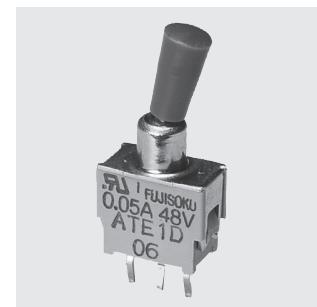


ATE

Subminiature Toggle Switch

Washable



RoHS Compliant

UL

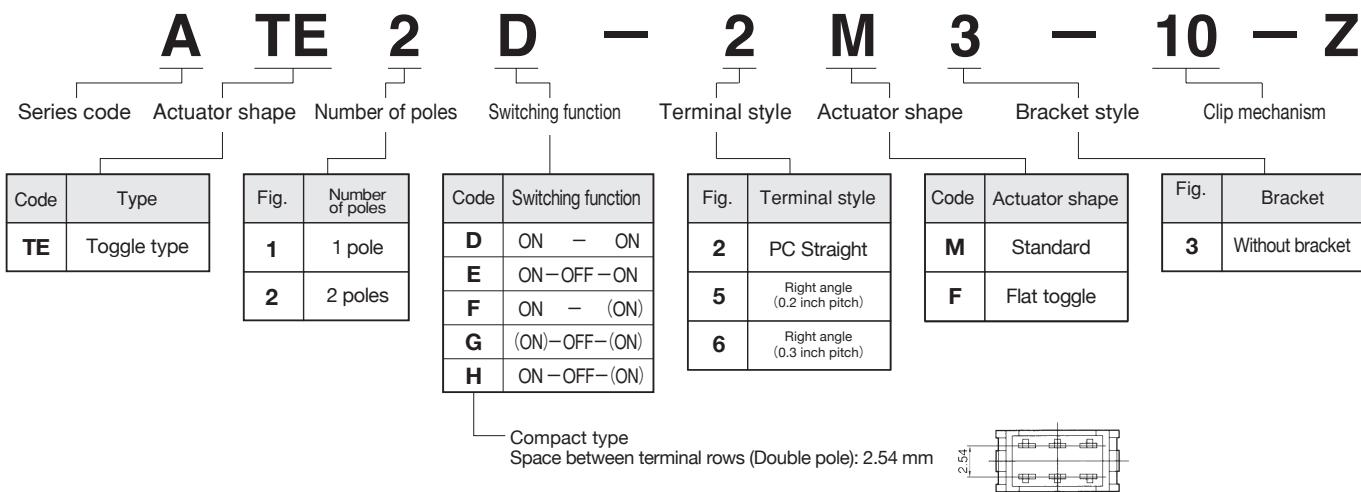
Features

1. Twin-contact clip mechanism for high reliability.
2. Process sealed structure
3. Gold-plated contacts.
4. Terminal pin pitch: 2.54 mm.
5. Independent detent mechanism ensures light operational feel.
6. UL recognized (Excluding ATE-J series with plastic cap/rocker)

Specifications

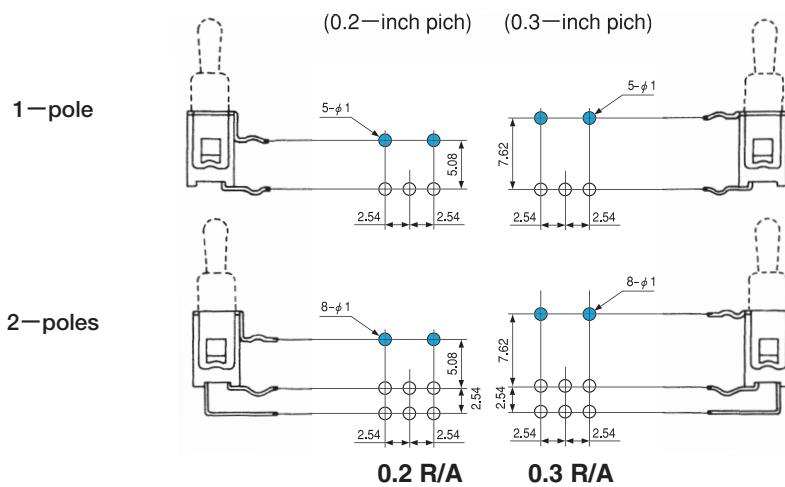
Rating	Max.	50mA 60VAC/DC 0.4VA AC/DC
	Min.	1 μ A 20mVAC/DC
	UL	48VAC/DC 50mA
Initial contact resistance	50m Ω Max.	(1.5mA 200 μ VAC)
Dielectric strength	250VAC 1 minute	
Insulation resistance	500M Ω min.	(500VDC)
Electrical life	10,000 cycles at 0.4VA rating. 50,000 cycles at 0.4VA rating. (D.E type) 30,000 cycles at 0.4VA rating. (F.G.H type)	
Mechanical life	D.E type 50,000 cycles F.G.H type 30,000 cycles	
Operating temperature range	-20°C ~ +85°C	
Storage temperature range	-40°C ~ +85°C	

Part Numbering



(ON) : Momentary.

