

APE

Washable

RoHS Compliant

Subminiature Pushbutton Switches

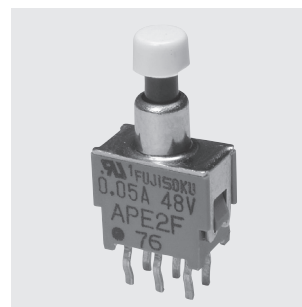
UL

■Features

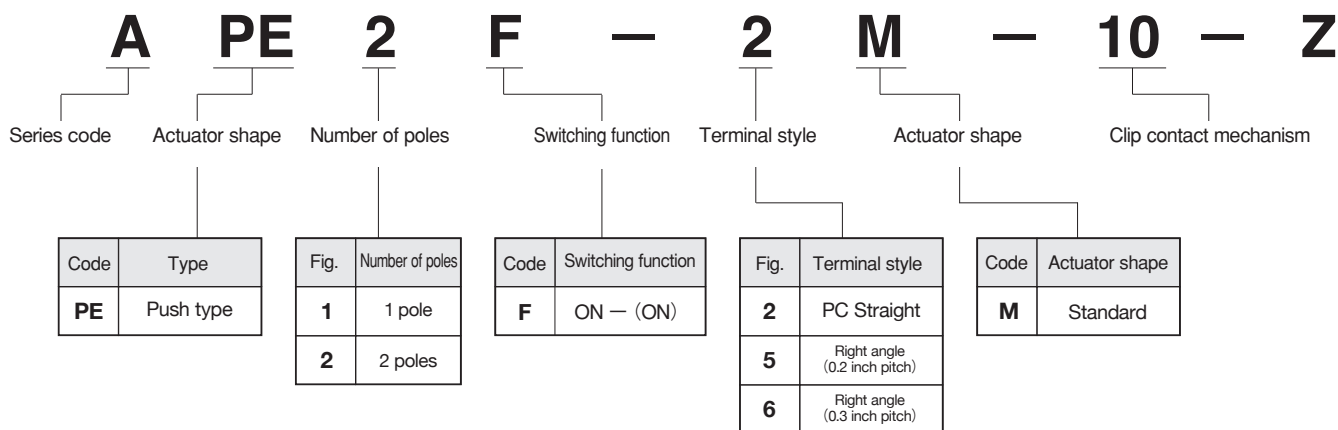
1. Twin-contact clip mechanism for high reliability.
2. Process sealed structure
3. Gold-plated contacts.
4. Terminal pin pitch: 2.54 mm.
5. UL recognized

■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



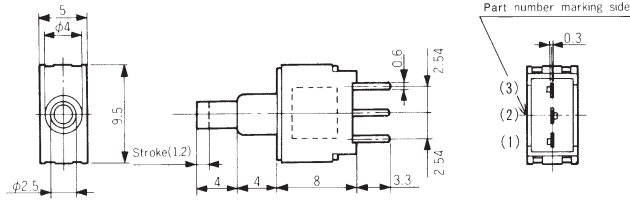
■Part Numbering



■Optional Accessories..... Page 253.

APE-M (Standard type)

SPDT

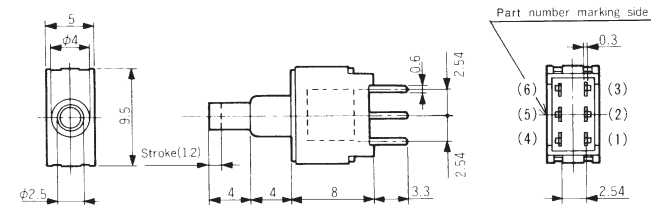


PC Straight

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

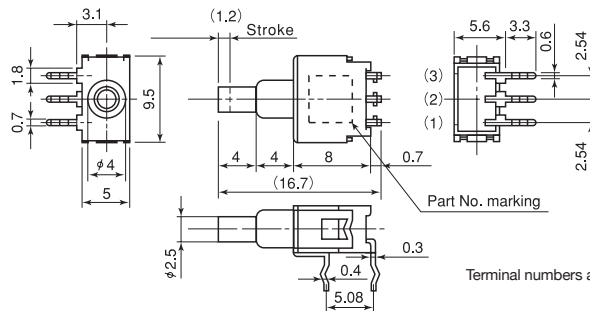
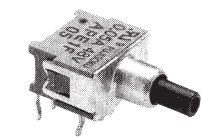


PC Straight

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

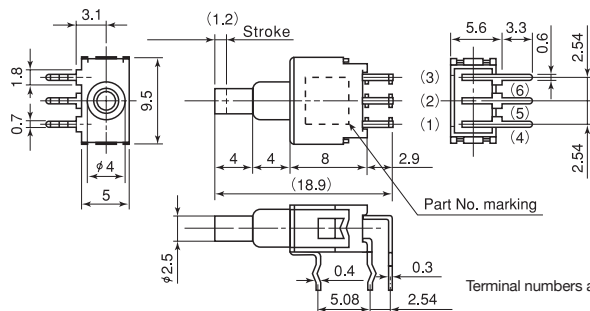


0.2R/A

Terminal numbers are not shown on the switch.

