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

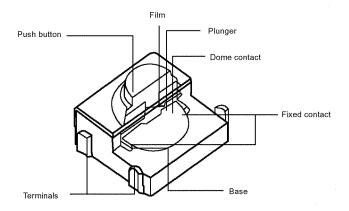
Switching capacity		1 to 50 mA, 5 to 24 VDC (resistive load)
Contact form		SPST-NO
Permissible load		1 mA 5 VDC min.
Contact resistance		100 M Ω max.
Insulation resistance		100 MΩ at 250 VDC
Dielectric strength		250 VAC, 50/60 Hz for 1 minute between contacts of same polarity 250 VAC, 50/60 Hz for 1 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 ² 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

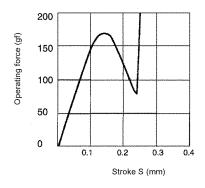
Characteristics		
Operating force (OF)	160 ± 50 g max.	
Release force (RF)	30 g min.	
Pretravel (PT)	$0.25 \pm 0.15 \; \text{mm}$	

■ Construction



Engineering Data

■ Operating Force vs. Stroke (typical example)

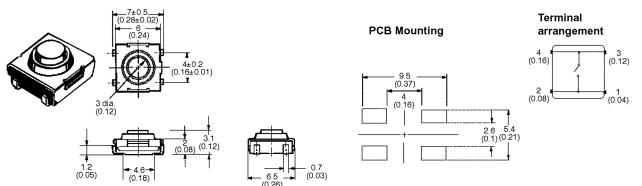


Dimensions

Unit: mm (inch)

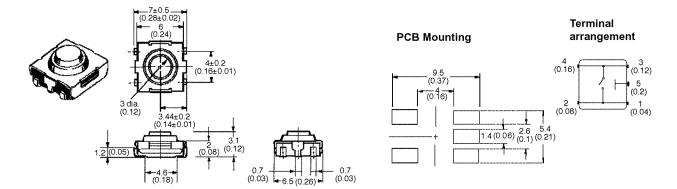
■ B3SN-3012, B3SN-3012P

Without Ground Terminal



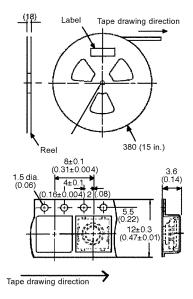
■ B3SN-3112, B3SN-3112P

With Ground Terminal



Note: Unless otherwise specified, a tolerance of \pm 0.2 mm applies to all dimensions.

■ Tape-Packaging Dimensions



Hints on Correct Use

See the Tactile Switch User's Guide, "Tactile Switches - Technical Information" for information regarding processing and handling.

Omron Electronic Components, LLC

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I. GENERAL

Definitions: The words used herein are defined as follows

These terms and conditions Terms:

Seller: Omron Electronic Components LLC and its subsidiaries

The buyer of Products, including any end user in section III through VI Products and/or services of Seller Buyer: Products:

Including: Including without limitation

- Offer: Acceptance: These Terms are deemed part of all quotations, acknowledgments, invoices, purchase orders and other documents, whether electronic or in writing, relating to the sale of Products by Seller. Seller hereby objects to any Terms proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these
- Distributor: Any distributor shall inform its customer of the contents after and including

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 Orders: Seller will accept no order less than 200 U.S. dollars net billing.

 Currencies: If the prices quoted herein are in a currency other than U.S. dollars, Buyer shall make remittance to Seller at the then current exchange rate most favorable to Seller; provided that if remittance is not made when due, Buyer will convert the amount to U.S. dollars at the then current exchange rate most favorable to Seller available during the period between the due date and the date remittance is actually made
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- <u>Shipping: Delivery:</u> Unless otherwise expressly agreed in writing by Seller:
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- (c) 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.
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 - Use in consumer Products or any use in significant quantities.

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ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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