



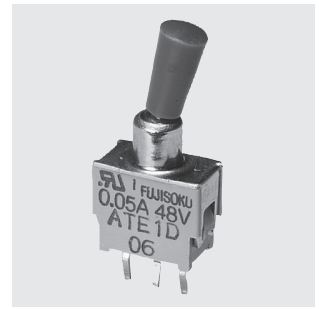
**THE DATASHEET OF
ATE2D-2M3-10-Z**



ATE

Subminiature Toggle Switches

Washable
RoHS Compliant



UL

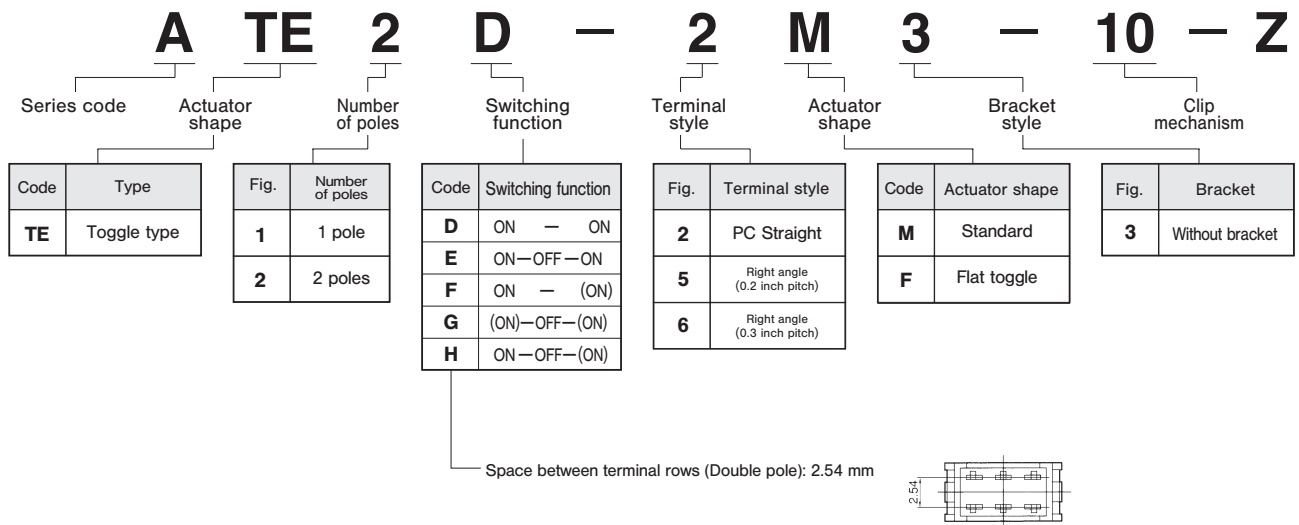
Features

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

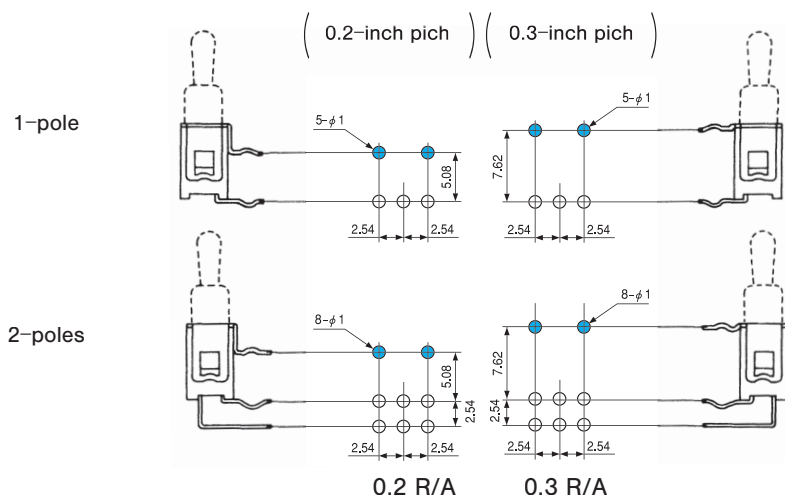
Specifications

Rating	Max.	50mA 60VAC/DC 0.4VA AC/DC
	Min.	1μA 20mVAC/DC
	UL	48VAC/DC 50mA
Initial contact resistance	50mΩ Max.	(1.5mA 200μVAC)
Dielectric strength	250VAC 1 minute	
Insulation resistance	500MΩ 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



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

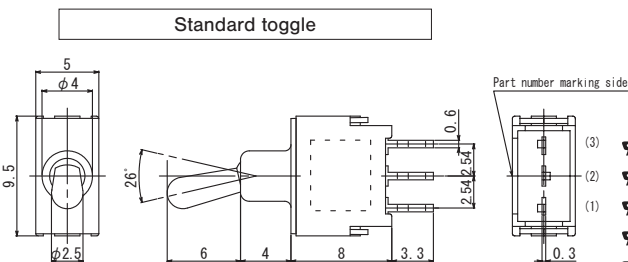
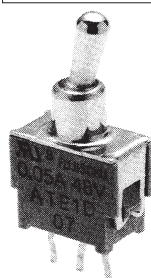
Refer to PC Hole Layouts.

