



**THE DATASHEET OF  
ASE2D-2M-10-Z**



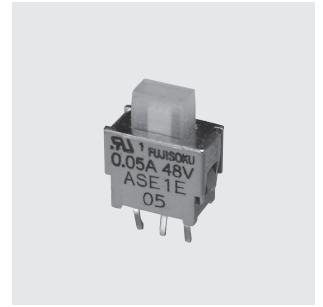
# ASE

Washable

RoHS Compliant

## Hyper-miniature Slide Switches

UL



### Features

#### 1. High Contact Reliability

Twin-contact clip mechanism for high contact reliability

#### 2. Immersion washable type

#### 3. Gold-plated contacts suitable for low current applications

#### 4. For PC board mounting

#### 5. Improved operability

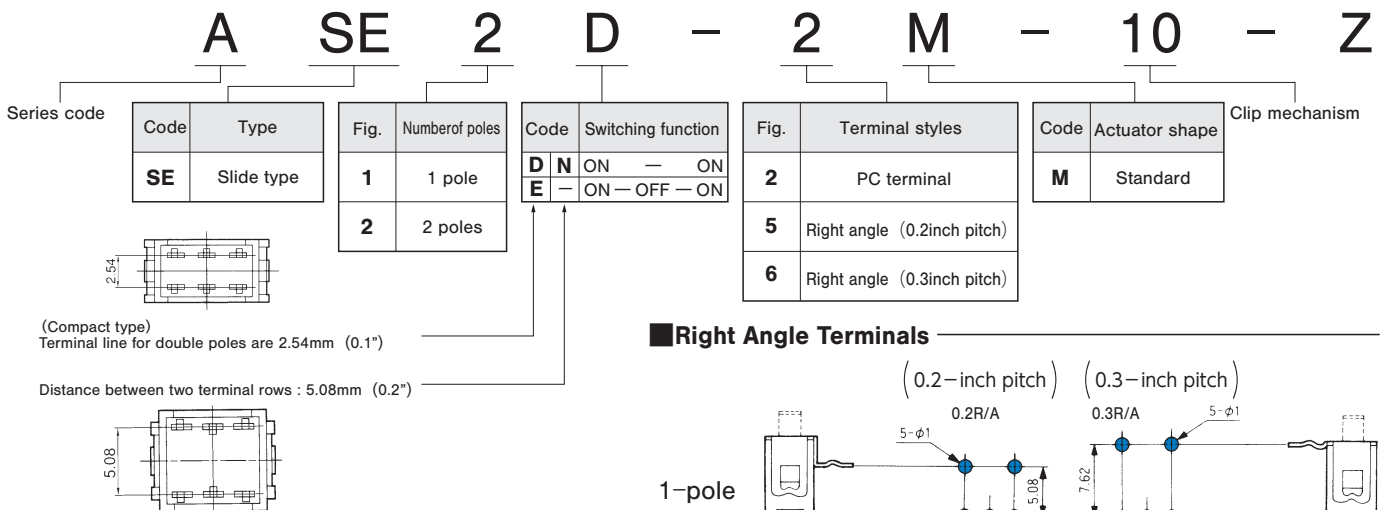
The independent detent structure provides a light operating touch.

#### 6. UL-recognized

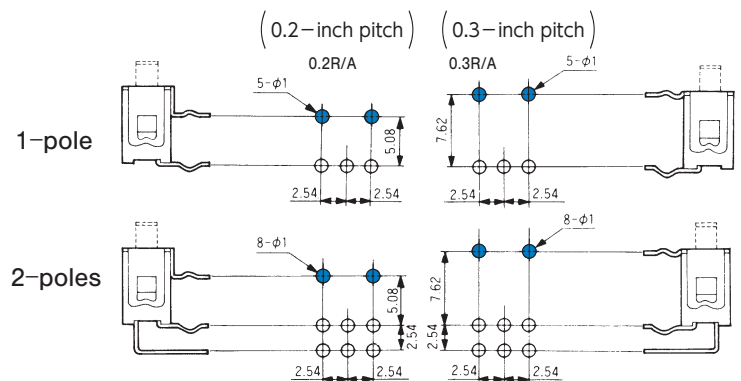
### Specifications

Rating	0.4VA AC/DC	Voltage range	20mV~60V
		Current range	1μA~50mA
	Max.	50mA 60VAC/DC	
	Min.	1μA 20mVAC/DC	
	UL	48VAC/DC 50mA	
Initial contact resistance	50mΩ max.	(1.5mA 200μVAC)	
Dielectric strength	250VAC 1 minute		
Initial insulation resistance	500MΩ min.	(500VDC)	
Electrical life	10,000 cycles at max. rating. 50,000 cycles at min. rating or 0.4VA		
Operating force	0.69~4.9N		
Operating temperature range	-20°C~+85°C		
Storage temperature range	-40°C~+85°C		

