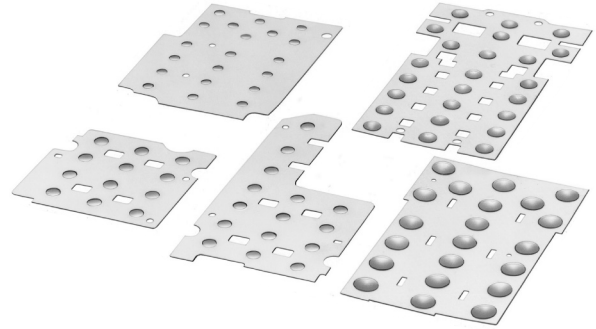


Ultra-low Profile Dome Array with Dust-Proof Construction and Crisp Clicking Action

- No soldering required. Attach directly to PCB to make an ultra-low profile tactile switch.
- Matrix adhesive used to create highly dust-proof construction with good ventilation. Omron's unique circular contact action ensures a high level of resistance to foreign matter.
- Lower profile, lighter weight, and crisp clicking action.
- Customization of Dome Array available upon request (i.e., silver plating, number of contacts, shape, etc.)



RoHS Compliant

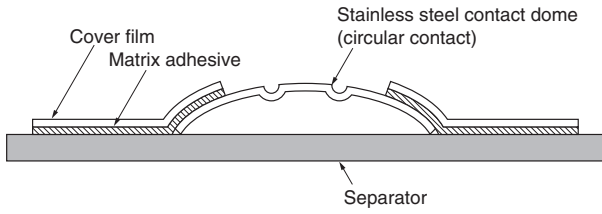
Specifications

■ List of Models/Ratings/Characteristics

Item	Model	
	4-mm dia. versions	5-mm dia. versions
Diameter	4 mm dia.	5 mm dia.
Operating force (OF)	1.57±0.49 N {160±50 gf}	
Releasing force (RF)	0.2 N {20 gf} min.	
Pretravel (PT)	0.2±0.1 mm	
Height	0.25±0.1 mm	
Durability	500,000 operations min.	1,000,000 operations min.
Switching capacity	10 mA, 12 VDC (resistive) Recommended min. load: 1 mA, 3 VDC (resistive)	
Ambient operating temperature	-40 to 80°C (at 60% RH max.) with no icing or condensation.	
Ambient storage humidity	10% to 90% (at 40°C max.)	
Material	Stainless steel	
Plating	Unplated. silver	

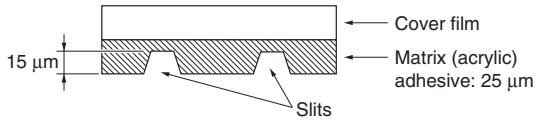
Note: Contact dome specifications not shown in this table are also available. Consult Omron for customization requirements.

■ Model Structure



Matrix Adhesive

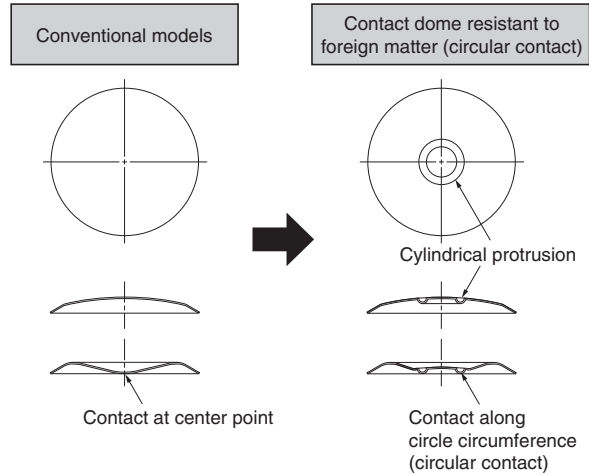
The surface structure of this adhesive has grid-shaped slits, as shown in the following cross-sectional diagram. These slits provide both ventilation and dust-proofing, which is required for contact dome operation.



Circular Contact

When Dome Arrays are attached to the PCB, any PCB dust or foreign particles will tend to collect in the center of the key when it is pressed. Therefore, poor contact occurs easily in Dome Arrays that provide contact at the center point only.

The circular contact construction provides contact along the circumference of a circle, thus preventing poor contact by avoiding the center point.