■ Right Angle Terminals



● The space between the terminal rows are available in two dimensions: 0.2 inches (5.08 mm) and 0.3 inches (7.62 mm).

[Example] 0.2-inch pitch: ATE1D-5M3-10-Z

0.3-inch pitch: ATE1D-6M3-10-Z

■ Optional Accessories

Refer to P.371 for PC Hole Layouts.

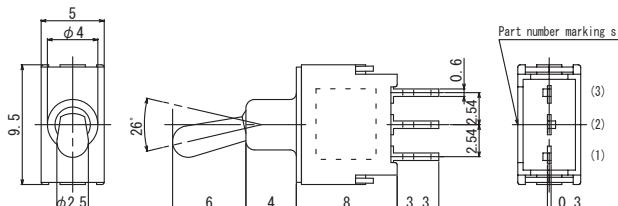
Part name	Bracket		
	Single pole	Double poles	
Box size	5 mm	7.5 mm	5 mm
ATE-2M · 2F			
Dimensions			
Part number	140000640314	140000640315	140000640318

Type	ATE-2M·5M·6M
Part name	Color Cap
Dimensions	Gloss finish
	Vinyl chloride
White	140000470174
Red	140000470175
Black	140000470173
Gray	140000470179

SPDT PC Straight



Standard Toggle

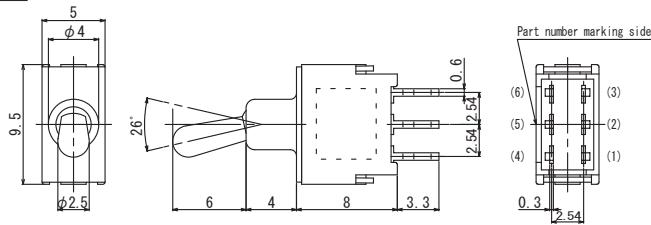


Part No.	Switching function	Viewed from part No. marking side		
ATE1D-2M3-10-Z	ON		—	ON
ATE1E-2M3-10-Z	ON		OFF	ON
ATE1F-2M3-10-Z	ON		—	(ON)
ATE1G-2M3-10-Z	(ON)		OFF	(ON)
★ATE1H-2M3-10-Z	ON		OFF	(ON)
Connecting terminals		2-3	—	2-1

DPDT PC Straight



Distance between two terminal rows : 2.54mm



Part No.	Switching function	Viewed from part No. marking side		
ATE2D-2M3-10-Z	ON		—	ON
★ATE2E-2M3-10-Z	ON		OFF	ON
★ATE2G-2M3-10-Z	(ON)		OFF	(ON)
Connecting terminals		2-3	—	2-1
		5-6	—	5-4

★ : Made to order products.

★ : Semi-standard products.

(ON) : Momentary.

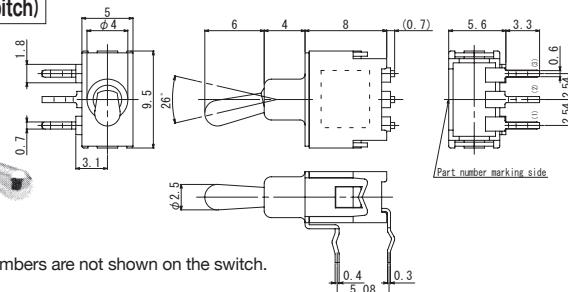
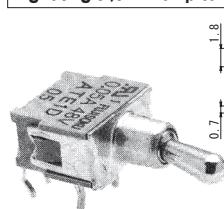
: Optional Accessories.