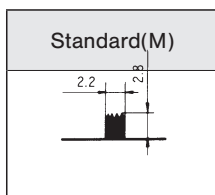
### Part Numbering



### Right Angle Terminals



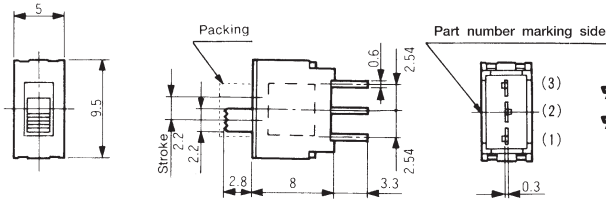
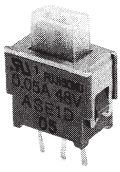
### Actuator Shape



# ASE

## SPDT

PC

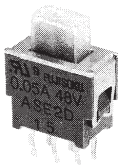


Switching function	Viewed from part No. marking side		
Part No.			
ASE1D-2M-10-Z	ON	-	ON
☆ ASE1E-2M-10-Z	ON	OFF	ON
Connecting terminals	2-1	-	2-3

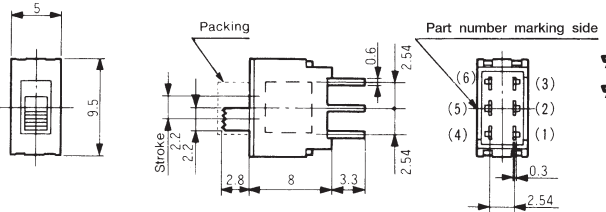
Terminal numbers are not shown on the switch.

## DPDT

PC



Distance between two terminal rows : 2.54 mm

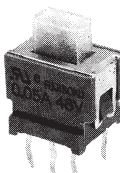


Switching function	Viewed from part No. marking side		
Part No.			
ASE2D-2M-10-Z	ON	-	ON
★ ASE2E-2M-10-Z	ON	OFF	ON
Connecting terminals	2-1 5-4	-	2-3 5-6

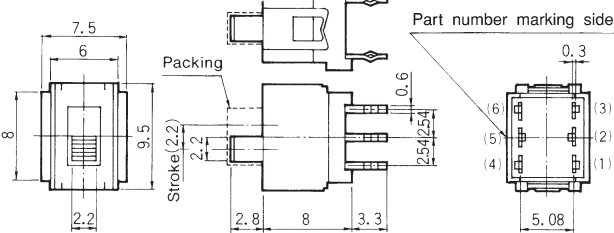
Terminal numbers are not shown on the switch.

## DPDT

PC



Distance between two terminal rows : 5.08 mm

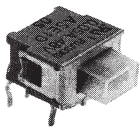


Switching function	Viewed from part No. marking side		
Part No.			
☆ ASE2N-2M-10-Z	ON	-	ON
Connecting terminals	2-1 5-4	-	2-3 5-6

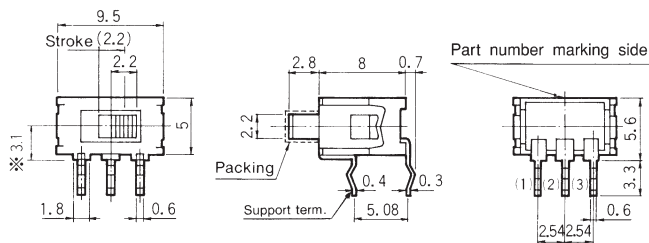
Terminal numbers are not shown on the switch.

## SPDT

0.2R/A



Mounting height : 3.1 mm

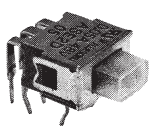


Switching function	Viewed from part No. marking side		
Part No.			
ASE1D-5M-10-Z	ON	-	ON
Connecting terminals	2-1	-	2-3

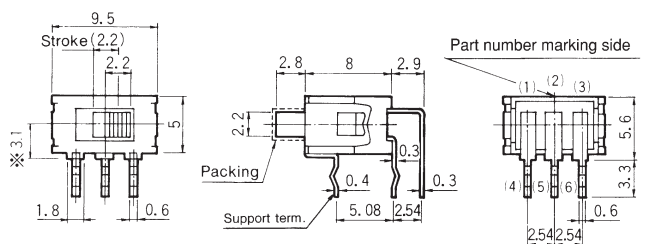
Terminal numbers are not shown on the switch.

## DPDT

0.2R/A



Mounting height : 3.1 mm



Switching function	Viewed from part No. marking side		
Part No.			
ASE2D-5M-10-Z	ON	-	ON
Connecting terminals	2-1 5-4	-	2-3 5-6

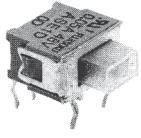
Terminal numbers are not shown on the switch.

