

# ATE4/ATLE4

Washable

## Subminiature Toggle Switch With Locking Lever



UL

RoHS Compliant

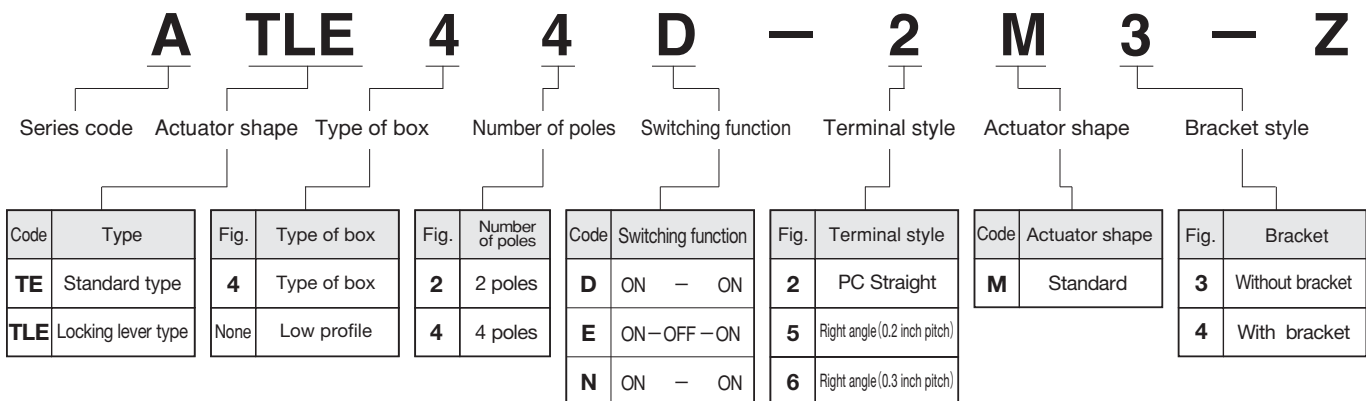
### Features

1. Twin-contact clip mechanism for high reliability.
2. Process sealed structure

### Specifications

Rating	Max.	50mA 48VAC/DC
	Min.	1 $\mu$ A 20mVAC/DC
Initial contact resistance	100m $\Omega$ max. (1.5mA 200 $\mu$ VAC)	
Dielectric strength	500VAC 1 minute	
Insulation resistance	500M $\Omega$ min. (250VDC)	
Electrical life	10,000 cycles at max. rating	
Operating temperature range	-20°C ~ +85°C	
Storage temperature range	-40°C ~ +85°C	

### Part Numbering



### PC Hole Layouts

Type	Terminal style	PC Straight (Without bracket)
ATE42□-2M3-Z ATLE42□-2M3-Z	2-poles	
ATE42□-2M3-Z ATLE44□-2M3-Z	4-poles	

Type	Terminal style	PC Straight (With bracket)
ATE42□-2M3-Z ATLE42□-2M3-Z	2-poles	
ATE44□-2M4-Z ATLE44□-2M4-Z	4-poles	

# ATE

## PC Hole Layouts

Type	Terminal style	Right angle
ATE42□-6M3-Z ATLE42□-6M3-Z	2-poles	
ATE44□-6M3-Z ATLE44□-6M3-Z	4-poles	

## Packaging Specification

<b>Plastick Pack</b>  <b>ATE-2M</b>	Standard type 50 pcs/pack  
<b>Plastick Pack</b>  <b>ATE-6M</b> <b>ATLE-2M</b> <b>ATLE-5M</b> <b>ATLE-6M</b>	Right-angle type 50 pcs/pack  

