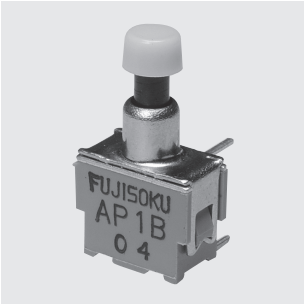
AP

Subminiature Pushbutton Switches



RoHS Compliant

Features

1. Gold-plated contacts.
2. Terminal pin pitch: 2.54 mm.

Specifications

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

Part Numbering

A P 2 C – 2 M – Z

- A: Series code
- P: Actuator shape
- 2: Number of poles
- C: Switching function
- 2: Terminal style
- M: Actuator shape
- Z: Actuator shape

Code	Type
P	Non-washable type

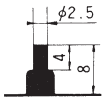
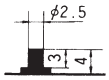
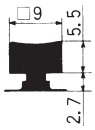
Fig.	Number of poles
1	1 pole
2	2 poles

Code 1pole	Code 2poles	Switching function
C	M	OFF – (ON)
F	R	ON – (ON)

Fig.	Terminal style
2	PC Straight
6	Right angle (0.3 inch pitch)

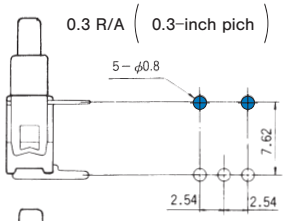
Code	Actuator shape
M	Standard
S	Short
H	Square

Actuator Shape

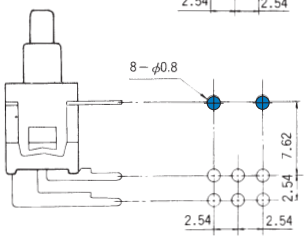
Standard (M)	Short (S)	Square (H)
		

Right angle Terminals

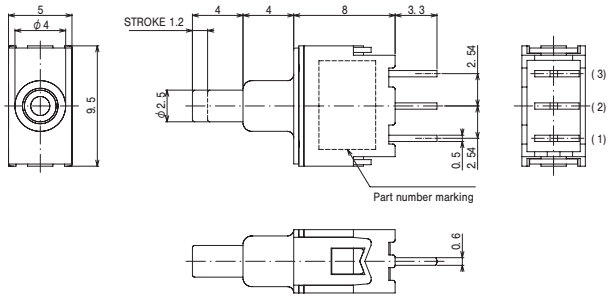
1 pole



2 poles



SPST/SPDT

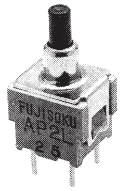


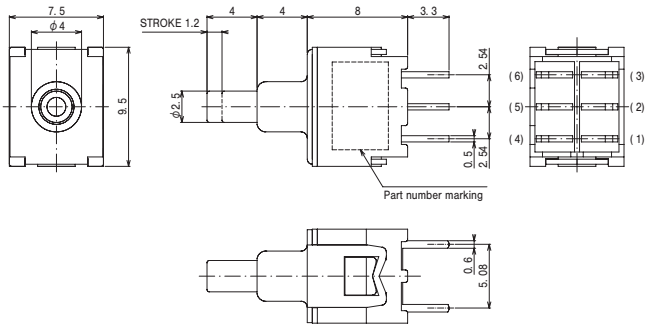
Switching function / Part No.		Push
※AP1C-2M-Z	OFF	(ON)
Connecting terminals	–	1–3
☆AP1F-2M-Z	ON	(ON)
Connecting terminals	2–3	2–1

