

## B3B Tactile Switch (Ultra-low Profile)

## B3B

### Ultra-low Profile Tactile Switch with a Thickness of Only 0.47 mm

- Surface-mounting model with dimensions of 4.7 x 4.7 mm allows high-density mounting.
- Contributes to making devices with this Tactile Switch more compact, slim, and lightweight.
- Available on embossed tape that enables automatic mounting.
- Dust-sealed construction provides high reliability.
- Available for reflow soldering.



## Ordering Information

### Model Number Legend

**B3B-1002P**

12 34

#### 1. Size

1: 4.7 mm x 4.7 mm

#### 2. Insulating Tape

0: None

#### 3. Operating Force (OF)

2: 1.58 N

#### 4. Shipment Package

P: Embossed tape

### List of Models

Item	Model
Embossed tape packing (unit: 6,000 pcs.)	B3B-1002P

**Note:** The Switches are available in units of 6,000 pieces. Orders must be made in units of 6,000 pieces; no partial units can be shipped.

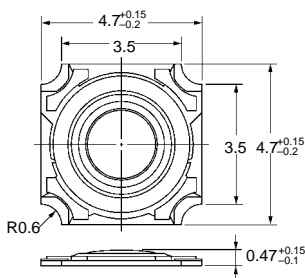
## Specifications

### Ratings/Characteristics

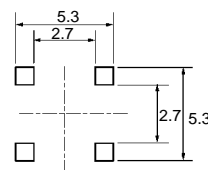
Switching capacity	1 to 20 mA, 5 to 15 VDC, (resistive load)
Contact configuration	SPST-NO
Contact material	Silver plating
Contact resistance	1 Ω max. (initial value) (rated: 1 mA, 5 VDC)
Insulation resistance	100 MΩ min. (at 100 VDC)
Dielectric strength	250 VAC, 50/60 Hz for 1 min
Bounce time	10 ms max.
Vibration resistance	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Destruction: 735 m/s <sup>2</sup> min. (approx. 75G min.)
Life expectancy	50,000 operations min.
Ambient temperature	Operating: -25°C to 70°C (with no icing)
Ambient humidity	Operating: 25% to 85%
Weight	Approx. 0.01 g max.

## Dimensions

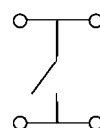
**Note:** All units are in millimeters unless otherwise indicated.



#### PCB Mounting (Top View)



#### Terminal Arrangement / Internal Connections (Top View)



#### Operating Characteristics

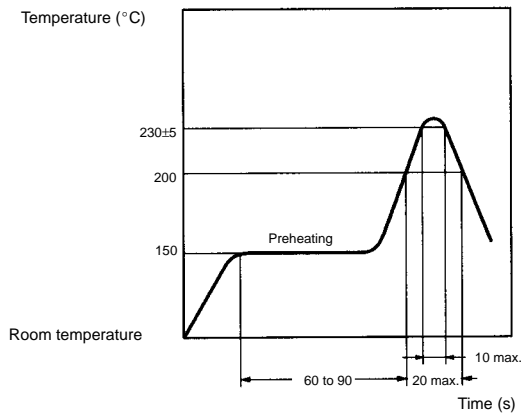
Item	Standard value
Operating force (OF)	1.58±0.49 N {160±50 gf}
Releasing force (RF)	0.29 N {30 gf} min.
Pretravel (PT)	0.2±0.1 mm

# Precautions

## Soldering

### Soldering Conditions for Reflow Soldering

Carry out soldering within the temperature curve shown in the following illustration.



**Note:** The above curve is given on condition that the thickness of the PCB is 1.6 mm.

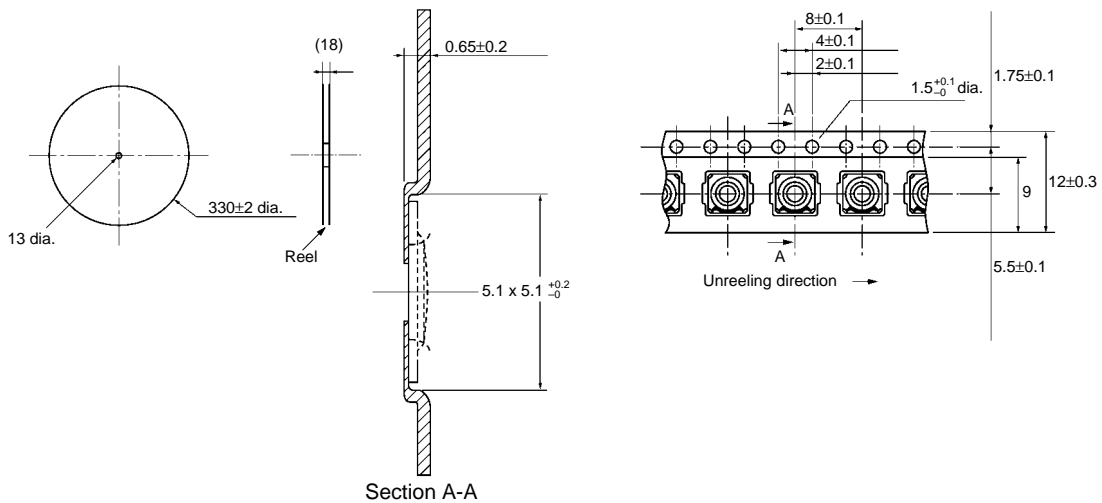
Since the peak value may vary depending on the reflow soldering device, be sure to conduct a verification test in advance.

## Washing

No washing is allowed after soldering to prevent detergent or flux from entering into the Switch. Doing so may cause malfunction.

## Tape Packing Specifications

Quantity
6,000 pieces



**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**  
 To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. A110-E1-4 In the interest of product improvement, specifications are subject to change without notice.

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