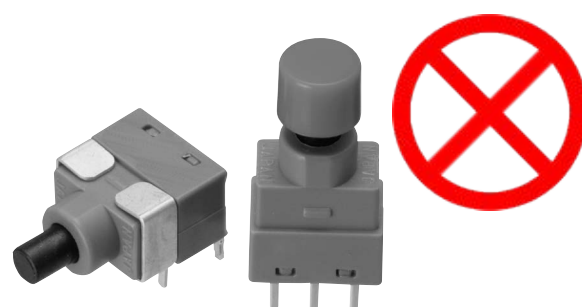


Subminiature Pushbutton Switch

A9P

Double-sided clip contact mechanism combined with see-saw action.

- Gold-plated clip contact and cleaning mechanisms ensure high reliability.
- Specially designed to prevent grease entry into the contact portion.
- Sealed against flux entry.
- Washable, equivalent to IP64 (IEC-60529).








RoHS Compliant

Typical Applications

Security Control Boards
Electric Power Instrumentation
Program Controllers

List of Models

Without Cap

Terminal shape Plunger color		DIP Terminal		Right Angle Terminal		Vertical Mount Terminal		Quantity per bag
		Ivory/Gray		Ivory/Gray		Ivory/Gray		
								
Switching Function								
		SPDT	DPDT	SPDT	DPDT	SPDT	DPDT	
ON	ON	A9P11-0011	-	A9P11-0012	-	A9P11-0013	-	100
ON	(ON)	A9P13-0011	A9P23-0011	A9P13-0012	A9P23-0012	A9P13-0013	A9P23-0013	

Note: 1. (ON) shows Momentary. ON shows Alternate internally, even plunger is released Momentary.

2. Plunger color

Gray: Alternate

Ivory: Momentary

3. Order caps separately from switches as Accessories for other than red color, see Accessories.

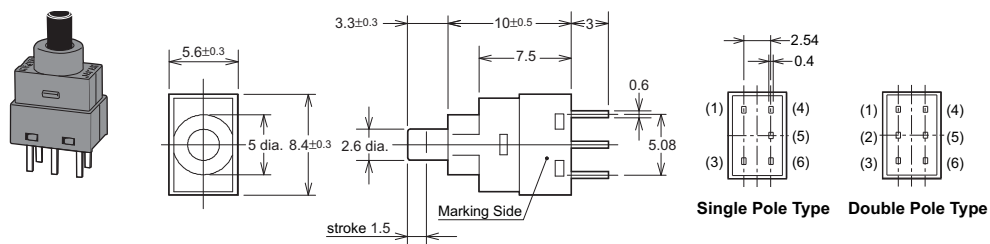
Ratings/Characteristics

Ratings		50 mA at 60 VAC/DC, 1 μ A (minimum current) at 20 mVAC/DC
Ambient operating temperature		-20 to 80 °C 60% RH max. (with no icing or condensation)
Ambient operating humidity		45 to 85%RH (5 to 35 °C)
Insulation resistance		1,000 M Ω min. (Initial value)
Contact resistance		50 m Ω max. (Initial value)
Dielectric strength		500 VAC for 1 min between terminals, between terminals and ground
Vibration resistance	Malfunction	10 to 55 Hz, 1.5-mm double amplitude
Shock resistance	Malfunction	500 m/s ² min.
Durability	Mechanical	50,000 operations min.
	Electrical	50,000 operations min.
Operating force		Alternate: 1.96 to 6.86 N {200 to 700 gf} / Momentary: 1.47 to 3.43 N {150 to 350 gf}
Weight	DIP Terminal	0.7 g
	Right Angle Terminal	0.9 g
	Vertical Mount Terminal	0.9 g

■ Dimensions (Unit: mm)