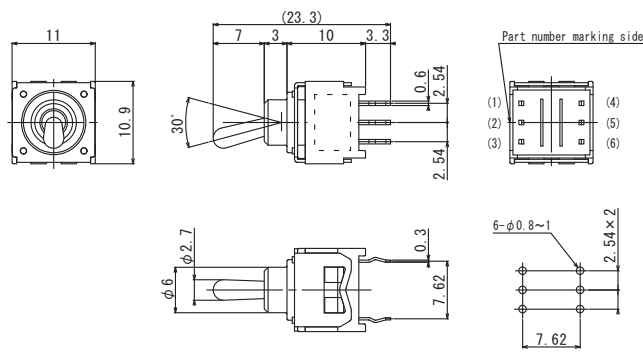
## Type of Actuator

Standard type	Locking lever type

## ATE (Subminiature Toggle Switch)

### DPDT

#### PC Straight



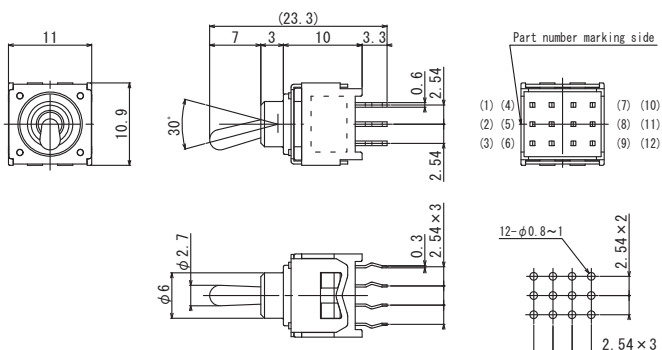
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.			
★ ATE42D-2M3-Z	ON	—	ON
★ ATE42E-2M3-Z	ON	OFF	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

### 4PDT

#### PC Straight



Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.			
★ ATE44D-2M3-Z	ON	—	ON
☆ ATE44E-2M3-Z	ON	OFF	ON
Connecting terminals	2-1 5-4 8-7 11-10	—	2-3 5-6 8-9 11-12

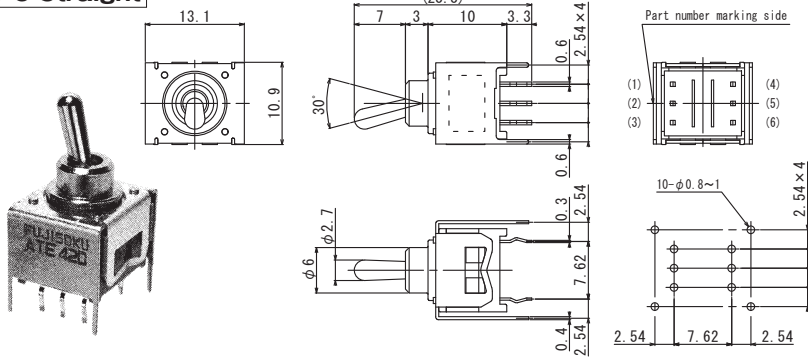
★ : Made-to-order items.

☆ : Semi-standard products.

# ATE(Subminiature Toggle Switch)

## DPDT

### PC Straight



(With bracket)

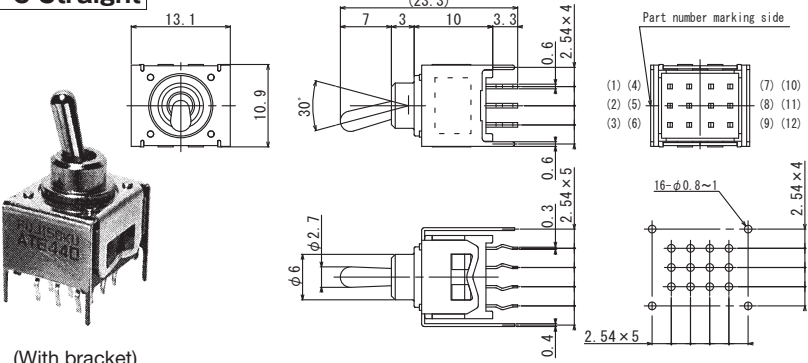
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.	<div style="display: flex; justify-content: space-around;"> <span>(1) (2) (3)</span> <span>(4) (5) (6)</span> </div>		
★ATE42D-2M4-Z	ON	—	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

## 4PDT

### PC Straight



(With bracket)