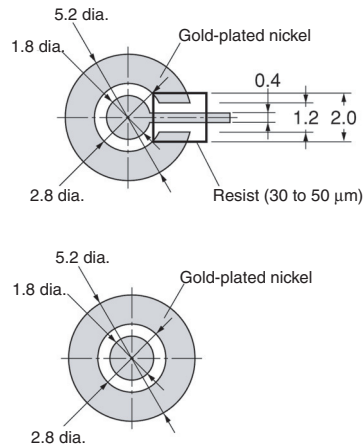


Dimensions

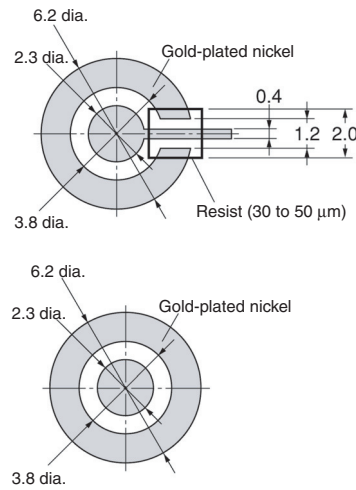
Note: All units are in millimeters, unless otherwise in diated.

■ Recommended Contact Form

4-mm Diameter Contact Dome

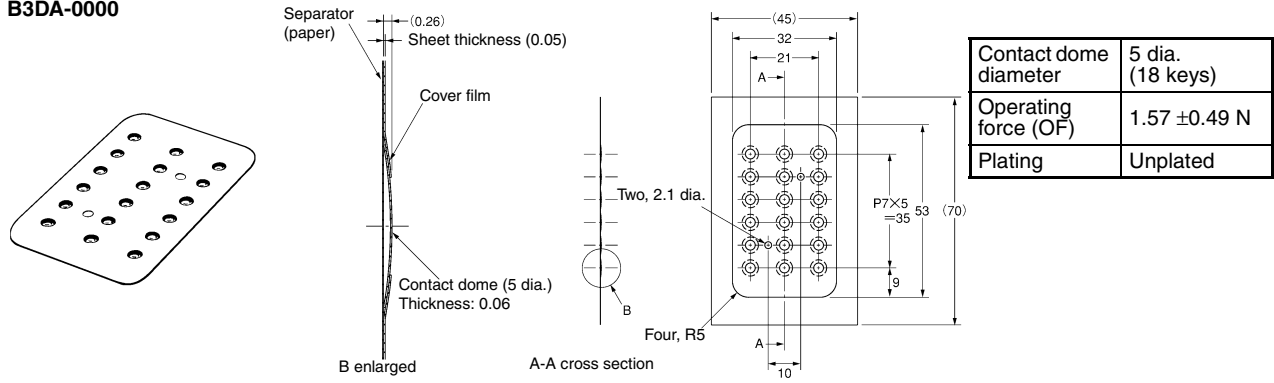


5-mm Diameter Contact Dome

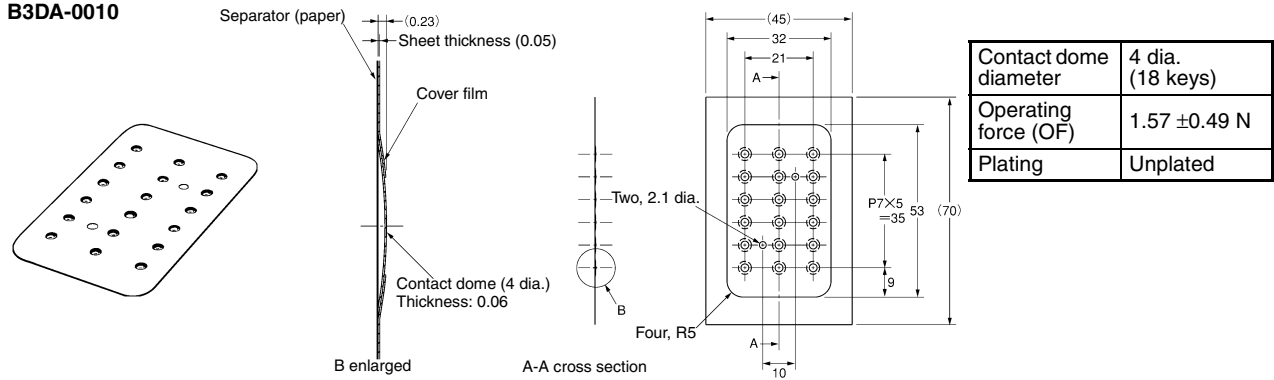


Sample for Engineering Reference

B3DA-0000



B3DA-0010



Precautions

■ Attaching to the PCB

Remove the Dome Array from the sheet using tweezers or a vacuum pick-up tool, and attach it above the contact on the PCB surface, which has been wiped clean in advance.

Do not reuse a Dome Array that has been detached from the PCB. Attach a new Dome Array to the PCB.

Do not touch the Dome Array with bare hands, or with unclean gloves. Doing so may damage the Dome Array, which is the part that comes in contact with the PCB.

■ Reflow Soldering

The Dome Array cannot withstand heat from reflow soldering. Always perform reflow soldering before attaching the Dome Array to the PCB.

■ Washing

Do not wash the Dome Array. The Dome Array is not water-resistant and must not be exposed to water or other liquids.

■ Common Precautions

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

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