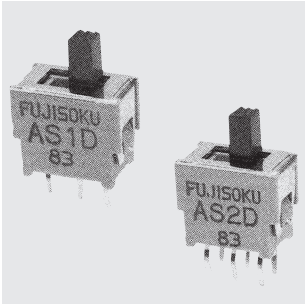
AS

Hyper-miniature Slide Switches



RoHS Compliant

■Features

1. High Contact Reliability
   Twin-contact clip mechanism for high contact reliability.
2. Gold-plated contacts suitable for low current applications
3. For PC board mounting
4. Improved operability
   The independent detent structure provides a light operating touch.

■ Specifications

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

■Part Numbering

A S 2 D – 2 M – 10 – Z

Series code

Code	Type
S	Slide type

Fig.	Number of poles
1	1 pole
2	2 poles

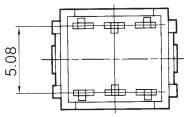
Code	Switching function
D N	ON — ON
E –	ON—OFF—ON

Fig.	Terminal style
2	PC terminal
5	Right angle (0.2inch pitch)
6	Right angle (0.3inch pitch)

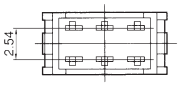
Code	Actuator shape
M	Standard

Clip mechanism

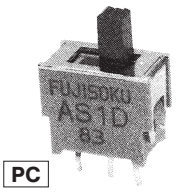
Distance between two terminal rows : 5.08mm (0.2")



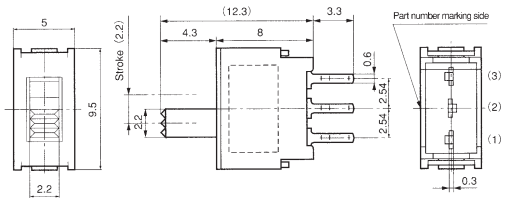
Terminal line for double poles are 2.54mm (0.1")



SPDT



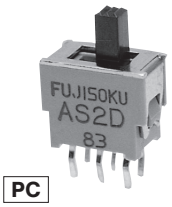
PC



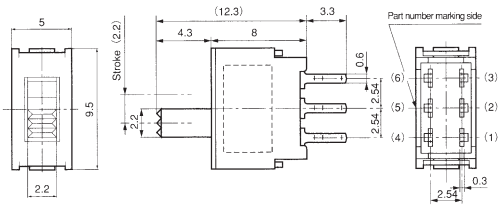
Part No. \ Switching function	Viewed from part No. marking side		
AS1D-2M-10-Z	ON	–	ON
☆AS1E-2M-10-Z	ON	OFF	ON
Connecting terminals	2–1	–	2–3

DPDT

Distance between two terminal rows : 2.54 mm



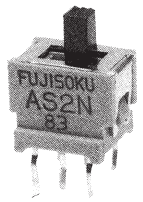
PC



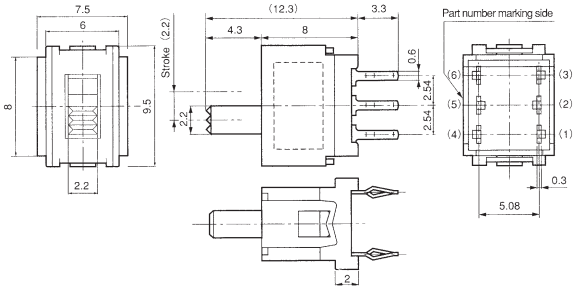
Part No. \ Switching function	Viewed from part No. marking side		
AS2D-2M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

DPDT

Distance between two terminal rows : 5.08 mm



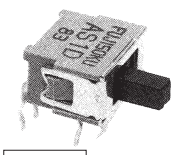
PC



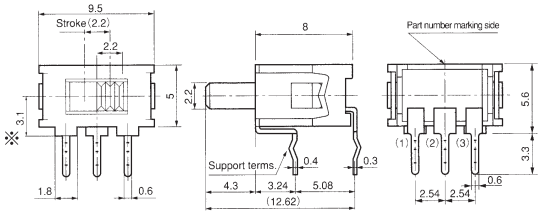
Part No. \ Switching function	Viewed from part No. marking side		
★AS2N-2M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

SPDT

※Mounting height : 3.1mm



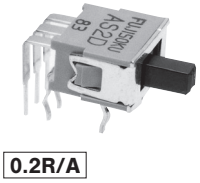
0.2R/A



Part No. \ Switching function	Viewed from part No. marking side		
AS1D-5M-10-Z	ON	–	ON
AS1E-5M-10-Z	ON	OFF	ON
Connecting terminals	2–1	–	2–3

