated 1.27 N {130 gf}	lvory	B3J-2000	B3J-3000	B3J-4000	 300 pcs
			Black	B3J-2100	B3J-3100	B3J-4100	
			Orange	B3J-2200	B3J-3200	B3J-4200	
		Yellow	B3J-2300	B3J-3300	B3J-4300		
		Blue	B3J-2400	B3J-3400	B3J-4400	7	

				Box			
Contact Operati		Operating	Color of	LED color			Minimum
Operation type	material	force (OF)	hinged button	Red/Yellow	Red/Green	Yellow/Green	packing unit
Two LEDs: Silver plated B3J-5000 Series B3J-6000 Series B3J-7000 Series	Silver plated	1.27 N {130 gf}	lvory	B3J-5000	B3J-6000	B3J-7000	
			Black	B3J-5100	B3J-6100	B3J-7100	
			Orange	B3J-5200	B3J-6200	B3J-7200	300 pcs
			Yellow	B3J-5300	B3J-6300	B3J-7300	1
			Blue	B3J-5400	B3J-6400	B3J-7400	1

Ratings/Characteristics

1 to 50 mA, 3 to 24 VDC			
10 µA at 1 VDC (resistive load)			
-25°C to +70°C at 60%RH max. (with no icing or condensation)			
35% to 85% (at +5 to +35°C)			
SPST-NO			
100 mΩ max.			
100 M Ω min. (at 250 VDC with insulation tester)			
500 VAC, 50/60 Hz for 1 min			
5 ms max.			
Malfunction: 10 to 55 Hz, 1.5-mm double amplitude			
Destruction: 1,000 m/s ² {approx. 100G} max.			
Malfunction: 100 m/s ² {approx. 10G} max.			
3,000,000 operations min.			
Approx. 1.5 to 1.7 g			
IEC IP00			
Not possible			

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		

LED Specifications

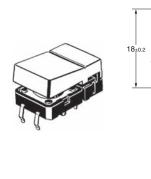
	Red	Yellow	Green	
Forward voltage VF	Standard value (V)	2.0	2.0	2.1
Forward current IF	Standard value (mA)	20	20	20
Permissible loss P	Absolute maximum value (mW)	84	84	84
Reverse voltage VR	Absolute maximum value (V)	5	5	5

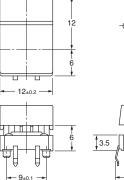
Note: Since the built-in LED does not contain any limiting resistors, externally connect limiting resistors within the limits shown in the above table.

■ **Dimensions** (Unit: mm)

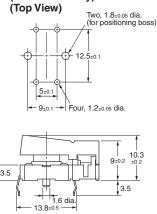
Types with no LED B3J-1□00

B3J





PCB Processing Dimensions (Reference Only)



PCB Processing Dimensions (Reference Only)

PCB Processing Dimensions

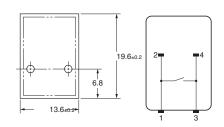
(Reference Only)

(Top View)

10.3 ±0.2

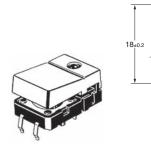
Panel Cutout

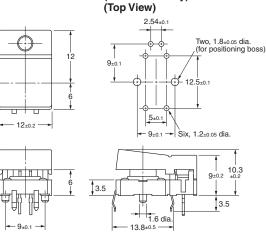
Terminal Arrangement /Internal Connections (Top View)



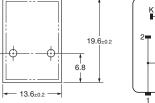
1 LED Types

B3J-2000 B3J-300 B3J-400





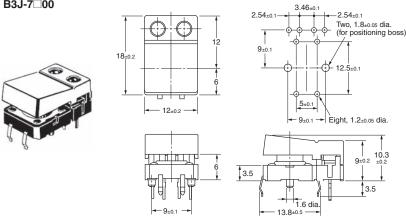
Terminal Arrangement /Internal Connections **Panel Cutout** (Top View)



A -



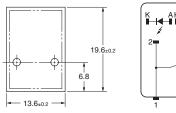
2 LED Types B3J-5□00 B3J-600 B3J-7000



12±0.2

9±0.1

Terminal Arrangement /Internal Connections (Top View)



Panel Cutout

Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

Be sure to read the safety precautions common to all Tactile Switches for correct use.

Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.

OMRON Corporation

Electronic and Mechanical Components Company

Contact: www.omron.com/ecb

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