★ : Made to order products.  
☆ : Semi-standard products.

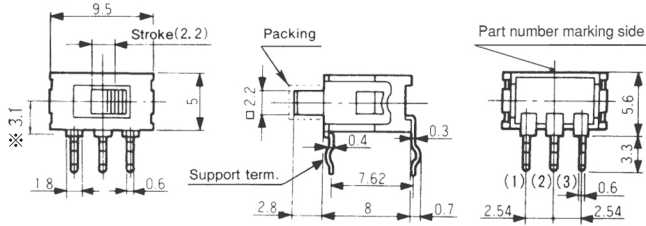
● The actuator is sealed with a white-colored packing. Remove the packing with tweezers after the washing process.

**SPDT**

0.3R/A



Mounting height : 3.1 mm

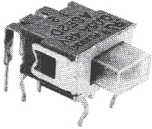


Switching function	Viewed from part No. marking side		
Part No.			
ASE1D-6M-10-Z	ON	-	ON
Connecting terminals	2-1	-	2-3

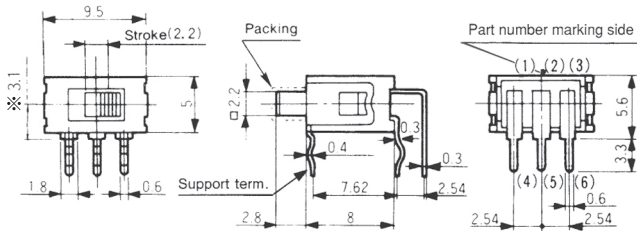
Terminal numbers are not shown on the switch.

**DPDT**

0.3R/A



Mounting height : 3.1 mm

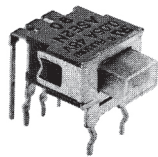


Switching function	Viewed from part No. marking side		
Part No.			
☆ ASE2D-6M-10-Z	ON	-	ON
Connecting terminals	2-1 5-4	-	2-3 5-6

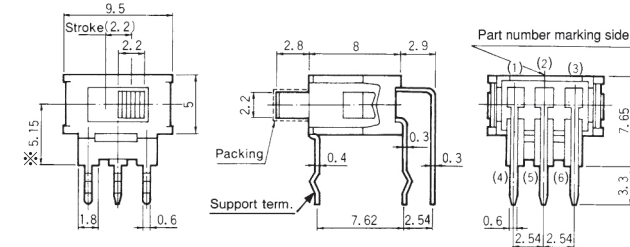
Terminal numbers are not shown on the switch.

**DPDT**

0.3R/A



Mounting height : 5.15 mm



Switching function	Viewed from part No. marking side		
Part No.			
★ ASE2N-6M-10-Z	ON	-	ON
Connecting terminals	2-1 5-4	-	2-3 5-6

Terminal numbers are not shown on the switch.

**Mounting Height**

Switching function	D·E	N
Mounting		

**Optional Accessories**

(Supplied separately)

Part Name	Bracket
Part No.	140000640324
Dimensions	

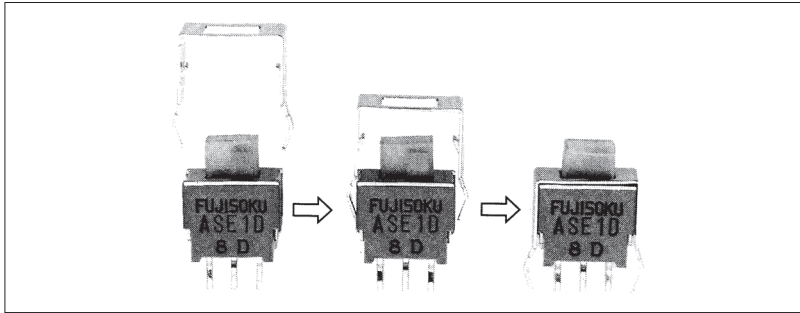
**PC Hole Layouts**

Series	P/C terminal		Right Angle terminal	
	Without bracket	With bracket	0.2inch pitch	0.3inch pitch
ASE1D ASE1E				
ASE2D ASE2E				
ASE2N				

★ : Made to order products.

☆ : Semi-standard products.

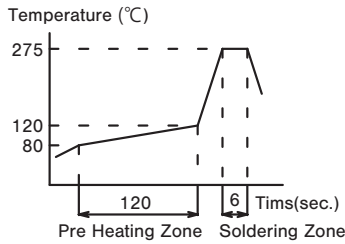
**Bracket Installation Procedure**



**Handling Precautions**

**1. Soldering Specifications**

- (1) Manual Soldering
  - Device : Soldering iron
  - 380°C, Max.; 3 seconds, Max.
- (2) Auto Soldering
  - Device : Jet wave type or dip type
  - 275°C, Max.; 6 seconds, Max.
  - Pre-heating should be done at temperatures ranging from 80°C to 120°C and within 120 sec.