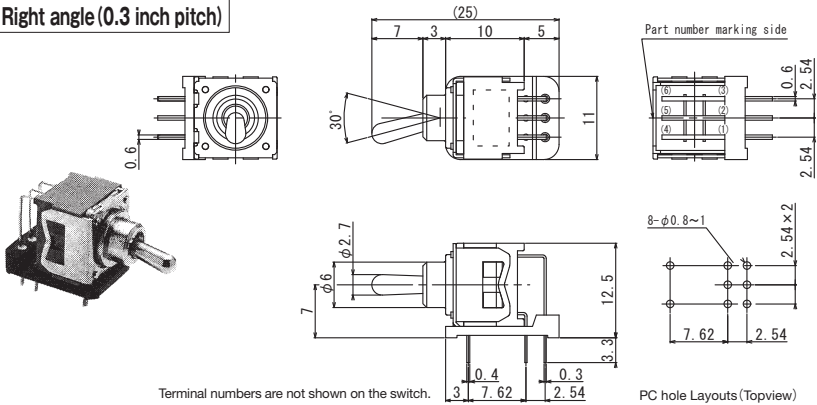
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.	<div style="display: flex; justify-content: space-around;"> <span>(1) (4) (2) (5) (3) (6)</span> <span>(7) (10) (8) (11) (9) (12)</span> </div>		
☆ATE44D-2M4-Z	ON	—	ON
Connecting terminals	2-1 5-4 8-7 11-10	—	2-3 5-6 8-9 11-12

## DPDT (Mounting height : 7mm)

### Right angle (0.3 inch pitch)



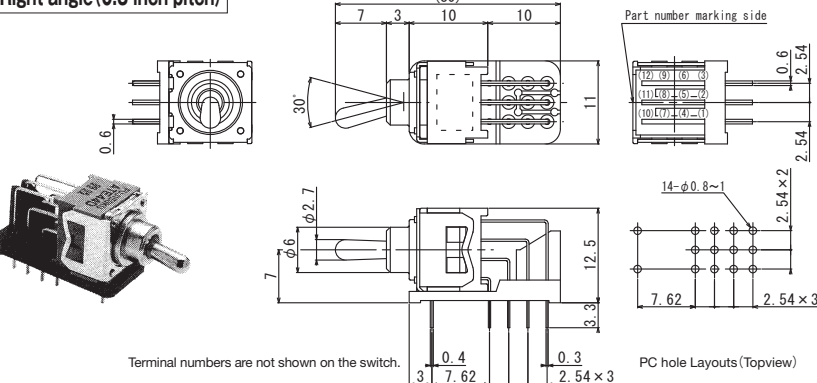
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.	<div style="display: flex; justify-content: space-around;"> <span>(8) (5) (4) (1)</span> <span>(3) (2) (7) (6)</span> </div>		
★ATE42D-6M3-Z	ON	—	ON
Connecting terminals	2-3 5-6	—	2-1 5-4

## 4PDT (Mounting height : 7mm)

### Right angle (0.3 inch pitch)



Terminal numbers are not shown on the switch.

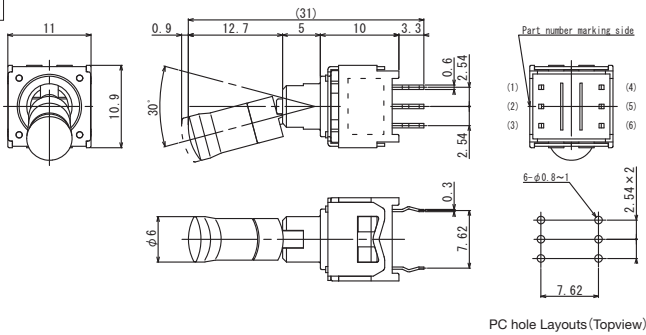
PC hole Layouts (Topview)

Switching function	Viewed from part No. marking side		
Part No.	<div style="display: flex; justify-content: space-around;"> <span>(12) (9) (11) (10) (8) (7) (6) (5) (4) (3) (2) (1)</span> </div>		
★ATE44D-6M3-Z	ON	—	ON
Connecting terminals	2-3 5-6 8-9 11-12	—	2-1 5-4 8-7 11-10