DPDT

※Mounting height : 3.1mm



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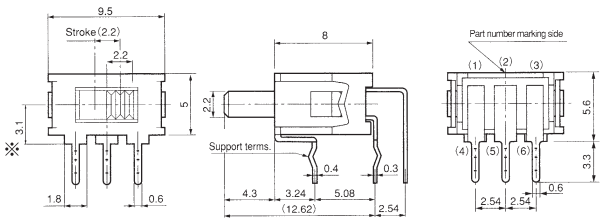
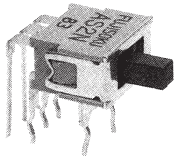


Part No. \ Switching function	Viewed from part No. marking side		
AS2D-5M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

DPDT

※Mounting height : 5.15mm



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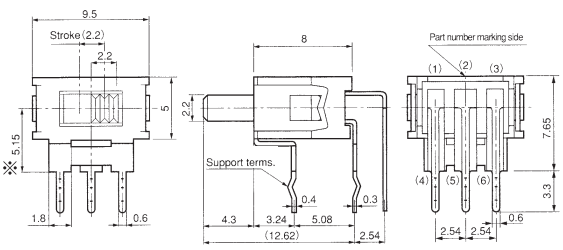
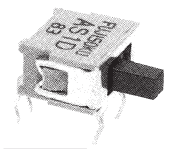


Part No. \ Switching function	Viewed from part No. marking side		
★AS2N-5M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

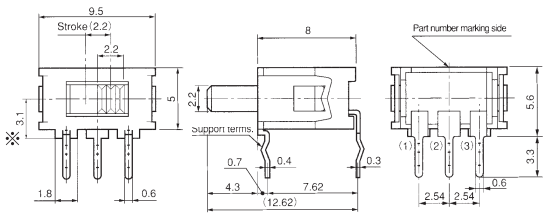
☆ : Semi-standard products. ★ : Made to order products. Terminal numbers are not shown on the switch. Non-marking : standard stock items.

SPDT

※Mounting height : 3.1mm



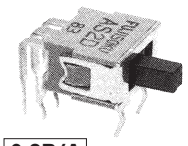
0.3R/A



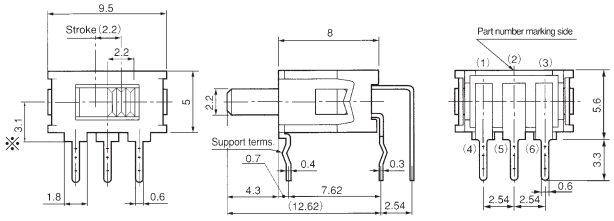
Part No. \ Switching function	Viewed from part No. marking side		
AS1D-6M-10-Z	ON	–	ON
Connecting terminals	2–1	–	2–3

DPDT

※Mounting height : 3.1mm



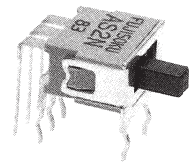
0.3R/A



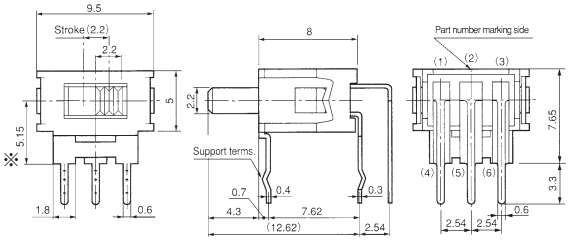
Part No. \ Switching function	Viewed from part No. marking side		
☆AS2D-6M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

DPDT

※Mounting height : 5.15mm

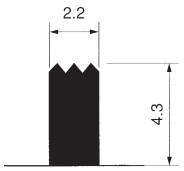


0.3R/A

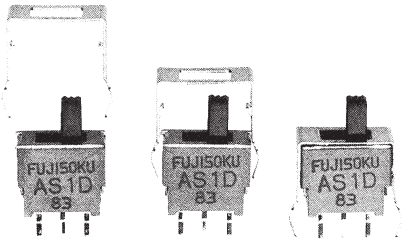


Part No. \ Switching function	Nimbus Sans		
☆AS2N-6M-10-Z	ON	–	ON
Connecting terminals	2–1 5–4	–	2–3 5–6