Part name	Bracket		
Poles	Single pole	Double poles	
Box size	5 mm	7.5 mm	5 mm
Type	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

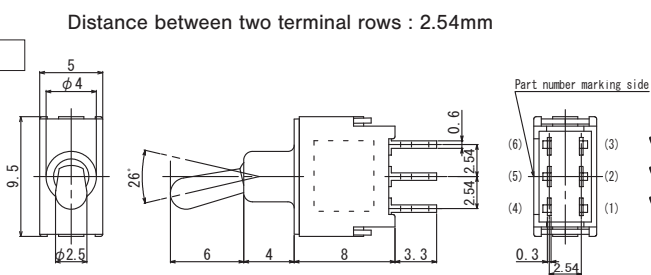
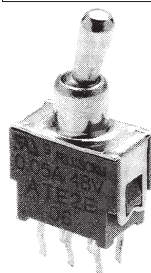


Terminal numbers are not shown on the switch.

Switching function	Viewed from part No. marking side		
Part No.			
⚡ 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



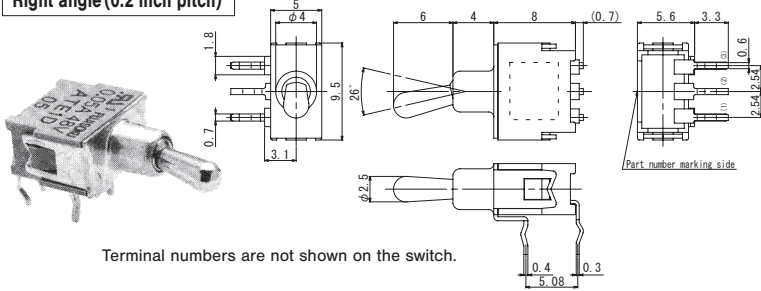
Terminal numbers are not shown on the switch.

Switching function	Viewed from part No. marking side		
Part No.			
⚡ ATE2D-2M3-10-Z	ON	-	ON
⚡ ☆ATE2E-2M3-10-Z	ON	OFF	ON
⚡ ☆ATE2G-2M3-10-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)

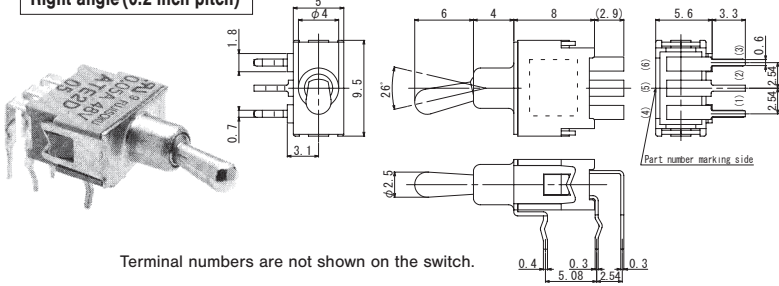


Part No.	Switching function		
	Viewed from part No. marking side		
ATE1D-5M3-10-Z	ON	-	ON
☆ ATE1E-5M3-10-Z	ON	OFF	ON
☆ ATE1G-5M3-10-Z	(ON)	OFF	(ON)
★ ATE1H-5M3-10-Z	ON	OFF	(ON)
Connecting terminals	2-3	-	2-1

DPDT

(Mounting height : 3.1mm)

Right angle (0.2 inch pitch)

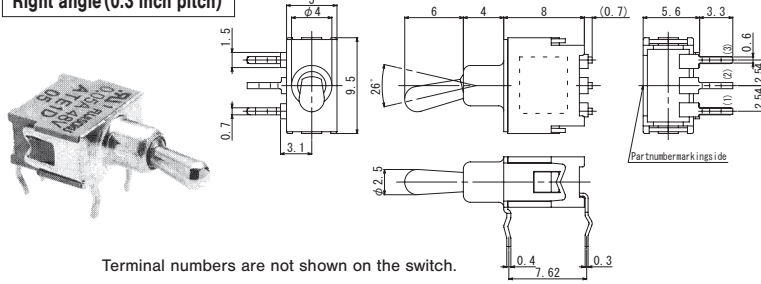


Part No.	Switching function		
	Viewed from part No. marking side		
☆ ATE2D-5M3-10-Z	ON	-	ON
☆ ATE2G-5M3-10-Z	(ON)	OFF	(ON)
Connecting terminals	2-3 5-6	-	2-1 5-4

