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 x 0.47 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.

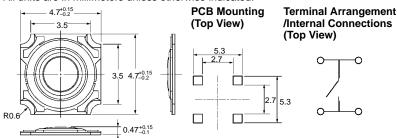
Specifications

■ 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 $M\Omega$ 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 ² 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.



Operating Characteristics

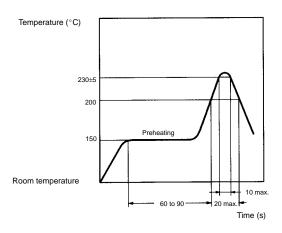
| Item | Standard value |
|----------------------|-------------------------|
| Operating force (OF) | 1.58±0.49 N {160±50 gf} |
| Releasing force (RF) | 0.29 N {30 gf} min. |
| Pretravel (PT) | 0.2±0.1 mm |

Precautions

Soldering

Soldering Conditions for Reflow Soldering

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



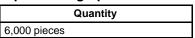
Washing

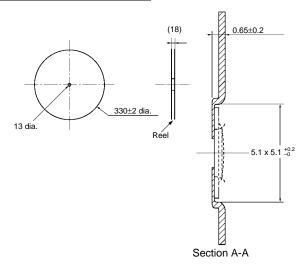
No washing is allowed after soldering to prevent detergent or flux from entering into the Switch. Doing so may cause malfunction.

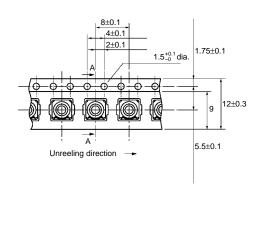
Note: The above curve is given on condition that the thickness of the PCB is 1.6 mm.

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

Tape Packing Specifications







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.

OMRON Corporation

C&C Components Division H.Q. Mechanical-Components Division 28th Fl., Crystal Tower Bldg., 1-2-27, Shiromi, Chuo-ku, Osaka 540-6028 Japan

Phone: (81)6-6949-6017 Fax: (81)6-6949-6134

Printed in Japan 0899-1M (0998) (A)