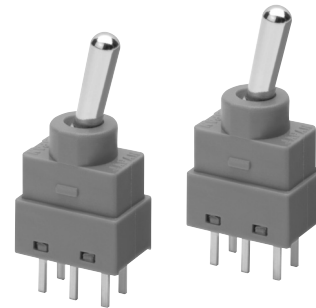


# Subminiature Toggle Switch A9T

## 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

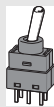



### Typical Applications

Security Control Boards  
Electric Power Instrumentation  
Program Controllers





## Ordering Information

### List of Models





#### DIP Terminal Models

Actuator Shapes			Standard		Quantity per bag
					
Switching Functions			SPDT	DPDT	
					100
ON	—	ON	<b>A9T11-0011</b>	<b>A9T21-0011</b>	
ON	OFF	ON	<b>A9T12-0011</b>	<b>A9T22-0011</b>	
(ON)	—	ON	<b>A9T13-0011</b>	<b>A9T23-0011</b>	
(ON)	OFF	(ON)	<b>A9T14-0011</b>	<b>A9T24-0011</b>	
(ON)	OFF	ON	<b>A9T15-0011</b>	<b>A9T25-0011</b>	

#### Right Angle Terminal Models

Actuator Shapes			Standard		Quantity per bag
					
Switching Functions			SPDT	DPDT	
					100
ON	—	ON	<b>A9T11-0012</b>	<b>A9T21-0012</b>	
ON	OFF	ON	<b>A9T12-0012</b>	<b>A9T22-0012</b>	
(ON)	—	ON	<b>A9T13-0012</b>	<b>A9T23-0012</b>	
(ON)	OFF	(ON)	<b>A9T14-0012</b>	<b>A9T24-0012</b>	
(ON)	OFF	ON	<b>A9T15-0012</b>	<b>A9T25-0012</b>	

● Vertical Mount Terminal Models

Actuator Shapes			Standard		Quantity per bag
Switching Functions					
			SPDT	DPDT	
ON	—	ON	<b>A9T11-0013</b>	<b>A9T21-0013</b>	100
ON	OFF	ON	<b>A9T12-0013</b>	<b>A9T22-0013</b>	
(ON)	—	ON	<b>A9T13-0013</b>	<b>A9T23-0013</b>	
(ON)	OFF	(ON)	<b>A9T14-0013</b>	<b>A9T24-0013</b>	
(ON)	OFF	ON	<b>A9T15-0013</b>	<b>A9T25-0013</b>	

**Note:** 1. (ON) shows Momentary.  
 2. Switching Functions show the view from the side of Type and Brand name marking.  
 3. Actuator does not stop at "-" position.

Specifications

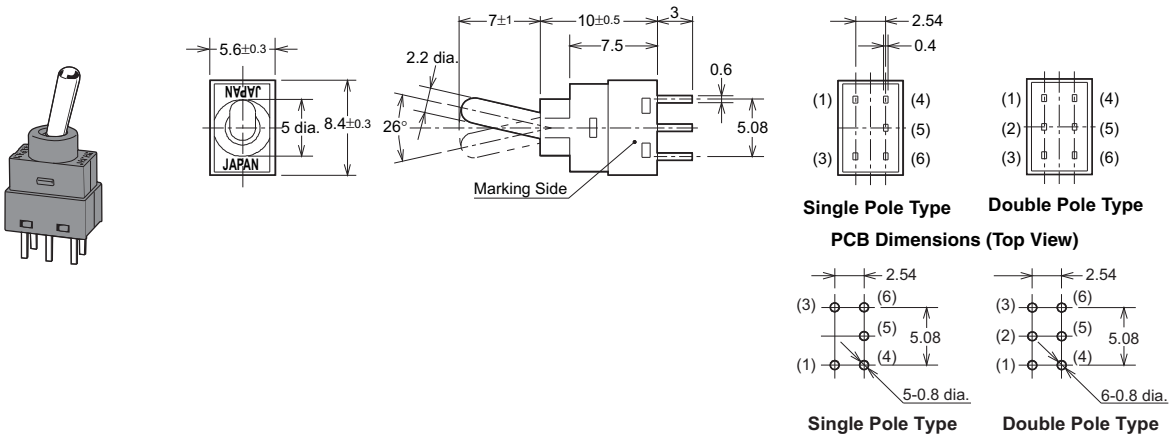
■ Ratings/Characteristics

<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>	0.49 to 3.43 N {50 to 350 gf}	
<b>Weight</b>	<b>DIP Terminal</b>	Standard: 0.8 g
	<b>Right Angle Terminal</b>	Standard: 1 g
	<b>Vertical Mount Terminal</b>	Standard: 1 g