PC

Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

DPST/DPDT



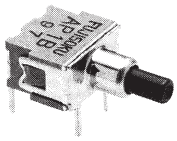


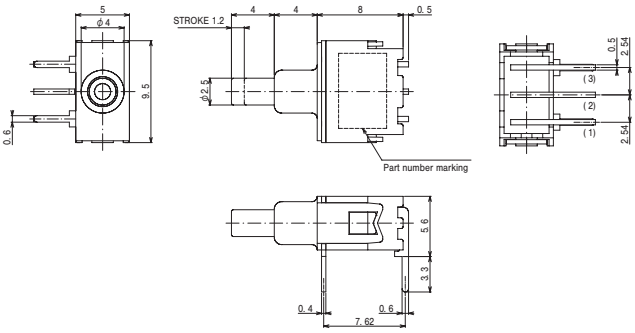
Switching function / Part No.		Push
★AP2R-2M-Z	ON	(ON)
Connecting terminals	2–3 5–6	2–1 5–4

PC

Terminal numbers are not shown on the switch.

SPST/SPDT



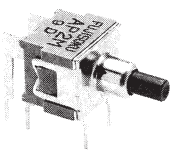


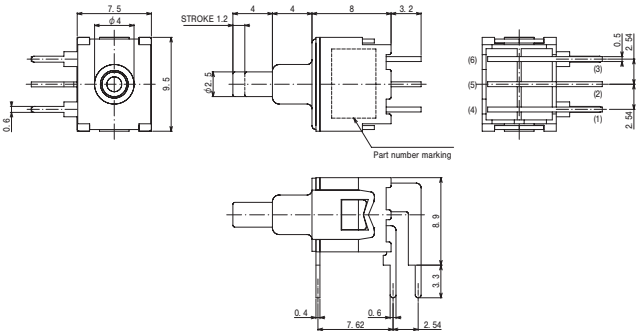
Switching function / Part No.		Push
※AP1C-6M-Z	OFF	(ON)
Connecting terminals	–	1–3
★※AP1F-6M-Z	ON	(ON)
Connecting terminals	2–3	2–1

Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

0.3R/A

DPST/DPDT





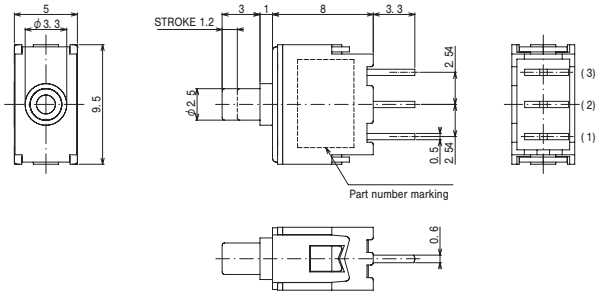
Switching function / Part No.		Push
☆※AP2M-6M-Z	OFF	(ON)
Connecting terminals	–	1–3 4–6
★AP2R-6M-Z	ON	(ON)
Connecting terminals	2–3 5–6	2–1 5–4

Terminal numbers are not shown on the switch. ※ Terminal pins No.2 and 5 are not available in switches with Switching Function "M".

0.3R/A

(ON) : Momentary. ☆ : Semi-standard products. ★ : Made to order products.

SPST/SPDT

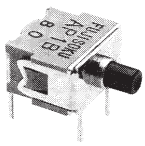


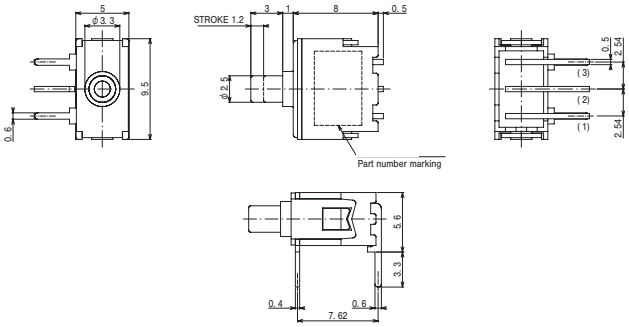
Switching function / Part No.		Push
※AP1C-2S-Z	OFF	(ON)
Connecting terminals	–	1–3
AP1F-2S-Z	ON	(ON)
Connecting terminals	2–3	2–1

Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

PC

SPST/SPDT



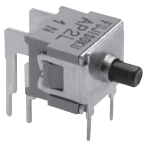


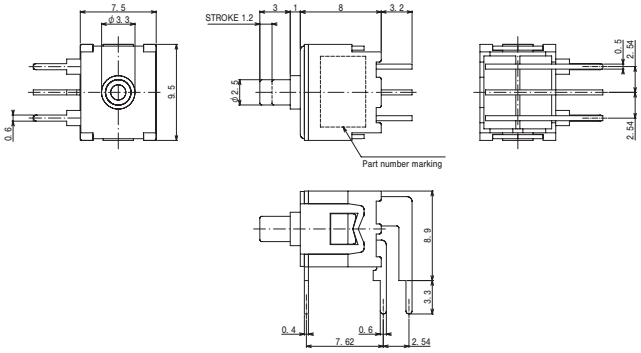
Switching function / Part No.		Push
※AP1C-6S-Z	OFF	(ON)
Connecting terminals	–	1–3
AP1F-6S-Z	ON	(ON)
Connecting terminals	2–3	2–1

Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

0.3R/A

DPST/DPDT

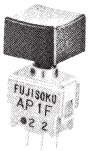


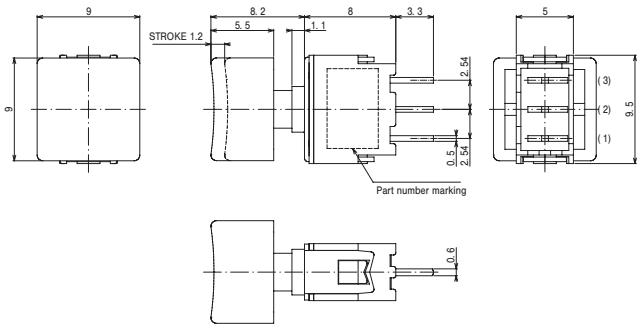


Switching function / Part No.		Push
☆AP2R-6S-Z	ON	(ON)
Connecting terminals	2–3 5–6	2–1 5–4

0.3R/A

SPST/SPDT





Switching function / Part No.		Push
※AP1C-2H-Z	OFF	(ON)
Connecting terminals	–	1–3
AP1F-2H-Z	ON	(ON)
Connecting terminals	2–3	2–1

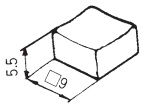
Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

PC

★ : Made to order products. ☆ : Semi-standard products. (ON) : Momentary.

■Standard Accessories

《Sold separately》

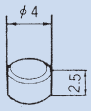
Color Button for AP-H series		
Dimensions	Color	Part No.
 ABS resin	White Red Black Gray	**140000470198** **140000470200** **140000470199** **140000470204**

A Color Button is supplied with the switch. Please select from the above part numbers.

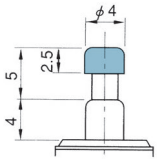
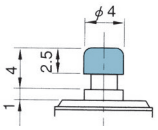
■Optional Accessories(10pcs./pack)

(AP•APE)

《Sold separately》

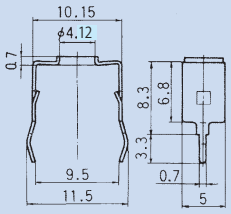
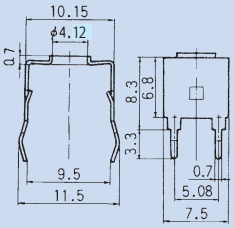
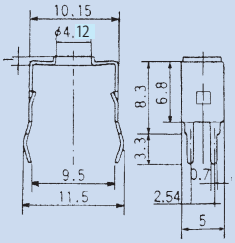
Color Cap for AP-M、APE-M & AP-S series		
Dimensions	Color	Part No.
 PC resin	White Red Black Gray	**140000481402** **140000481404** **140000481403** **140000481408**

■Color Cap Mounting

AP-M	AP-S
	

■Optional Accessories (AP • APE)

《Sold separately》

Part name	Bracket		
Poles	Single pole	Double poles	
Box size	5 mm	7.5 mm	5 mm
Type	**AP-M•APE-M•AP-H**	**AP-M•AP-H•APE-M**	**APE-M**
Dimensions			
Part No.	**140000640314**	**140000640315**	**140000640318**

■Soldering Specifications

(1)Manual Soldering

Device : Soldering iron

①380°C, Max.; 3 seconds, Max.

