

ATE4/ATLE4

Subminiature Toggle Switch With Locking Lever

Washable

FUJISOKU
SWITCHES



UL

RoHS Compliant

Features

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

Specifications

Rating	Max.	50mA 48VAC/DC
	Min.	1 μ A 20mVAC/DC
Initial contact resistance	100m Ω max. (1.5mA 200 μ VAC)	
Dielectric strength	500VAC 1 minute	
Insulation resistance	500M Ω 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

A

TLE

4

4

D

—

2

M

3

—

Z

Series code

Actuator shape

Type of box

Number of poles

Switching function

Terminal style

Actuator shape

Bracket style

Code

Type

Fig.

Type of box

Fig.

Number of poles

Code

Switching function

Fig.

Terminal style

Code

Actuator shape

Fig.

Bracket

TE

Standard type

4

Type of box

2

2 poles

D

ON — ON

2

PC Straight

M

Standard

3

Without bracket

TLE

Locking lever type

None

Low profile

4

4 poles

E

ON—OFF—ON

5

Right angle (0.2 inch pitch)

4

With bracket

N

ON — ON

6

Right angle (0.3 inch pitch)

PC Hole Layouts

Type	Terminal style	PC Straight (Without bracket)
ATE42□-2M3-Z ATLE42□-2M3-Z	2—poles	
ATE44□-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	

PC Hole Layouts

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

Packaging Specification

Plastick Pack	Standard type 50 pcs/pack
ATE—2M	
Plastick Pack	Right—angle type 50 pcs/pack
ATE—6M ATLE—2M ATLE—5M ATLE—6M	

Type of Actuator

Standard type	Locking lever type

ATE(Subminiature Toggle Switch)

DPDT

PC Straight

Part number marking side

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

Part number marking side

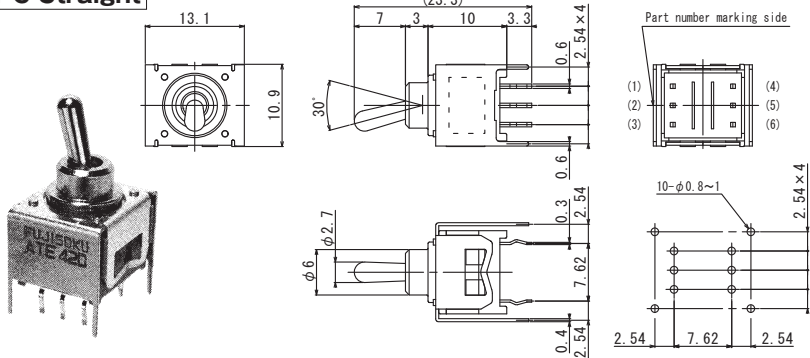
PC hole Layouts (Topview)

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

ATE(Subminiature Toggle Switch)

DPDT

PC Straight



(With bracket)

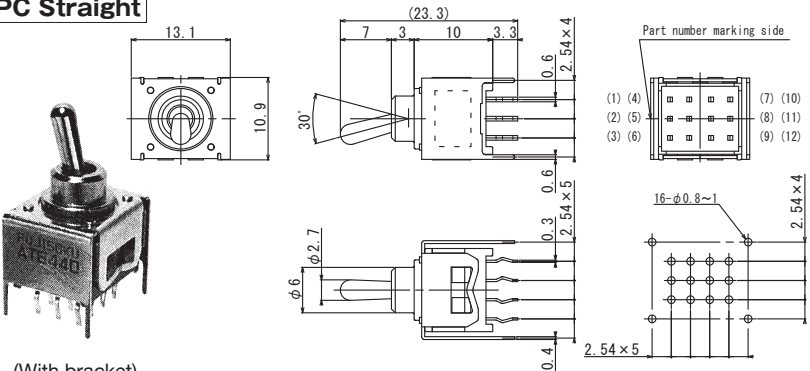
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function Part No.	Viewed from part No. marking side		
★ ATE42D-2M4-Z	ON	—	ON
Connecting terminals	2—1 5—4	—	2—3 5—6

4PDT

PC Straight



(With bracket)

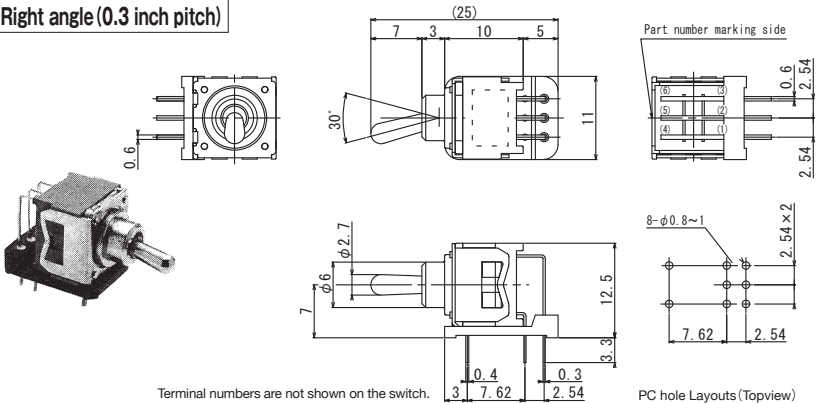
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