# ATLE(Locking Lever Toggle Switch)

## DPDT

### PC Straight



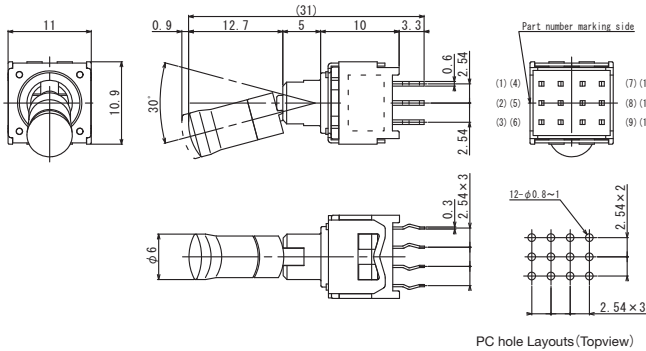
PC hole Layouts (Topview)

Terminal numbers are not shown on the switch.

Switching function	Viewed from part No. marking side		
Part No.			
★ATLE42D-2M3-Z	ON	—	ON
★ATLE42E-2M3-Z	ON	OFF	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

## 4PDT

### PC Straight



PC hole Layouts (Topview)

Terminal numbers are not shown on the switch.

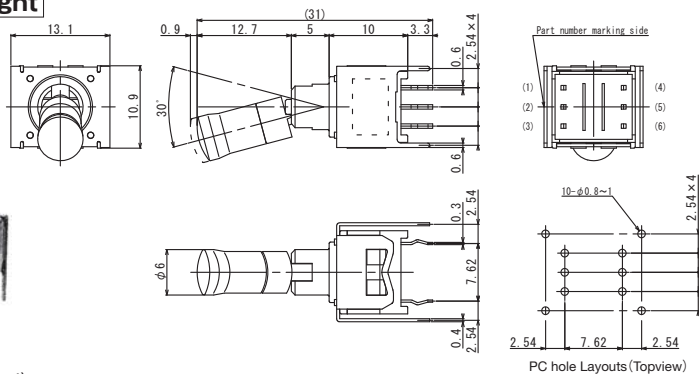
Switching function	Viewed from part No. marking side		
Part No.			
★ATLE44D-2M3-Z	ON	—	ON
★ATLE44E-2M3-Z	ON	OFF	ON
Connecting terminals	2-1 5-4 8-7 11-10	—	2-3 5-6 8-9 11-12

## DPDT

### PC Straight



(With bracket)



PC hole Layouts (Topview)

Terminal numbers are not shown on the switch.

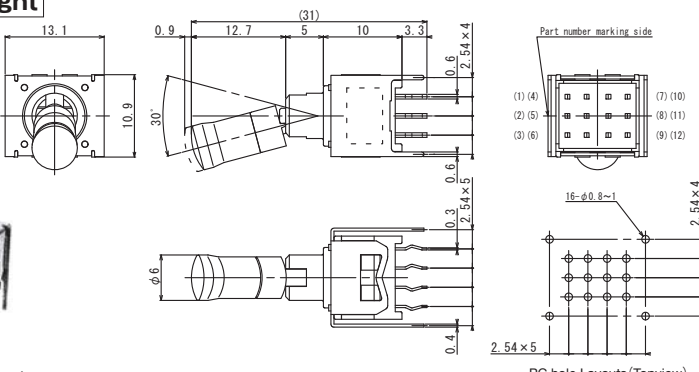
Switching function	Viewed from part No. marking side		
Part No.			
☆ATLE42D-2M4-Z	ON	—	ON
☆ATLE42E-2M4-Z	ON	OFF	ON
Connecting terminals	2-1 5-4	—	2-3 5-6

## 4PDT

### PC Straight



(With bracket)



PC hole Layouts (Topview)

Terminal numbers are not shown on the switch.

Switching function	Viewed from part No. marking side		
Part No.			
★ATLE44D-2M4-Z	ON	—	ON
★ATLE44E-2M4-Z	ON	OFF	ON
Connecting terminals	2-1 5-4 8-7 11-10	—	2-3 5-6 8-9 11-12

★ : Made to order products.

