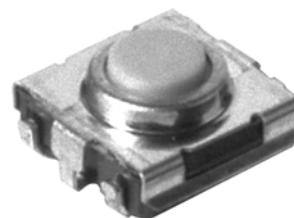


# Tactile Switch (SMD)

# B3SN

## Compact Tactile Switch with Sealed Construction for Dusty or Humid Environments

- Ideal tactile switch for surface mounting
- Compact and over 1 mm lower profile than conventional tactile switches
- Available with ground terminals for protection against static electricity
- Sealed construction conforming to IP64 (IEC-529) provides high reliability in dusty or humid environments
- RoHS Compliant



## Ordering Information

Switch height x pitch	Packaging	Part number	
		Without ground terminal	With ground terminal
3.1 x 4.6 mm	Bulk	B3SN-3012	B3SN-3112
	Embossed tape	B3SN-3012P	B3SN-3112P

**Note:** Switches on embossed tape must be ordered in units of 3,000.

**Important Note:** Switches cannot be water-washed.

## Specifications

### ■ Characteristics

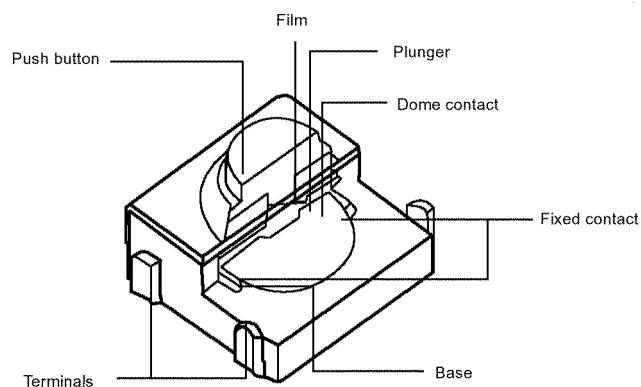
Switching capacity		1 to 50 mA, 5 to 24 VDC (resistive load)
Contact form		SPST-NO
Permissible load		1 mA 5 VDC min.
Contact resistance		100 MΩ max.
Insulation resistance		100 MΩ at 250 VDC
Dielectric strength		250 VAC, 50/60 Hz for 1 minute between contacts of same polarity 250 VAC, 50/60 Hz for 1 minute between each terminal and ground
Vibration	Malfunction durability	10 to 55 Hz, 1.5-mm double amplitude
Shock	Malfunction durability	1,000 m/s <sup>2</sup> min. (approx. 100 G)
Ambient temperature		-25° to 70°C (-13° to 176°F) with no icing
Humidity		35% to 85% RH
Service life	Mechanical/electrical	50,000 operations min.
Weight		Approx. 0.20 g

**Note:** Data shown are of initial value.

## Operating Characteristics — B3SN 3□□□ Series

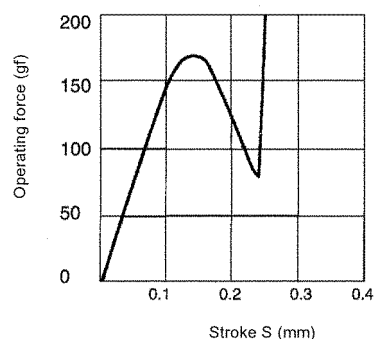
Characteristics	
Operating force (OF)	160 ± 50 g max.
Release force (RF)	30 g min.
Pretravel (PT)	0.25 ± 0.15 mm

## Construction



## Engineering Data

### Operating Force vs. Stroke (typical example)

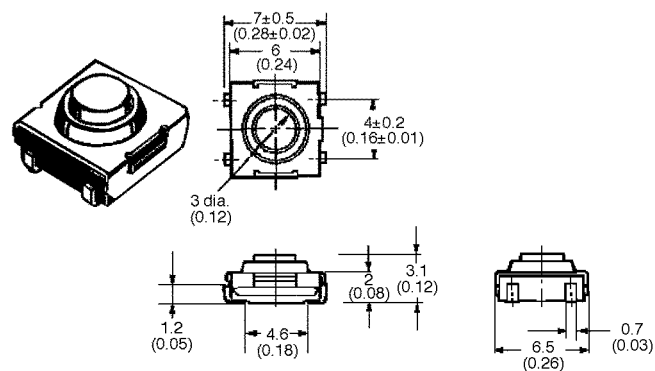


## Dimensions

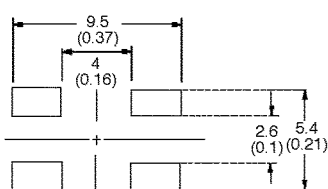
Unit: mm (inch)

### B3SN-3012, B3SN-3012P

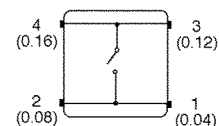
Without Ground Terminal



#### PCB Mounting



#### Terminal arrangement





# Omron Electronic Components, LLC

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### I. GENERAL

- Definitions:** The words used herein are defined as follows.
  - Terms:** These terms and conditions
  - Seller:** Omron Electronic Components LLC and its subsidiaries
  - Buyer:** The buyer of Products, including any end user in section III through VI
  - Products:** Products and/or services of Seller
  - Including:** Including without limitation
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  - Delivery and shipping dates are estimates only; and
  - Seller will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.
- Claims:** Any claim by Buyer against Seller for shortage or damage to the Products occurring before delivery to the carrier must be presented in detail in writing to Seller within 30 days of receipt of shipment.

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