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

DPDT

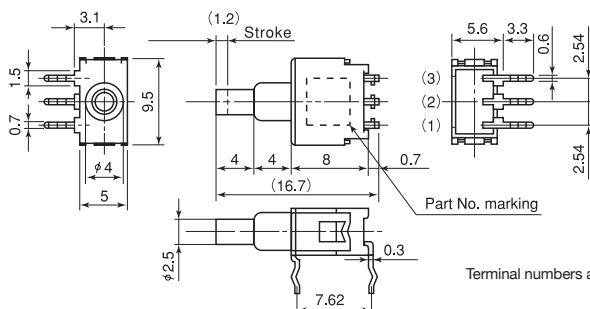
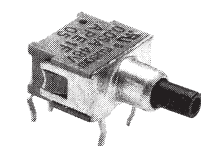


0.2R/A

Terminal numbers are not shown on the switch.

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

SPDT

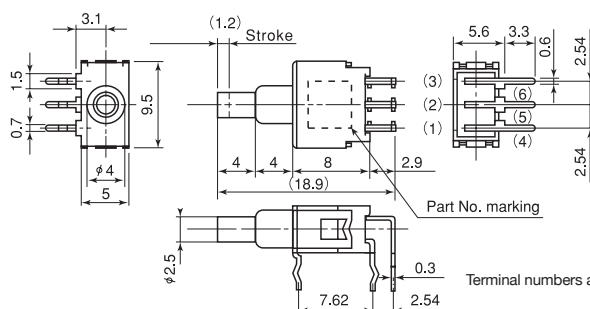
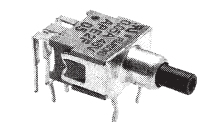


0.3R/A

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

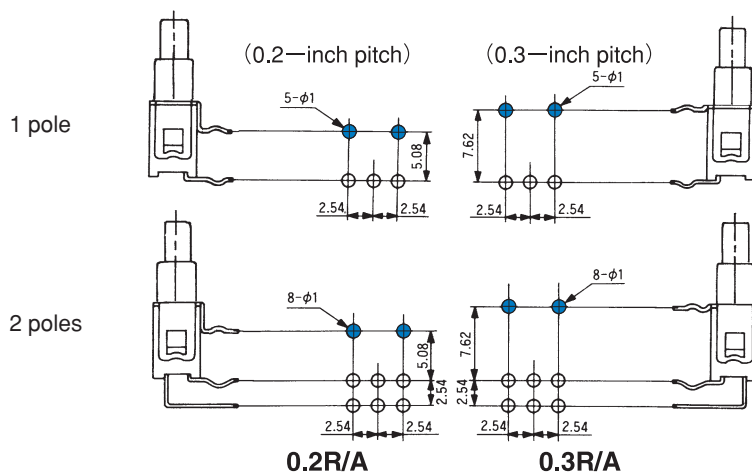
Terminal numbers are not shown on the switch.

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

(ON) : Momentary.

☆ : Semi-standard products. ★ : Made to order products.

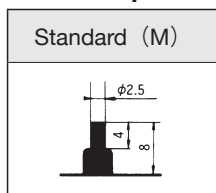
■Right angle terminals



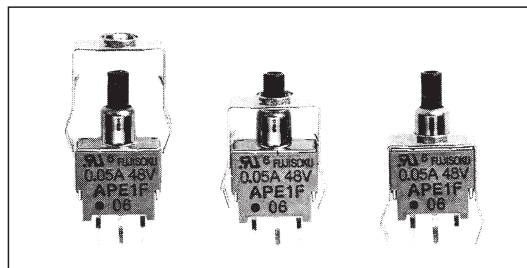
●The space between the terminal rows are available in two dimensions: 0.2 inches (5.08 mm) and 0.3 inches (7.62 mm).

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

■Button Shape



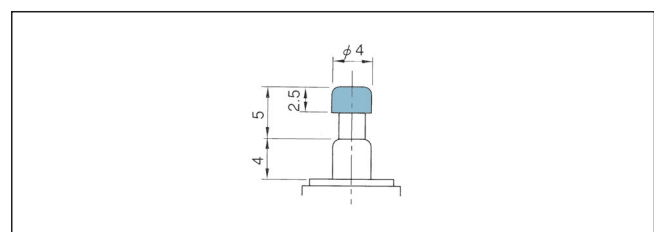
■Bracket Installation Procedure



■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 Type		Without Bracket	When optional Bracket is used.		
			140000640314 or 140000640316	140000640315 or 140000640317	140000640318
AP-M AP-S AP-H APE	1 pole				
	2 poles				
	2 poles				

Right-angle Terminal

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

Packaging Specification

