

APE

Washable

RoHS Compliant

Subminiature Pushbutton Switches

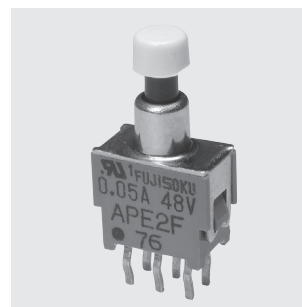
UL

■Features

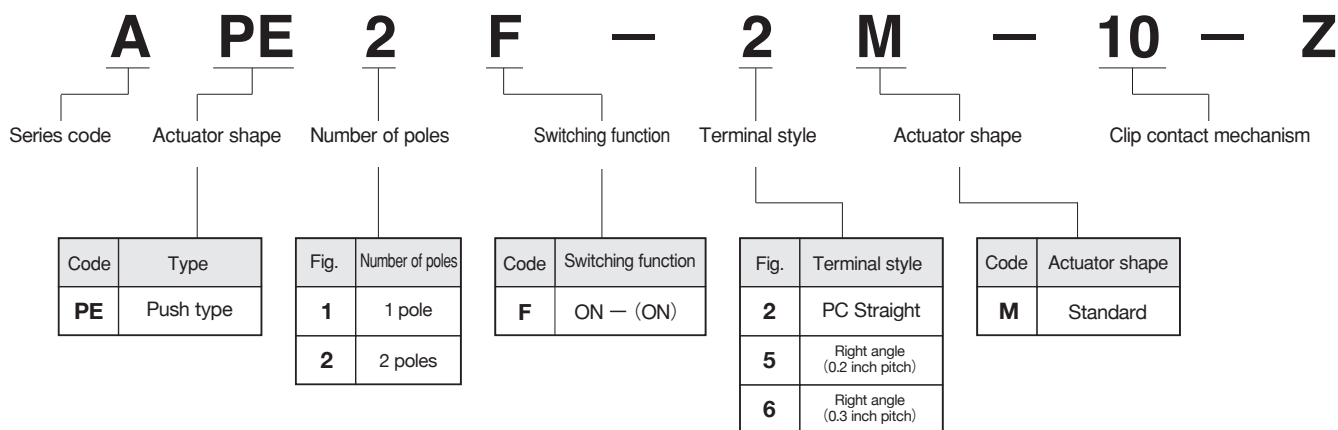
1. Twin-contact clip mechanism for high reliability.
2. Process sealed structure
3. Gold-plated contacts.
4. Terminal pin pitch: 2.54 mm.
5. UL recognized

■Specifications

Rating	0.4VA AC, DC
	Max:50mA 60VAC/DC Min:1μA 20mVAC/DC UL:48VAC/DC 50mA
Initial contact resistance	50mΩ max. (1.5mA 200μVAC)
Dielectric strength	250VAC 1 minute
Initial Insulation resistance	500MΩ min. (500VDC)
Electrical life	10,000 operations at maximum rating. 30,000 operations at 0.4VA
Operating force	0.78~2.94N
Operating temperature range	-20~+85°C
Storage temperature range	-40~+85°C



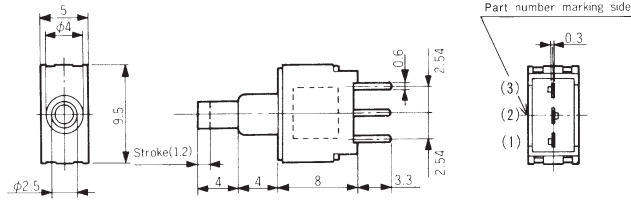
■Part Numbering



■Optional Accessories..... Page 253.

APE-M (Standard type)

SPDT

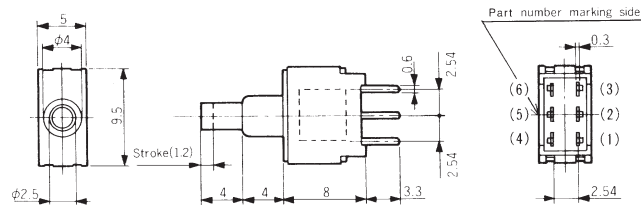


PC Straight

Terminal numbers are not shown on the switch.

Switching function		Push
Part No.	APE1F-2M-10-Z	(ON)
Connecting terminals	2-3	2-1

DPDT

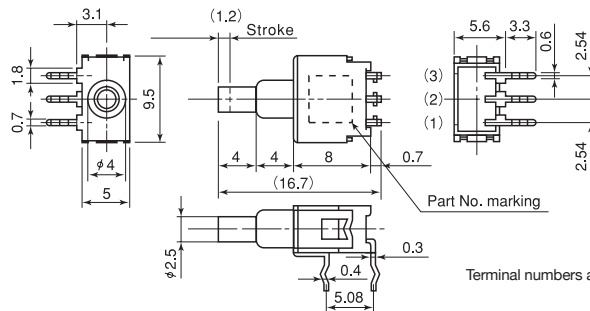
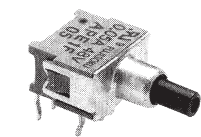


PC Straight

Terminal numbers are not shown on the switch.