(2)Auto Soldering (PC types only)

Device : Jet wave type or dip type

①275°C, 6 seconds, Max.

• Pre-heating should be done at temperatures from 80 to 120°C and within 120 seconds.

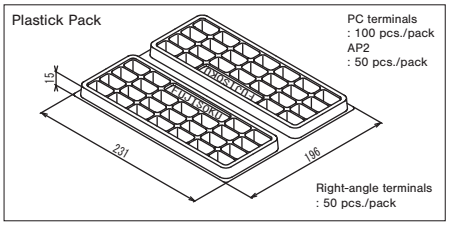
(3)When soldering two or more terminals to the common land, use solder resist to solder them independently.

■Flux Cleaning

(1) Solvent :Fluorine or Alcohol type

(2) The AP series are not washable. To wash the PC board, clean the soldering surface of the PC board with a brush so that the switch is not exposed to the cleaning solution.

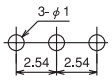
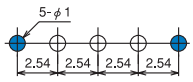
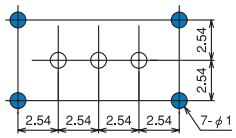
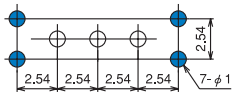
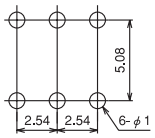
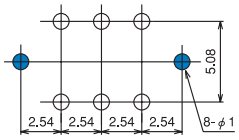
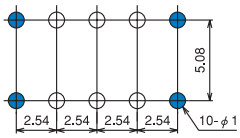
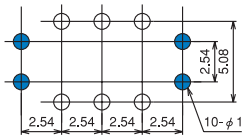
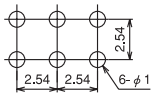
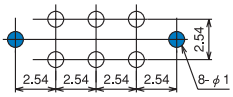
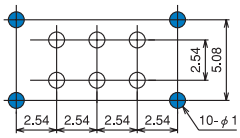
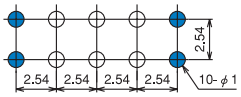
■Packaging Specifications



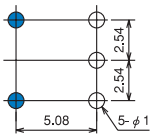
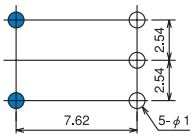
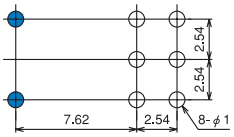
(ON) : Momentary. ▭ :Optional Accessories. ★ : Made to order products.

■PC Hole Layouts (AP •APE)

PC Straight

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

■Right-angle Terminal

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

■Table of Part Numbers

Term.style	Poles	Switching function	AP–M	AP–S	AP–H
PC	1 pole	OFF – (ON)	**AP1C–2M–Z**	**AP1C–2S–Z**	**AP1C–2H–Z**
		ON – (ON)	**☆AP1F–2M–Z**	**AP1F–2S–Z**	**AP1F–2H–Z**
	2 poles	ON – (ON)	**★AP2R–2M–Z**	—	—
0.3R/A	1 pole	OFF – (ON)	**AP1C–6M–Z**	**AP1C–6S–Z**	—
		ON – (ON)	**★AP1F–6M–Z**	**AP1F–6S–Z**	—
	2 poles	OFF – (ON)	**☆AP2M–6M–Z**	—	—
		ON – (ON)	**★AP2R–6M–Z**	**☆AP2R–6S–Z**	—

★ : Made to order products. ☆ : Semi-standard products. (ON):Momentary

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AP2R-2M-Z