Switching function Part No.	Viewed from part No. marking side		
☆ 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)



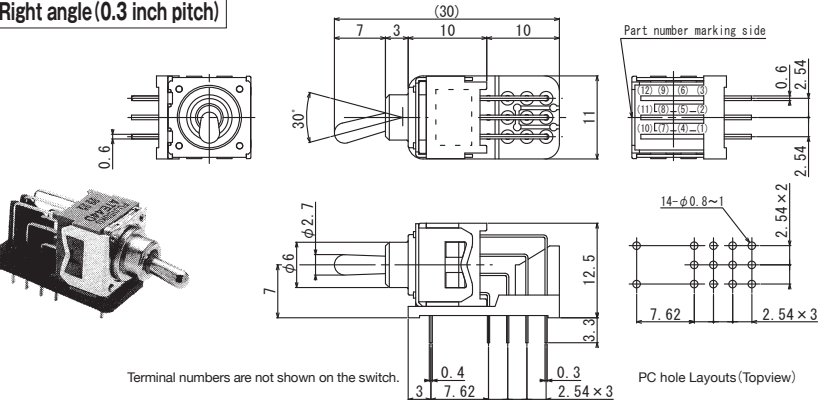
Terminal numbers are not shown on the switch.

PC hole Layouts (Topview)

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

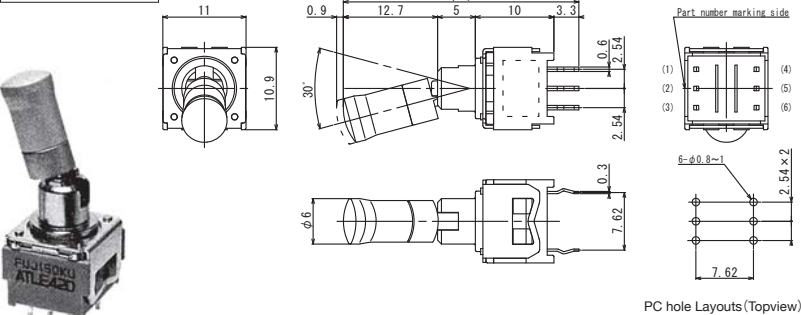
PC hole Layouts (Topview)

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

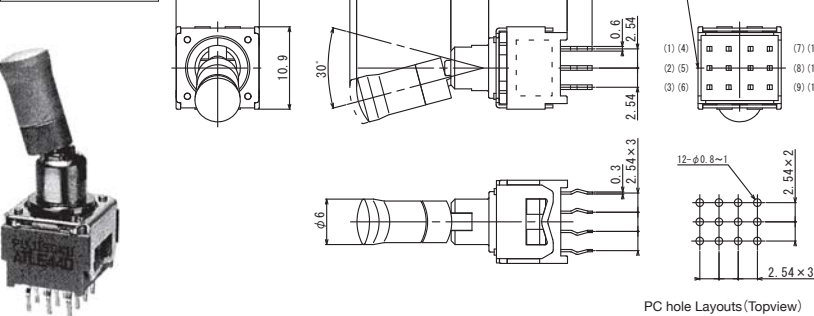


Switching function Part No.	Viewed from part No. marking side		
★ATLE42D-2M3-Z	ON	—	ON
★ATLE42E-2M3-Z	ON	OFF	ON
Connecting terminals	2—1 5—4	—	2—3 5—6

Terminal numbers are not shown on the switch.

4PDT

PC Straight

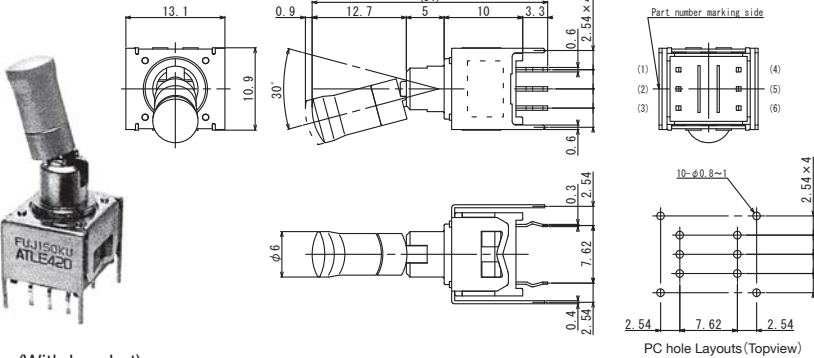


Switching function Part No.	Viewed from part No. marking side		
★ATLE44D-2M3-Z	ON	—	ON
★ATLE44E-2M3-Z	ON	OFF	ON
Connecting terminals	2—1 5—4 8—7 11—10	—	2—3 5—6 8—9 11—12

Terminal numbers are not shown on the switch.