● DIP Terminal

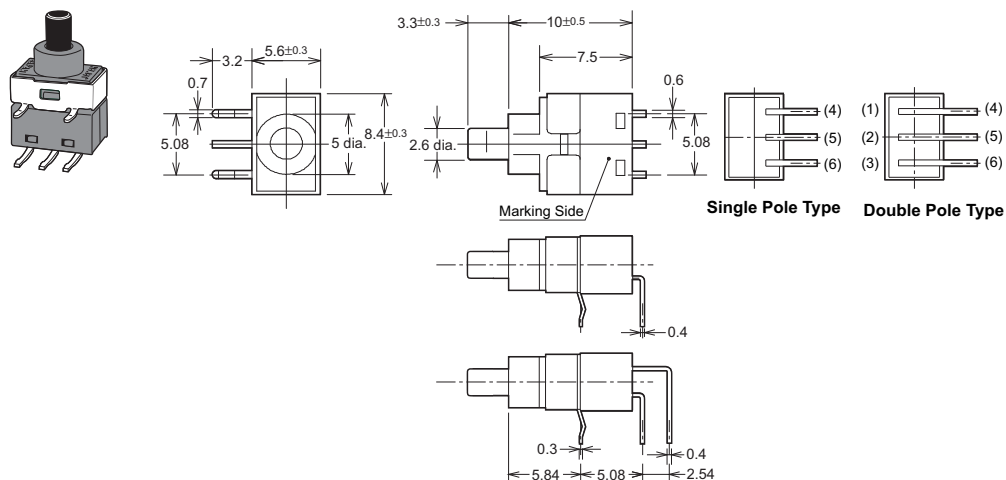
Without cap



Note: No. (1) and (3) terminals in the SPDT models are dummies to support the Switch case.

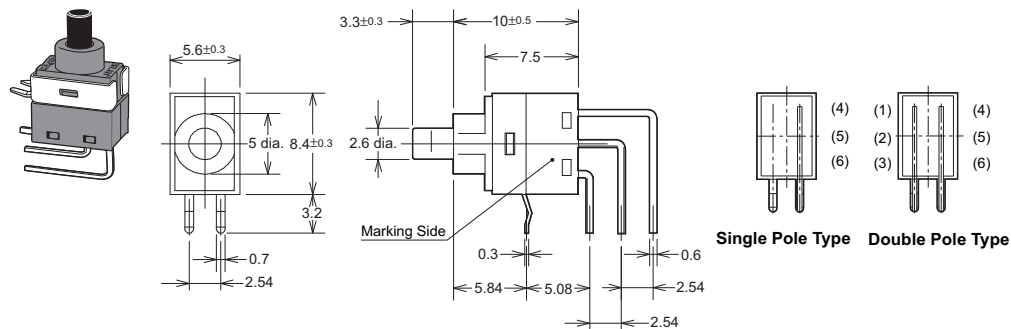
● Right Angle Terminal

Without cap



● Vertical Mount Terminal

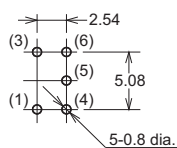
Without cap



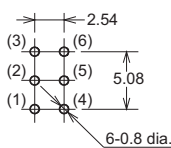
Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions.

■ PCB Dimensions (Top View)

DIP Terminal

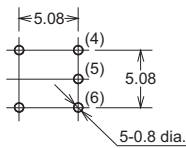


Single Pole Type

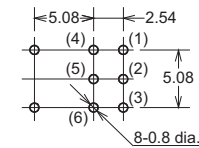


Double Pole Type

Right Angle Terminal

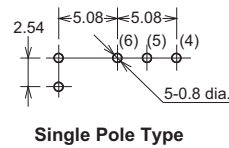


Single Pole Type

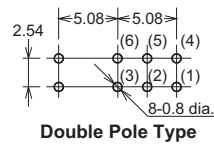


Double Pole Type

Vertical Mount Terminal



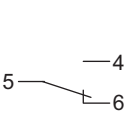
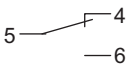
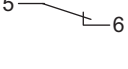
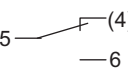
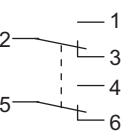
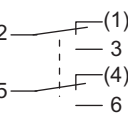


Single Pole Type



Double Pole Type

■Switching Functions / Internal Connections

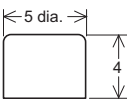
	Switching Function		Contact Forms	
				
SPDT Models	ON	ON		
	ON	(ON)		
DPDT Models	ON	(ON)		

Note: (ON) shows Momentary

■Accessories

● Caps

Available wide range of colors.

Colors	White	Black	Gray	Blue	Green	Red
	A9P-011	A9P-021	A9P-031	A9P-041	A9P-051	A9P-071
Dimension						

■Safety Precautions

Be sure to read the Safety precautions common to all PCB-mount Manual Switches for correct use.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

Note: Do not use this document to operate the Unit.

OMRON Corporation

ELECTRONIC AND MECHANICAL COMPONENTS COMPANY

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