

AP

Subminiature Pushbutton Switches



RoHS Compliant

■ Features

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

■ Specifications

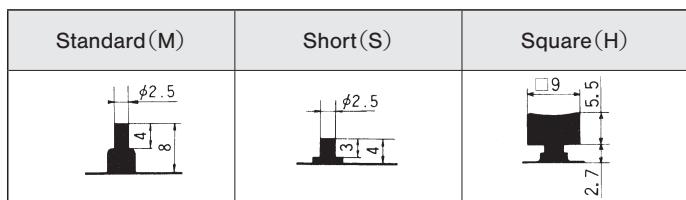
Rating	Max.:50 mA 48 VAC/DC Min.:1 μ A 20 mVAC/DC
Initial contact resistance	50 m Ω max. (1.5 mA 200 μ VAC)
Dielectric strength	500 VAC 1 minute
Insulation resistance	10,000 M Ω min. (250 VDC)
Electrical life	10,000 operations at maximum rating. 50,000 operations at 0.4 VA.
Operating temperature range	-20~+85 °C
Storage temperature range	-40~+85 °C

■ Part Numbering

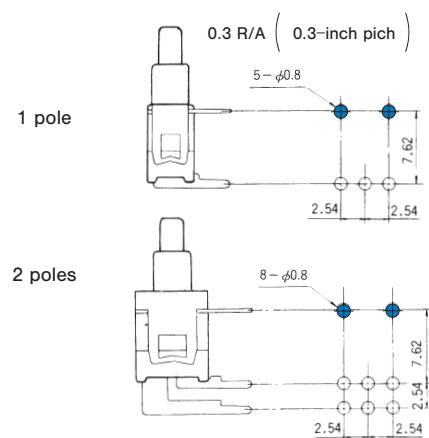
A		P		2	C		-		2	M		-		Z	
Series code		Actuator shape		Number of poles		Switching function			Terminal style		Actuator shape				
Code	Type			Fig.	Number of poles	Code	Switching function		Fig.	Terminal style	Code	Actuator shape			
P	Non-washable type			1	1 pole	1pole 2poles	OFF - (ON)		2	PC Straight	M	Standard			
				2	2 poles	C M	ON - (ON)		6	Right angle (0.3 inch pitch)	S	Short			
						F R					H	Square			

Note : Some model names may not be registered. Please refer to the product list for this series.

■ Actuator Shape

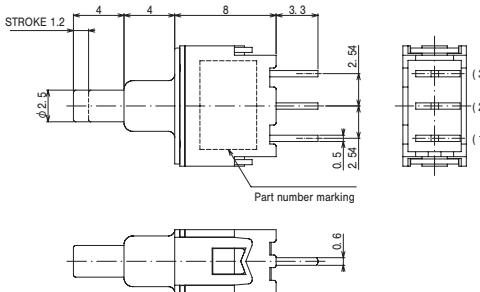
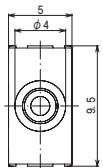


■ Right angle Terminals



AP

SPST/SPDT

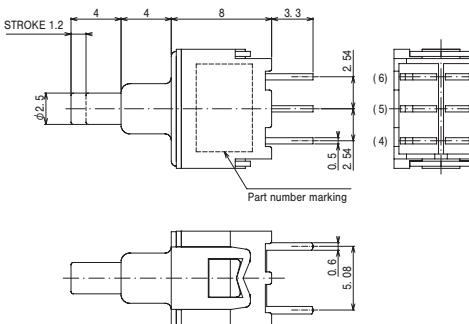
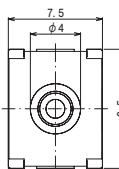


Switching function	OFF	(ON)
Part No.	※AP1C-2M-Z	
Connecting terminals	—	1-3
Part No.	★AP1F-2M-Z	
Connecting terminals	ON	(ON)
Part No.	—	2-3
Connecting terminals	2-1	