DPDT

PC Straight

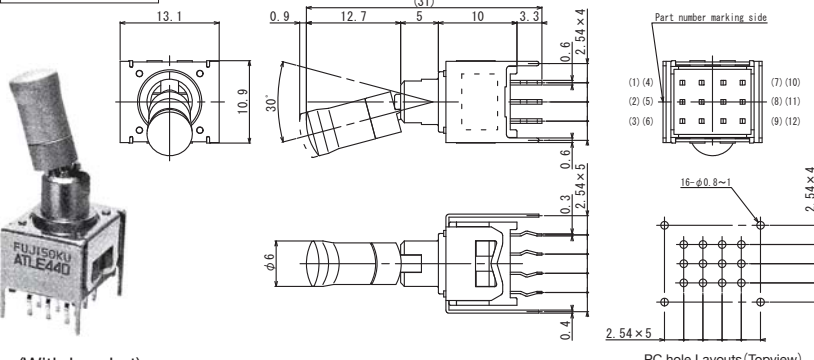


(With bracket)

Terminal numbers are not shown on the switch.

4PDT

PC Straight



(With bracket)

Terminal numbers are not shown on the switch.

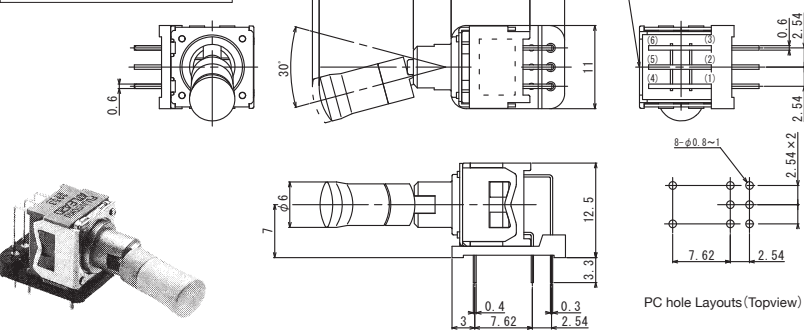
Switching function Part No.	Viewed from part No. marking side		
★ATLE44D-2M4-Z	ON	—	ON
★ATLE44E-2M4-Z	ON	OFF	ON
Connecting terminals	2—1 5—4 8—7 11—10	—	2—3 5—6 8—9 11—12

ATLE (Locking Lever Toggle Switch)

DPDT

(Mounting height : 7mm)

Right angle (0.3 inch pitch)



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

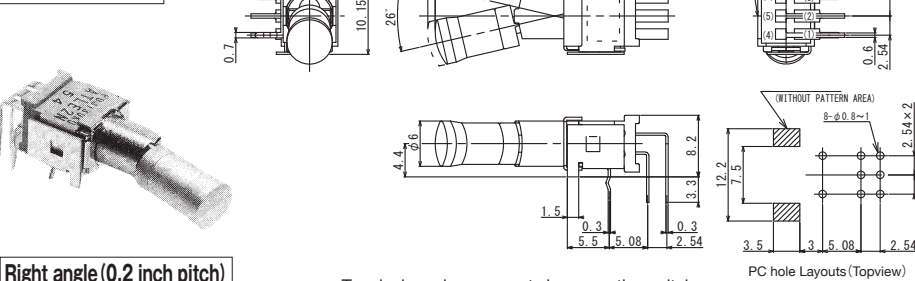
Terminal numbers are not shown on the switch.

DPDT

(Mounting height : 4.4mm)

ATLE2N—5M3—Z

Low profile



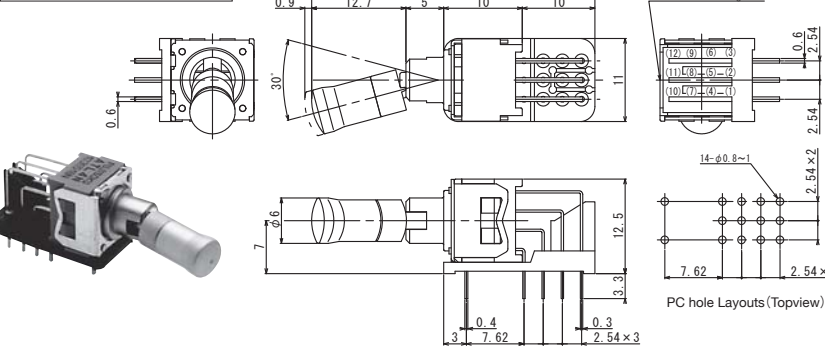
Switching function Part No.	Viewed from part No. marking side	
★ATLE2N-5M3-Z	ON	ON
Connecting terminals	2—3 5—6	2—1 5—4

Terminal numbers are not shown on the switch.

4PDT

(Mounting height : 7mm)

Right angle (0.3 inch pitch)



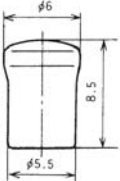
Switching function Part No.	Viewed from part No. marking side		
★ATLE42D-6M3-Z	ON	—	ON
★ATLE42E-6M3-Z	ON	OFF	ON
Connecting terminals	2—3 5—6 8—9 11—12	—	2—1 5—4 8—7 11—10

Terminal numbers are not shown on the switch.

■Standard Accessories

For Locking Lever Type

《Supplied separately》

Color Cap		
Dimensions	Color	Part No.
 Alumite finish Aliminium alloy	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.