ATE

SPDT

(Mounting height : 3.1mm)

Right angle (0.2 inch pitch)



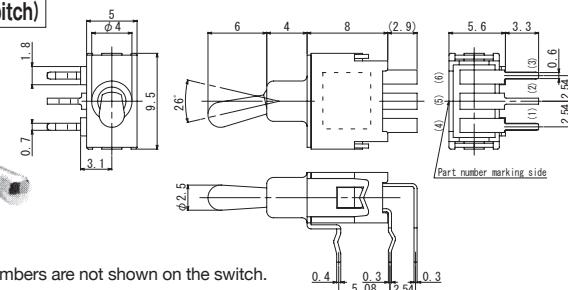
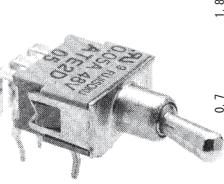
Terminal numbers are not shown on the switch.

Part No.	Switching function	Viewed from part No. marking side		
ATE1D-5M3-10-Z	ON	—	ON	
ATE1E-5M3-10-Z	ON	OFF	ON	
ATE1G-5M3-10-Z	(ON)	OFF	(ON)	
ATE1H-5M3-10-Z	ON	OFF	(ON)	
Connecting terminals	2-3	—	2-1	

DPDT

(Mounting height : 3.1mm)

Right angle (0.2 inch pitch)



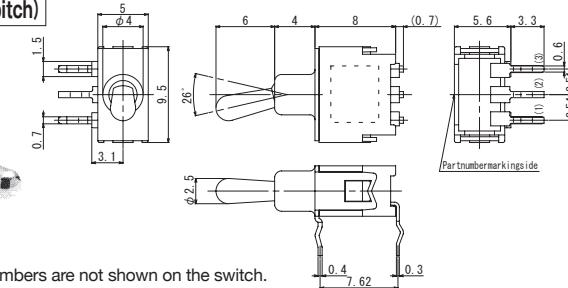
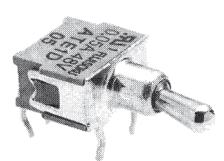
Terminal numbers are not shown on the switch.

Part No.	Switching function	Viewed from part No. marking side		
ATE2D-5M3-10-Z	ON	—	ON	
ATE2G-5M3-10-Z	(ON)	OFF	(ON)	
Connecting terminals	2-3 5-6	—	2-1 5-4	

SPDT

(Mounting height : 3.1mm)

Right angle (0.3 inch pitch)

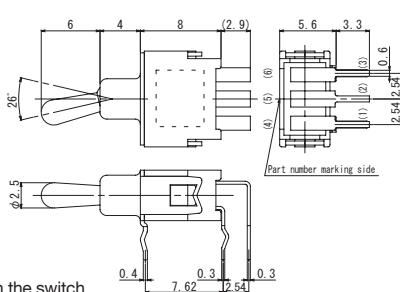
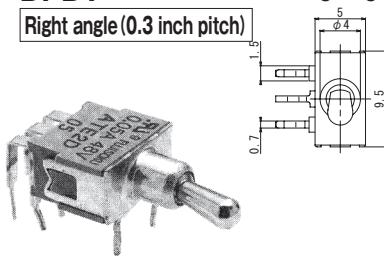


Terminal numbers are not shown on the switch.

Part No.	Switching function	Viewed from part No. marking side		
ATE1D-6M3-10-Z	ON	—	ON	
ATE1E-6M3-10-Z	ON	OFF	ON	
ATE1F-6M3-10-Z	ON	—	(ON)	
ATE1G-6M3-10-Z	(ON)	OFF	(ON)	
ATE1H-6M3-10-Z	ON	OFF	(ON)	
Connecting terminals	2-3	—	2-1	

DPDT

(Mounting height : 3.1mm)

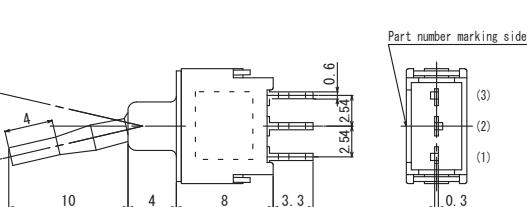
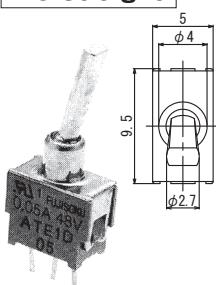


Terminal numbers are not shown on the switch.

Part No.	Switching function	Viewed from part No. marking side		
		ON	—	ON
ATE2D-6M3-10-Z	ON	—	—	ON
Connecting terminals	2-3 5-6	—	—	2-1 5-4

SPDT**PC Straight**

Flat Toggle



Terminal numbers are not shown on the switch.