PC

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

DPST/DPDT

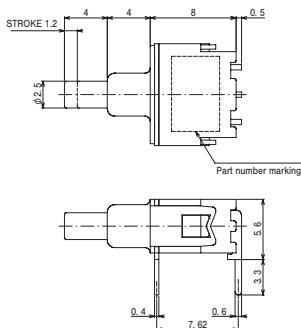
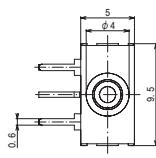
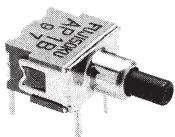


Switching function	ON	(ON)
Part No.	★AP2R-2M-Z	
Connecting terminals	2-3 5-6	2-1 5-4

PC

Terminal numbers are not shown on the switch.

SPST/SPDT

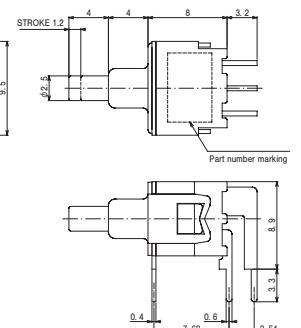
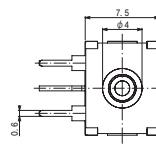
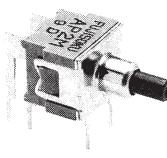


Switching function	OFF	(ON)
Part No.	※AP1C-6M-Z	
Connecting terminals	—	1-3
Part No.	★※AP1F-6M-Z	
Connecting terminals	2-3	2-1

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

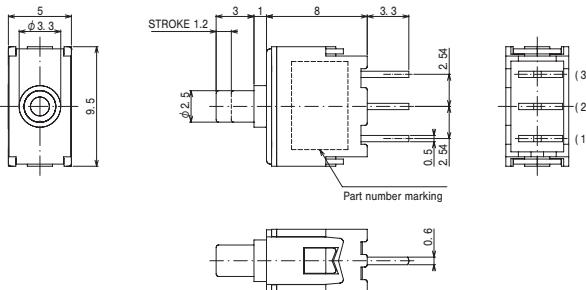


Switching function	OFF	(ON)
Part No.	★※AP2M-6M-Z	
Connecting terminals	—	1-3 4-6
Part No.	★AP2R-6M-Z	
Connecting terminals	2-3 5-6	2-1 5-4

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

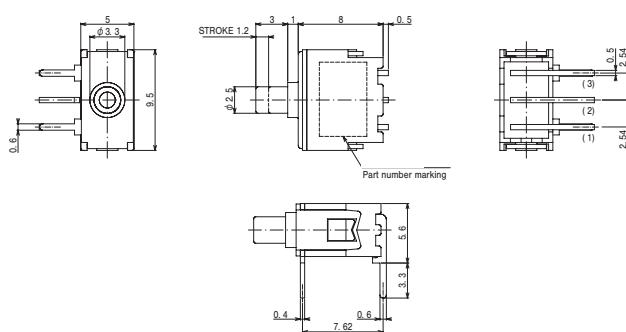
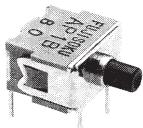
(ON) : Momentary. ★ : Semi-standard products. ★ : Made to order products.

SPST/SPDT

Switching function		
Part No.	OFF	(ON)
※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".