SPDT

(Mounting height : 3.1mm)

Right angle (0.3 inch pitch)

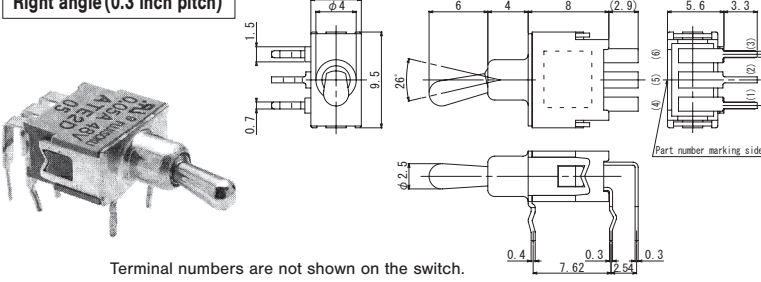


Part No.	Switching function		
	Viewed from part No. marking side		
ATE1D-6M3-10-Z	ON	-	ON
ATE1E-6M3-10-Z	ON	OFF	ON
ATE1F-6M3-10-Z	ON	-	(ON)
☆ ATE1G-6M3-10-Z	(ON)	OFF	(ON)
☆ ATE1H-6M3-10-Z	ON	OFF	(ON)
Connecting terminals	2-3	-	2-1

DPDT

(Mounting height : 3.1mm)

Right angle (0.3 inch pitch)

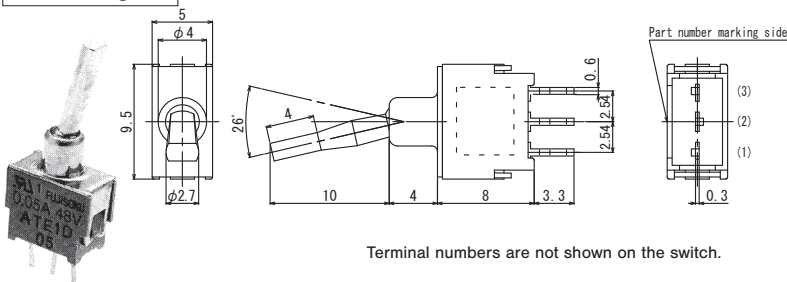


Part No.	Switching function		
	Viewed from part No. marking side		
ATE2D-6M3-10-Z	ON	-	ON
Connecting terminals	2-3 5-6	-	2-1 5-4

SPDT

Flat toggle

PC Straight



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

PC Hole Layouts

PC Straight

(Top view)

	ATE-2M-2F	ATE-2M-2F		
Installation	Whithout bracket	When optional bracket is used		
		140000640314	140000640315	140000640318
1-pole				
2-poles Two terminal rows				

Right Angle terminal • Vertical Mount terminal

(Top view)

	ATE-5M • 5F	ATE-6M • 6F
Terminal	R/A 0.2-inch pitch	R/A 0.3-inch pitch
1-pole		
2-poles		

Bracket Mounted Dimensions.

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

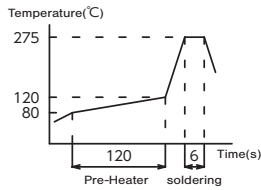
■ Soldering Specifications

(1) Manual Soldering

Device : Soldering iron
380°C, Max.; 3 seconds, Max.

(2) Auto Soldering

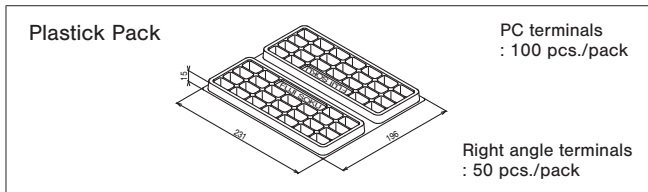
Device : Jet wave type or dip type
275°C, Max.; 6 seconds, Max.



- 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.

■ Packaging Specifications

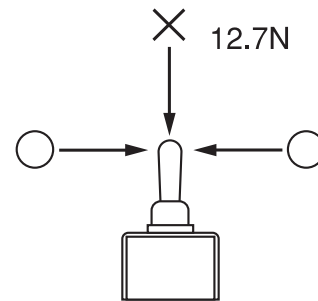


■ Flux Cleaning

- (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.



■ 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.



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