Part No.	Switching function	Viewed from part No. marking side		
		ON	—	ON
ATE1D-2F3-10-Z	ON	—	—	ON
ATE1E-2F3-10-Z	ON	OFF	—	ON
Connecting terminals	2-3	—	—	2-1

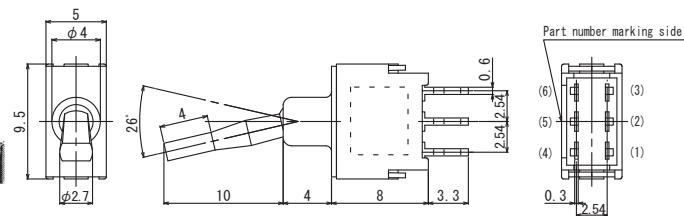
ATE

DPDT

PC Straight



(Space between terminal rows (Double pole): 2.54 mm)



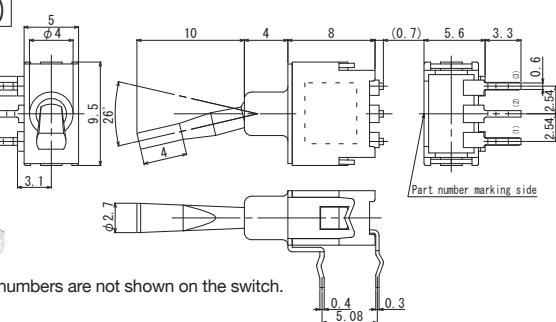
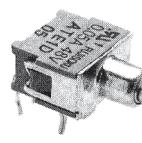
Terminal numbers are not shown on the switch.

Part No.	Switching function		
	Viewed from part No. marking side	ON	OFF
★ATE2D-2F3-10-Z	ON	—	ON
★ATE2G-2F3-10-Z	(ON)	OFF	(ON)
Connecting terminals	2-3 5-6	—	2-1 5-4

SPDT

(Mounting height : 3.1mm)

Right angle (0.2 inch pitch)



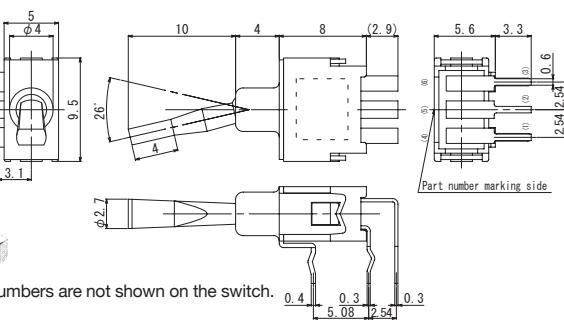
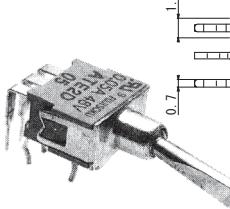
Terminal numbers are not shown on the switch.

Part No.	Switching function		
	Viewed from part No. marking side	ON	OFF
★ATE1G-5F3-10-Z	(ON)	OFF	(ON)
★ATE1H-5F3-10-Z	ON	OFF	(ON)
Connecting terminals	2-3	—	2-1

DPDT

(Mounting height : 3.1mm)

Right angle (0.2 inch pitch)



Terminal numbers are not shown on the switch.

Part No.	Switching function		
	Viewed from part No. marking side	ON	OFF
★ATE2D-5F3-10-Z	ON	—	ON
Connecting terminals	2-3 5-6	—	2-1 5-4

(ON) : Momentary.

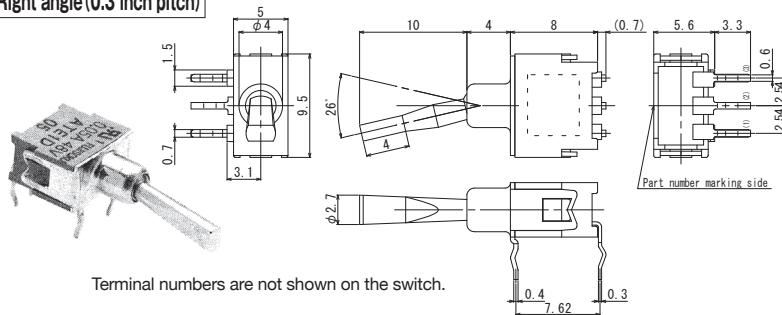
★ : Semi-standard products.

★ : Made to order products.