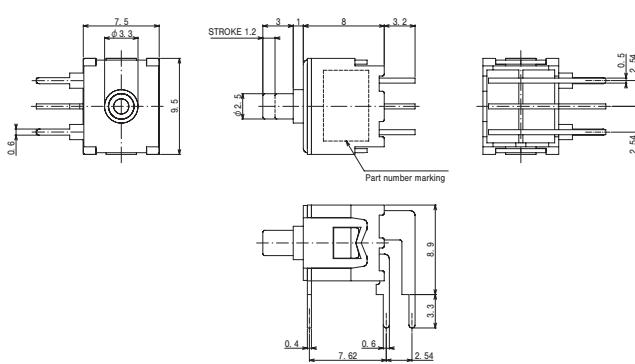
PC

SPST/SPDT

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

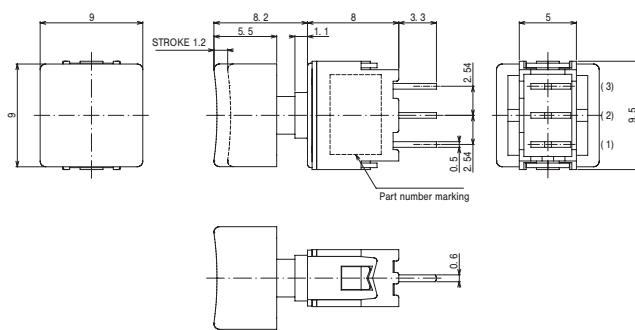
Terminal numbers are not shown on the switch. ※ Terminal pin No.2 is not available in switches with Switching Function "C".

0.3R/A

DPST/DPDT

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

0.3R/A

SPST/SPDT

Switching function		
Part No.	OFF	(ON)
※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

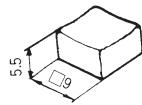
★ : Made to order products.

★ : Semi-standard products.

(ON) : Momentary.

■ Standard Accessories

《Sold separately》

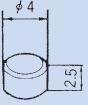
Color Button for AP-H series		
Dimensions	Color	Part No.
	White	140000470198
	Red	140000470200
	Black	140000470199
	Gray	140000470204

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

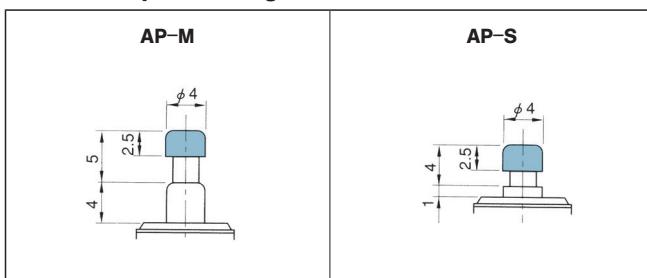
■ Optional Accessories(10pcs./pack)

(AP・APE)

《Sold separately》

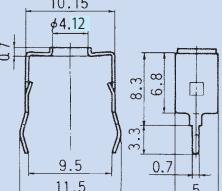
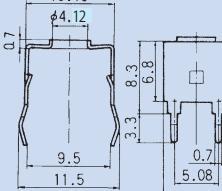
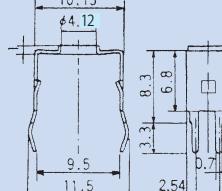
Color Cap for AP-M, APE-M & AP-S series		
Dimensions	Color	Part No.
	White	140000481402
	Red	140000481404
	Black	140000481403
	Gray	140000481408

■ Color Cap Mounting



■ Optional Accessories(AP・APE)

《Sold separately》

Part name	Bracket		
	Single pole	Double poles	5 mm
Poles	5 mm	7.5 mm	5 mm
Box size			
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

① 380°C, Max.; 3 seconds, Max.

(2) Auto Soldering (PC types only)

Device : Jet wave type or dip type

① 275°C, 6 seconds, Max.

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

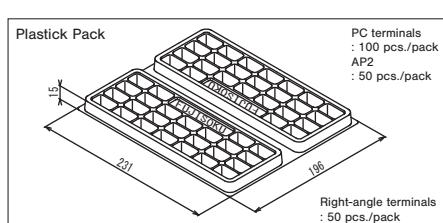
(3) When soldering two or more terminals to the common land, use solder resist to solder them independently.

■ 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



■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
0.3R/A	2 poles	ON - (ON)	★AP2R-2M-Z	—	—
	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