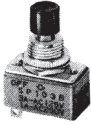

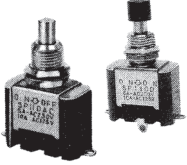

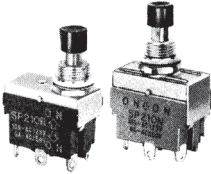









Pushbutton Switch Selection Table

Type	Appearance	No. of poles	Rating	Switching function	Terminal style	Page
SP103B SP103C		1	AC125V 3A AC250V 1A	ON — (OFF) OFF — (ON)	 Solder φ2.4 Hole	277
SP110		1	AC125V 10A AC250V 6A	ON — OFF ON — ON	 Solder φ2.6 Hole	278
SP210		2	AC125V 10A AC250V 6A	ON — OFF ON — ON ON — (OFF) OFF — (ON) ON — (ON)	 Solder φ2.6 Hole	278
SPP203 (Push & Pull)		2	AC125V 3A AC125V 3A AC250V 1A	ON — OFF OFF — ON ON — ON	 Solder φ2.2 Hole	279
SPP210 (Push & Pull)		2	AC125V 10A AC250V 6A	ON — OFF OFF — ON ON — ON	 Solder φ2.6 Hole	279
S2P210 (Two Button Type)		2	AC125V 10A AC250V 6A	ON — OFF ON — ON ON — OFF — ON	 Solder φ2.6 Hole	279

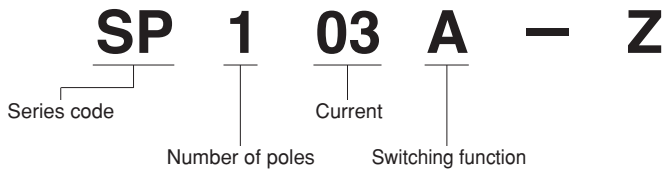
SP · SPP · S2P

Miniature Pushbutton Switches



RoHS compliant

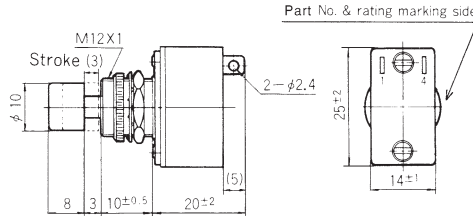
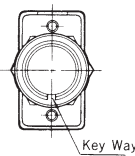
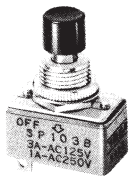
Part Numbering



- For UL-recognized products, refer to P.276.
- Ratings are based on resistive load.

- Soldering Page 276.
- Packaging Specification Page 276.

SP103 (1 pole)



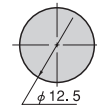
Terminal numbers are shown on the switch.

Switching function		
Part No.	★SP103B-Z	(OFF)
Connecting terminals	1-4	—
Part No.	SP103C-Z	(ON)
Connecting terminals	—	1-4

Specifications

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
SP103 B·C	AC125V 3A AC250V 1A	10mΩ Max.	AC1500V 1 minute	100MΩ Min. 10,000 operations

Panel Cut-Out Dimensions



Panel thickness : 4.5 mm Max.

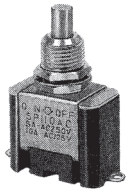
Standard Accessories

《Supplied with switch》

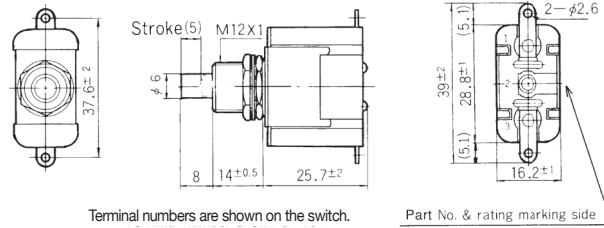
Knurled Nut 140008010236	Hex Nut 140008010221	Lockwasher 140008030055	Color Button					
			A 10 mm dia. Black Color Button is supplied with the switch. If a Color Button in a different size or color is required, please select from the below table.					
Chrome plated	Zinc plated		Dimensions	Color	Part No.	Dimensions	Color	Part No.
				White	140008050162		White	140008050158
				Red	140008050155		Red	140008050164
				Black	140008050153		Black	140008050163
							Gray	140008050165

SP

SP110 (1 pole)



SP110AC/Dimensions



Terminal numbers are shown on the switch.

Part No. & rating marking side

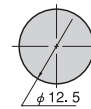
Switching function		
Part No.	★※SP110AC-Z	
Connecting terminals	OFF	ON
	—	1-3

※ : The circuit switches each time the switch button is pressed.