SPDT

(Mounting height : 3.1mm)

Right angle (0.3 inch pitch)

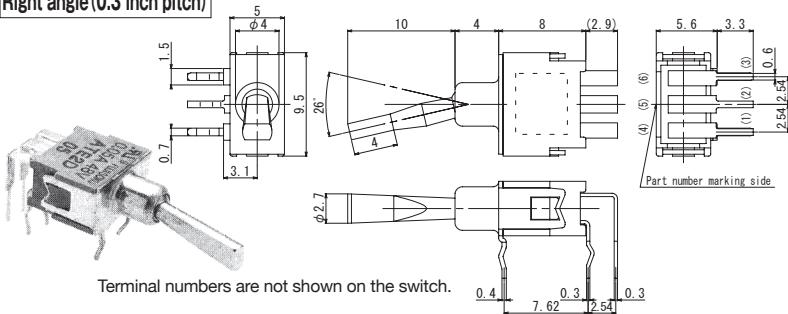


Part No.	Switching function		
	Viewed from part No. marking side	(ON)	OFF
★ATE1G-6F3-10-Z	(ON)	OFF	(ON)
Connecting terminals	2-3	—	2-1

DPDT

(Mounting height : 3.1mm)

Right angle (0.3 inch pitch)



Part No.	Switching function		
	Viewed from part No. marking side	ON	—
★ATE2D-6F3-10-Z	ON	—	ON
Connecting terminals	2-3 5-6	—	2-1 5-4

ATE-J(Plastic type)

Part Numbering(Plastic cap•Rocker type)

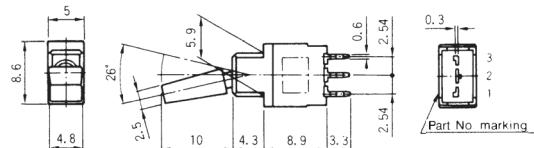
A	TE	1	D	—	2	J	3	—	10	—	Z
Series code	Actuator shape	Number of poles	Switching function		Terminal style	Actuator shape	Bracket style		Clip mechanism		
Code TE	Type Toggle type	Fig. 1	Number of poles 1 pole	Code D	Switching function ON — ON	Fig. 2	Terminal style P/C terminal	Code J	Actuator shape Plastic Knob type	Fig. 3	Bracket Without bracket
		Fig. 2	2 poles	Code E	ON-OFF-ON	Fig. 7	Vertical mounting				

SPDT

PC Straight



Mount with CAP



Part No.	Switching function	Viewed from part No. marking side		
		ON	—	ON
★ATE1D-2J3-10-Z	ON	—	ON	
★ATE1E-2J3-10-Z	ON	OFF	ON	
Connecting terminals	2-3	—	2-1	

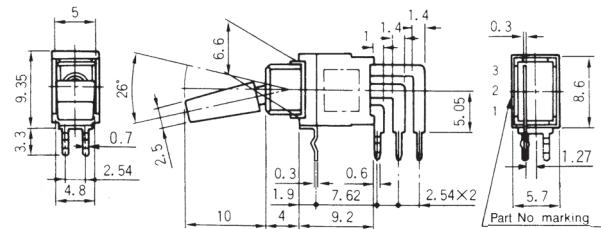
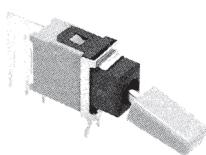
●Color cap and Rocker accessories are sold separately.

Terminal numbers are not shown on the switch.

(ON) : Momentary.

★ : Made to order products.

☆ : Semi-standard products.

SPDT**Vertical mounting**Mount with **CAP**

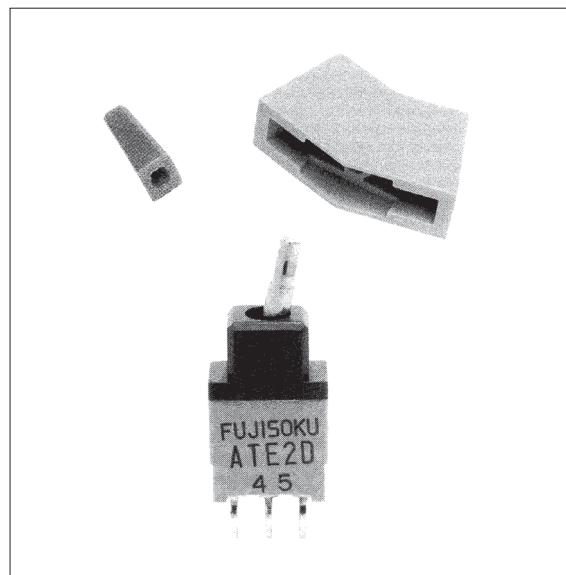
Terminal numbers are not shown on the switch.