Switching function		Push
Part No.	APE2F-2M-10-Z	(ON)
Connecting terminals	2-3 5-6	2-1 5-4

SPDT

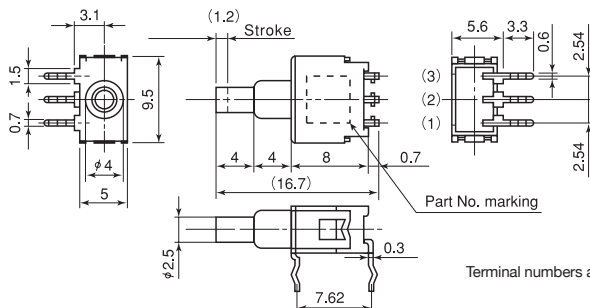
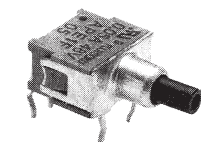


0.2R/A

Terminal numbers are not shown on the switch.

Switching function		Push
Part No.	★APE1F-5M-10-Z	(ON)
Connecting terminals	2-3	2-1

SPDT

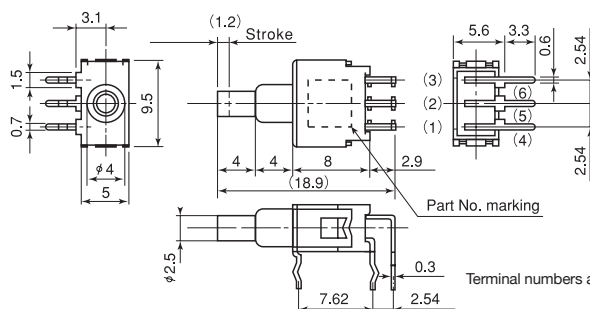
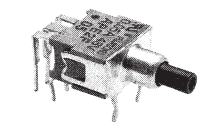


0.3R/A

Terminal numbers are not shown on the switch.

Switching function		Push
Part No.	APE1F-6M-10-Z	(ON)
Connecting terminals	2-3	2-1

DPDT

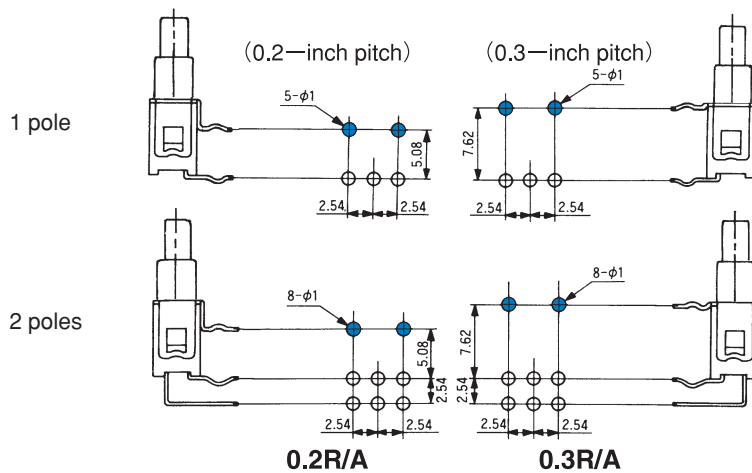


0.3R/A

Terminal numbers are not shown on the switch.

Switching function		Push
Part No.	☆APE2F-6M-10-Z	(ON)
Connecting terminals	2-3 5-6	2-1 5-4

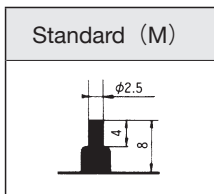
■Right angle terminals



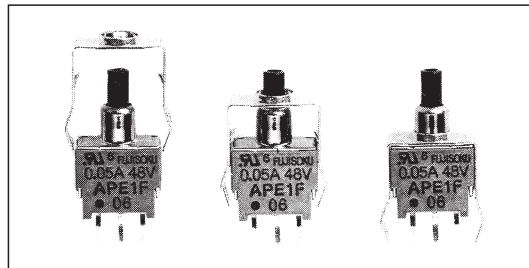
●The space between the terminal rows are available in two dimensions: 0.2 inches (5.08 mm) and 0.3 inches (7.62 mm).

[Example] 0.2-inch pitch : **APE1F-5M-10-Z**
0.3-inch pitch : **APE1F-6M-10-Z**

■Button Shape



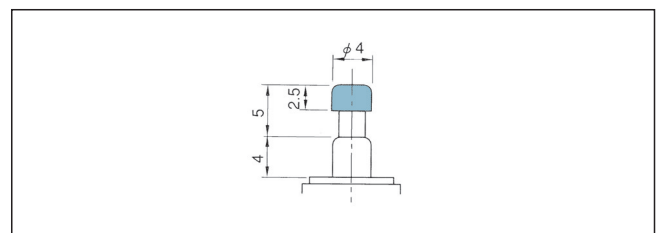
■Bracket Installation Procedure



■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. If load exceeding 12.7 N is expected to be applied to the actuator, please use a **Bracket** (optional accessory sold separately). Maximum load will be 29.4 N when a **Bracket** is used.
- Use **Bracket 140000640314** or **140000640318** for side-by-side mounting.
- To increase mounting strength, use **Bracket 140000640315**.
- PC Hole Layouts will change depending on the **Bracket**. Please refer to P.245.

■Color Cap Mounting



Refer to P.249.

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.

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.

(3)Do not use ultrasonic cleaning.

PC Hole Layouts (AP・APE)

PC Straight

Mounting		Without Bracket	When optional Bracket is used.		
Type			140000640314	140000640315	140000640318
AP-M AP-S AP-H APE	1 pole				
AP-M	2 poles				
APE	2 poles				

Right-angle Terminal

Terminal		0.2—inch pitch	0.3—inch pitch
Type			
AP-M AP-S APE	1 pole		
	2 poles		

Packaging Specification

