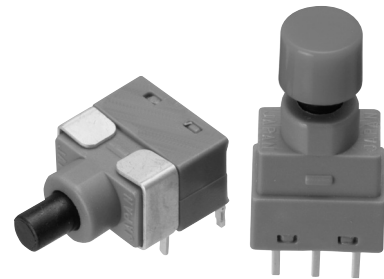


# Subminiature Pushbutton Switch

# 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

## Ordering Information

### 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								
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.

## Specifications

### Ratings/Characteristics

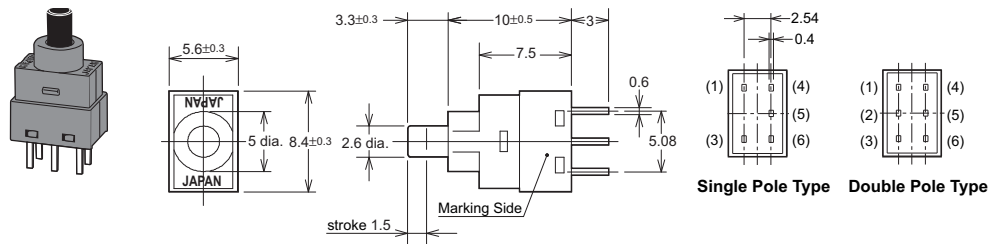
<b>Switching capacity</b>	50 mA at 60 VAC/DC, 1 μA (minimum current) at 20 mVAC/DC	
<b>Ambient operating temperature</b>	-20 to 80 °C 60% RH max. (with no icing or condensation)	
<b>Ambient operating humidity</b>	45 to 85%RH (5 to 35 °C)	
<b>Insulation resistance</b>	1,000 MΩ min. (Initial value)	
<b>Contact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

## Dimensions

Note: All units are in millimeters unless otherwise indicated.

### ● DIP Terminal

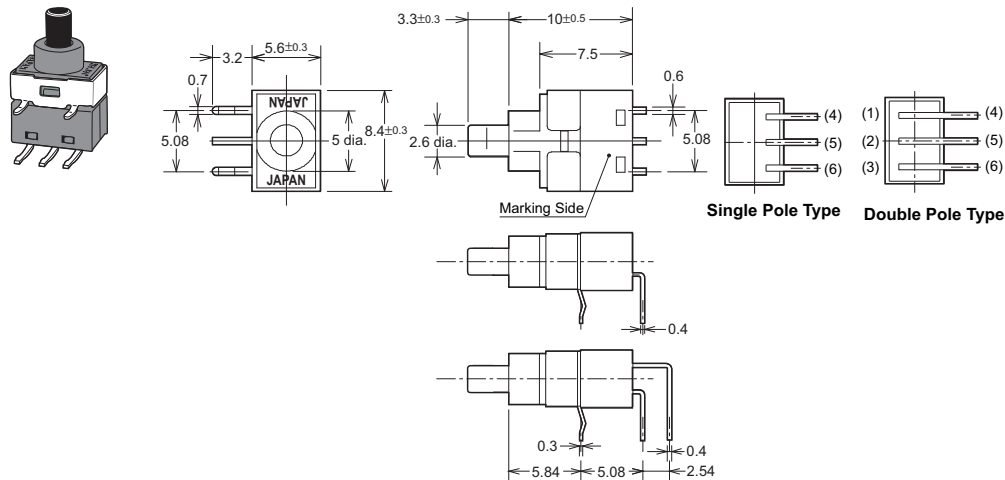
Without cap



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

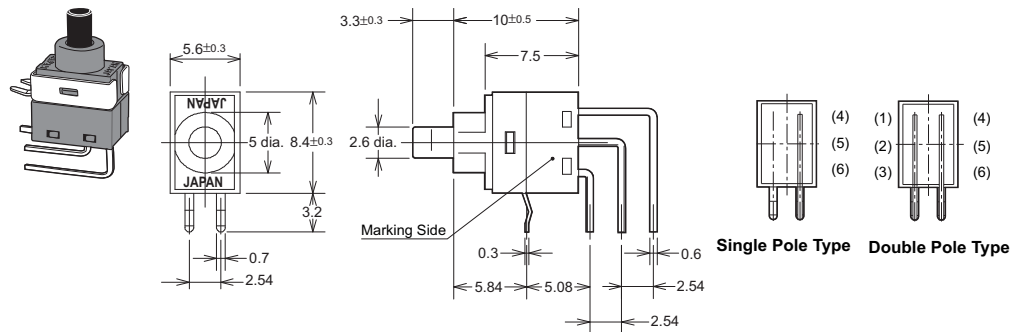
### ● Right Angle Terminal

Without cap



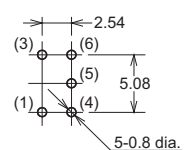
### ● Vertical Mount Terminal

Without cap

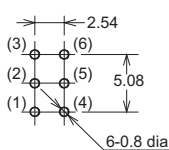


### ● PCB Dimensions (Top View)

#### DIP Terminal

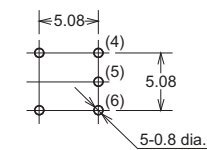


Single Pole Type

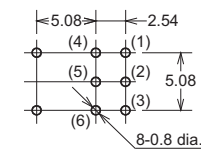


Double Pole Type

#### Right Angle Terminal

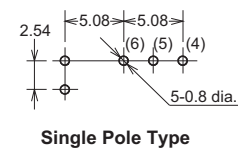


Single Pole Type

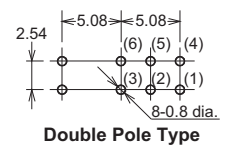


Double Pole Type

#### Vertical Mount Terminal



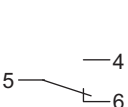
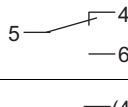

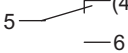
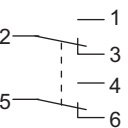
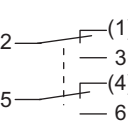


Single Pole Type



Double Pole Type

## Switching Functions / Internal Connections

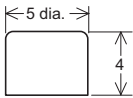
	Switching Function		Contact Forms	
				
SPDT Models	ON	ON		
	ON	(ON)		
DPDT Models	ON	(ON)		

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.

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

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