## Dimensions

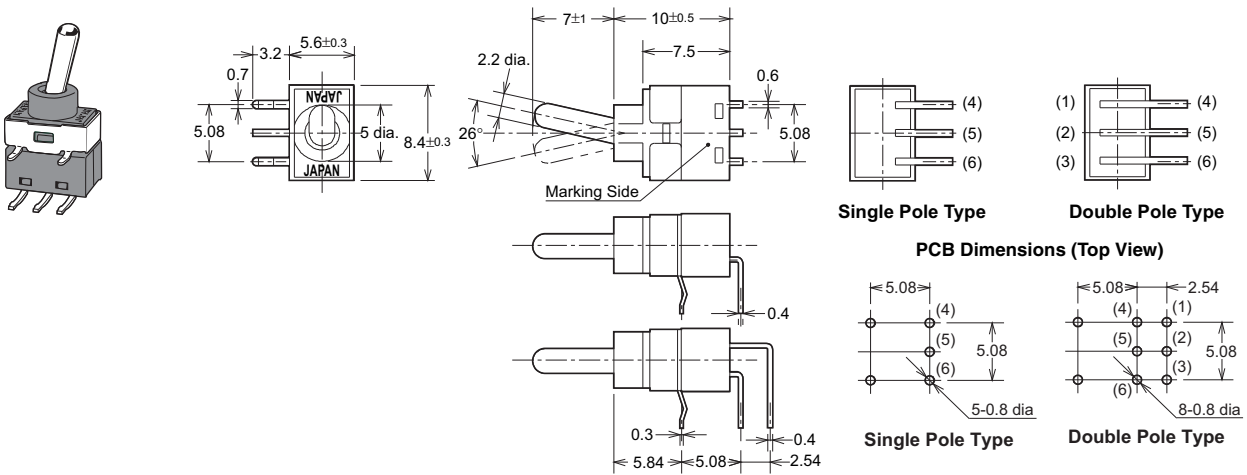
Note: All units are in millimeters unless otherwise indicated.

### ● DIP Terminal Models

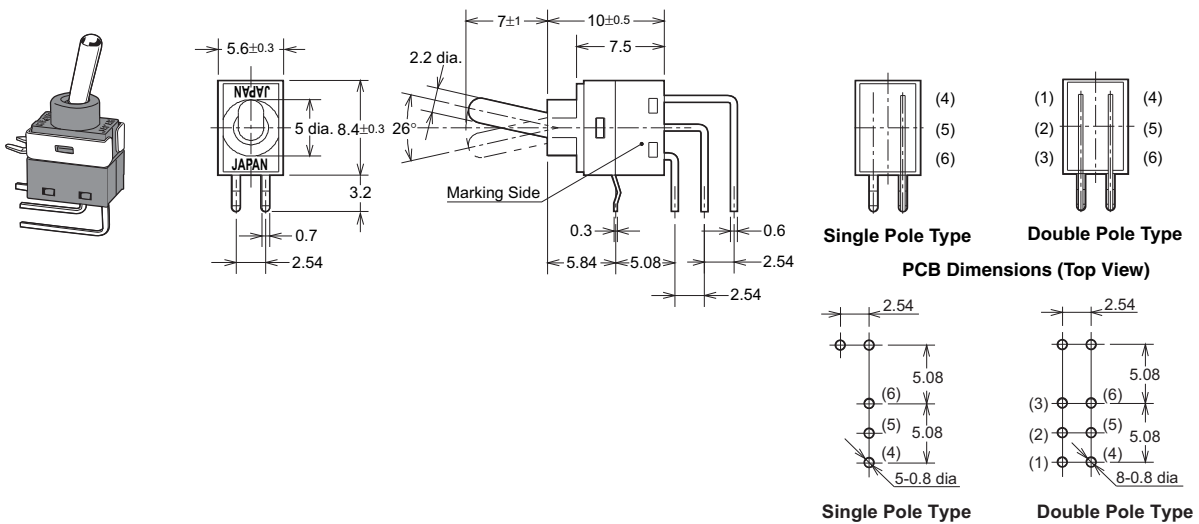


Note: No. (1) and (3) terminals in the SPDT models are dummies to support the Switch case.





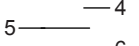
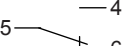
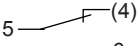
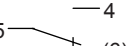
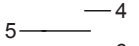
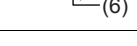
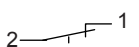
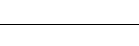

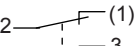
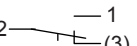

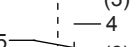
### ● Right Angle Terminal Models



### ● Vertical Mount Terminal Models



## Switching Function / Internal Connections

	Switching Functions			Contact Forms		
						
SPDT Models	ON	—	ON		—	
	ON	OFF	ON			
	(ON)	—	ON		—	
	(ON)	OFF	(ON)			
	(ON)	OFF	ON			
DPDT Models	ON	—	ON		—	
	ON	OFF	ON			
	(ON)	—	ON		—	
	(ON)	OFF	(ON)			
	(ON)	OFF	ON			

Note: (ON) shows Momentary.

## 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.