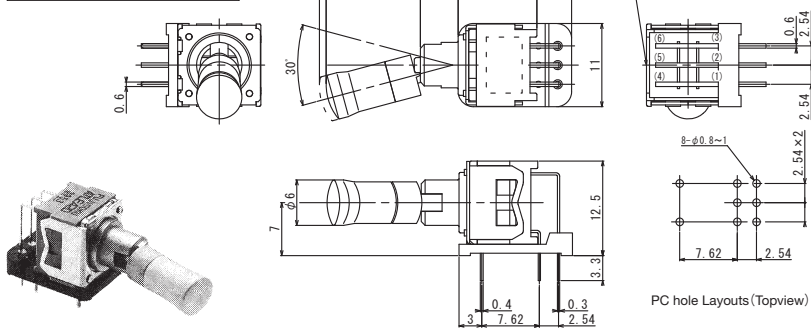
☆ : Semi-standard products.

# ATLE (Locking Lever Toggle Switch)

## DPDT

(Mounting height : 7mm)

Right angle (0.3 inch pitch)



Switching function	Viewed from part No. marking side		
Part No.			
★ATLE42D-6M3-Z	ON	—	ON
★ATLE42E-6M3-Z	ON	OFF	ON
Connecting terminals	2-3 5-6	—	2-1 5-4

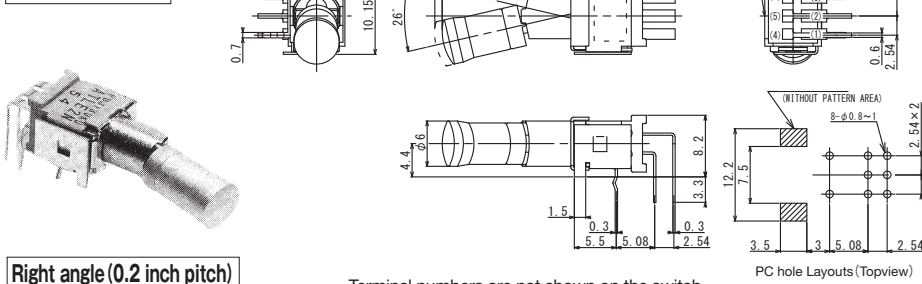
Terminal numbers are not shown on the switch.

## DPDT

(Mounting height : 4.4mm)

ATLE2N-5M3-Z

Low profile



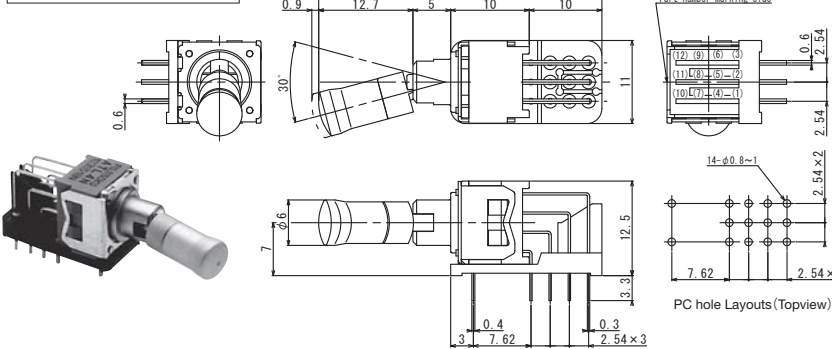
Switching function	Viewed from part No. marking side	
Part No.		
★ATLE2N-5M3-Z	ON	ON
Connecting terminals	2-3 5-6	2-1 5-4

Terminal numbers are not shown on the switch.

## 4PDT

(Mounting height : 7mm)

Right angle (0.3 inch pitch)



Switching function	Viewed from part No. marking side		
Part No.			
★ATLE44D-6M3-Z	ON	—	ON
★ATLE44E-6M3-Z	ON	OFF	ON
Connecting terminals	2-3 5-6 8-9 11-12	—	2-1 5-4 8-7 11-10

Terminal numbers are not shown on the switch.

## Standard Accessories

### For Locking Lever Type

《Supplied separately》

Color Cap		
Dimensions	Color	Part No.
	Silver	140000470225
	Red	140000470234
	Blue	140000470259
	Black	140000470260

A Silver cap is attached to the switch. Red, Blue, and Black caps are also available (sold separately).

## 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.

## 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.

## Mounting of Switch

- Do not bend the terminals 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 12.74 N to the knob.