■Actuator Shape

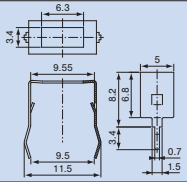
Standard (M)


■Bracket Installation Procedure

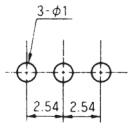
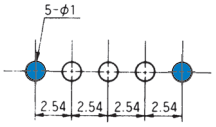
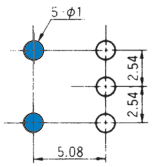
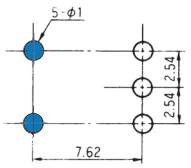
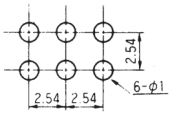
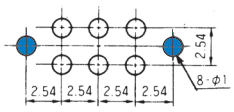
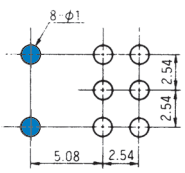
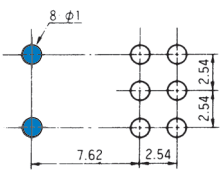
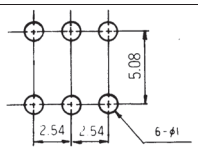
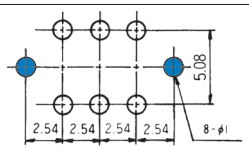


■ Optional Accessories

《Sold separately》

Part Name	Bracket
Part No.	140000640324
Dimensions	

■PC Hole Layouts

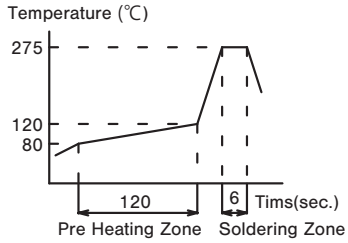
Series	PC terminal		Right Angle terminal	
	Without bracket	With bracket	0.2inch pitch	0.3inch pitch
AS1D AS1E				
AS2D				
AS2N				

☆ : Semi-standard products. :Optional Accessories.

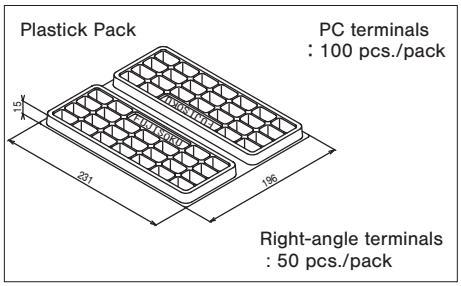
■Handling Precautions

1.Soldering Specifications

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



■Packaging Specifications



2. Flux Cleaning

(1)Solvent : Fluorine or Alcohol type.
(2)Cleaning after soldering should be done after the terminal temperature falls to 90℃ 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.

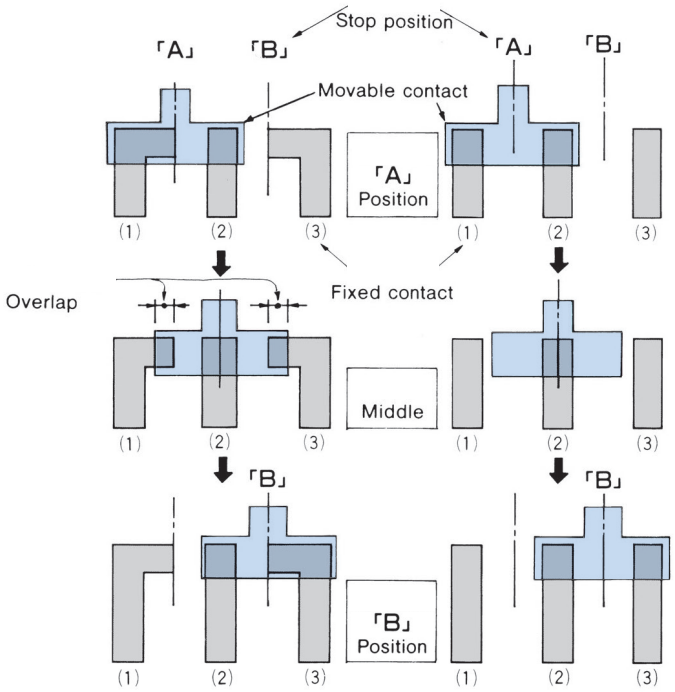
3. Mounting of Switch

(1)Use the PC boards of ϕ1 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.

■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〕