Part No.	Switching function		
	Viewed from part No. marking side	ON	—
★ATE1D-7J3-10-Z	ON	—	ON
Connecting terminals	2-3	—	2-1

■Optional Accessories

⟨Sold separately⟩

Type	ATE-2J・7J	ATE-2J・7J
Part name	Color Cap	Rocker
Dimensions		
White	140000050884	140000481541
Red	140000050886	140000481543
Black	140000050885	140000481542

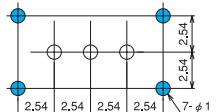
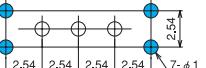
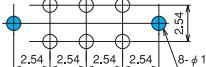
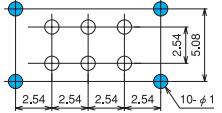
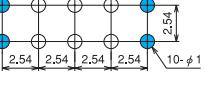
■Color Cap and Rocker**Installation Procedure for ATE-J type**

ATE

■PC Hole Layouts

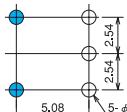
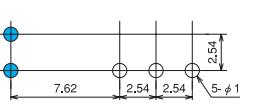
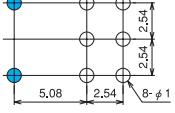
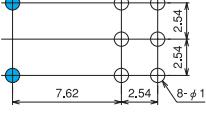
PC terminal

(Top view)

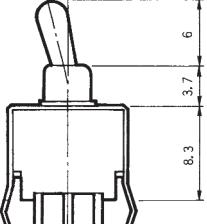
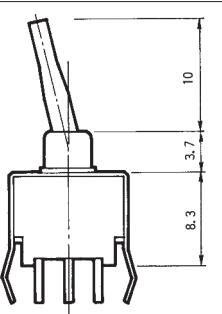
Series code	ATE-2M-2F-2J	ATE-2M-2F		
Installation	Without bracket	When optional bracket is used		
		140000640314	140000640315	140000640318
1-pole				
2-poles 2.54mm Two terminal rows				

Right Angle terminal • Vertical Mount terminal

(Top view)

Series code	ATE-5M-5F	ATE-6M-6F	ATE-7J
Terminal	R/A 0.2-inch pitch	R/A 0.3-inch pitch	Vertical mount
1-pole			
2-poles			

■Bracket Mounted Dimensions.

Type	ATE-2M	ATE-2F
	Standard	Flat
Dimensions		

■Soldering Specifications

(1)Manual Soldering

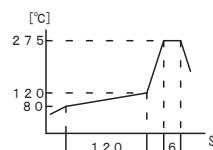
Device : Soldering iron

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 seconds

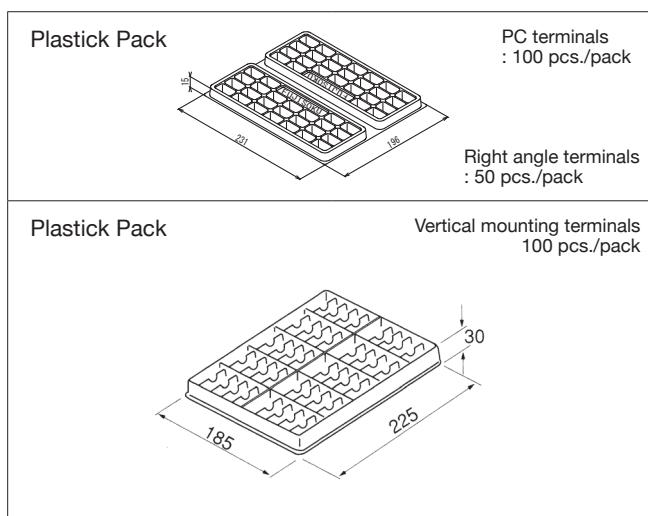
(3)Install the cap/rocker accessory after soldering and cleaning.

■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.

■Packaging Specifications



■Mounting of Switch

- Use PC boards with hole diameter of 1mm.
- Do not bend the terminal pins before mounting the switch on the PC board.
- After mounting the switch, do not place the device in such a way that the device weight will be applied on to the actuator of the switch.
- Do not apply load exceeding 12.7 N to the actuator.