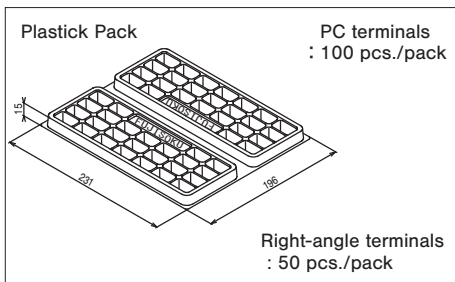
**2. Flux Cleaning**

- (1) Solvent : Fluorine or Alcohol type.
- (2) Cleaning after soldering should be done after the terminal temperature falls to 90°C or below, or after leaving the switch for five minutes or longer at room temperature.
  - AS series are not process sealed and are not washable. If the PC board is to be cleaned, clean the soldering surface of substrate with a brush so that the switch is not exposed to the cleaning solution.
- (3) Do not use ultrasonic cleaning system.

**3. Mounting of Switch**

- (1) Use the PC boards of  $\phi 1$  holes.
- (2) Do not bend the terminals before mounting the switch on the PC board.
- (3) After mounting the switch, do not place the device in such a way that the device weight will be applied on the knob, etc. of the switch.
- (4) Do not apply load exceeding 12.7 N (1.3 kgf) to the knob. Use a bracket (optional accessory) if the load is expected to exceed 12.7 N (1.3 kgf). The strength of the knob will be reinforced to 29.4 N (3 kgf) max.

**Packaging Specifications**



**UL Recognized / CSA Certified**

Part No.
<b>ASE1D-2M-10-Z</b>
<b>ASE1E-2M-10-Z</b>
<b>ASE2D-2M-10-Z</b>
<b>ASE2E-2M-10-Z</b>
<b>ASE2N-2M-10-Z</b>
<b>ASE1D-5M-10-Z</b>
<b>ASE2D-5M-10-Z</b>
<b>ASE1D-6M-10-Z</b>
<b>ASE2D-6M-10-Z</b>
<b>ASE2N-6M-10-Z</b>

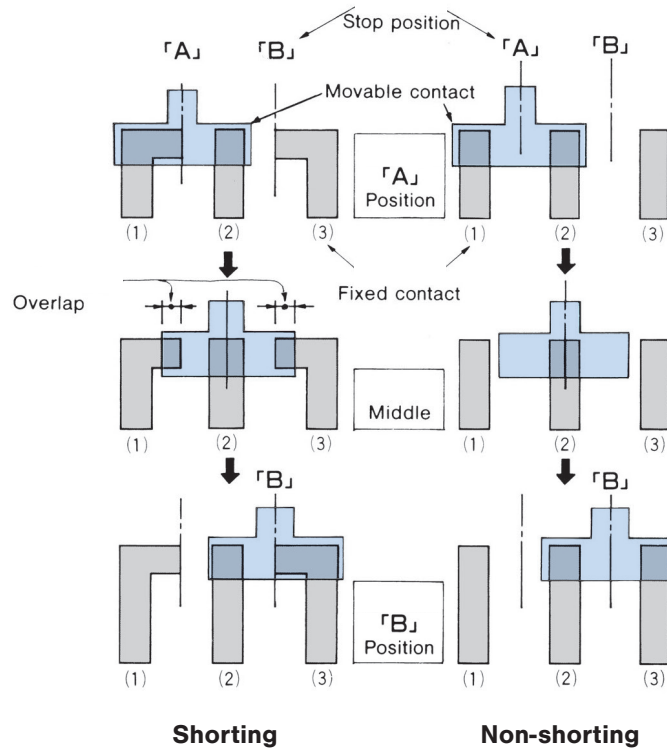
Even if the products are of UL-or CSA-approved ones, The products in stock do not carry the UL mark of the CSA mark.  
 When placing an order, be sure to specify "With UL/CSA Mark." For the products with the UL mark or the CSA mark, extra costs will be added.

UL File No.E43275  
 CSA File No.LR38341

■ Shorting (Make-Before-Break)

A switch which momentarily connects both circuits when the actuator is moved from Point A to B in the below figure.



All switches which are not marked as "Shorting" are "Non-shorting" (Break-Before-Make).









[Fig.1]

## Looking for pricing, stock, or lifecycle information?

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-  [View ASE2D-2M-10-Z on WIN SOURCE](#)
-  [Nidec Copal Electronics Information](#)

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