Specifications

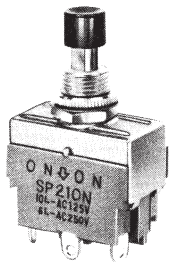
Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
SP110AC AC125V 10A AC250V 6A	20mΩ Max.	AC1000V 1 minute	100MΩ Min.	30,000 operations

Panel Cut-Out Dimensions

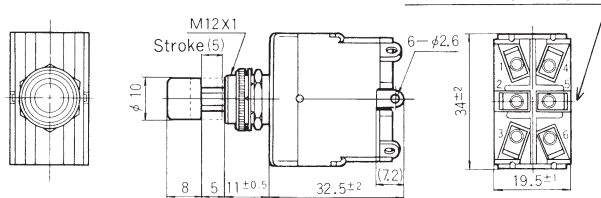


Panel thickness
SP110AC 8.5 mm Max.

SP210 (2 poles)



210N/Dimensions



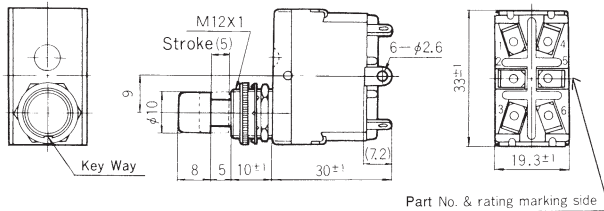
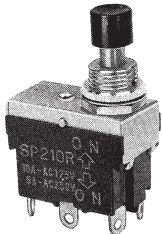
Terminal numbers are shown on the switch.

Part No. & rating marking side

Switching function		
Part No.	★※SP210N-Z	
Connecting terminals	ON	ON
	2-1 5-4	2-3 5-6
☆ SP210M-Z	OFF	(ON)
Connecting terminals	—	1-3 4-6
★ SP210R-Z	ON	(ON)
Connecting terminals	2-3 5-6	2-1 5-4

※ : The circuit switches each time the switch button is pressed.

210M・210R/Dimensions



Terminal pins No.2 and No.5 are not available in switches with Switching Function "L" or "M".

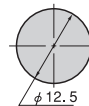
Terminal numbers are shown on the switch.

Part No. & rating marking side

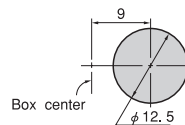
Specifications

Rating	Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
SP210 N・M・R AC125V 10A AC250V 6A	20mΩ Max.	AC1500V 1 minute	100MΩ Min.	10,000 operations

Panel Cut-Out Dimensions

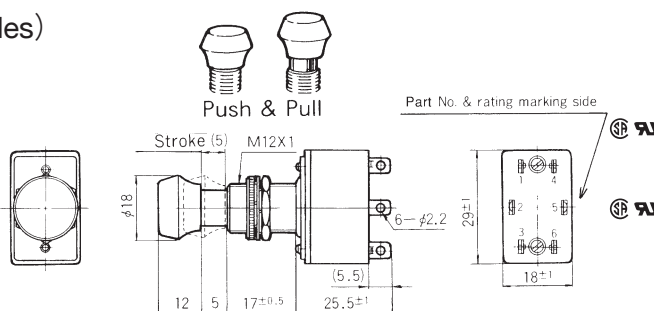
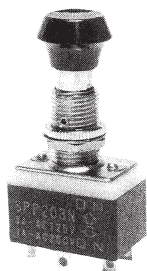


210N
Panel thickness : 5.5 mm Max.



210M, 210R
Panel thickness : 4.5 mm Max.

SPP203 (2 poles)



Terminal numbers are shown on the switch.

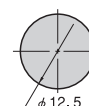
Switching function	Viewed from part No. and rating marking side	
	Pull	Push
Part No.	★SPP203K-Z	ON OFF
Connecting terminals	2-1 5-4	—
Part No.	★SPP203N-Z	ON ON
Connecting terminals	2-3 5-6	2-1 5-4

Terminal pins No.3 and No.6 are not available in switches with Switching Function "K".

Specifications

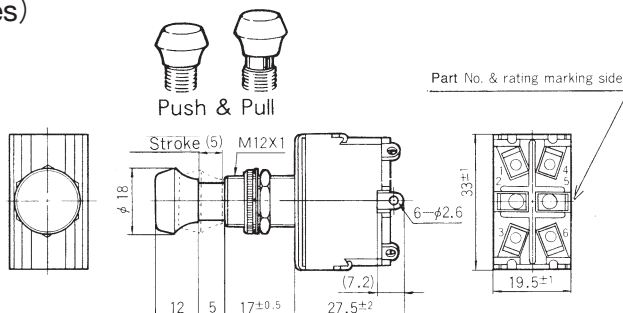
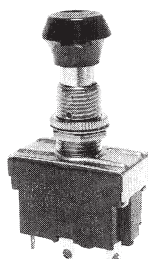
Rating		Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
SPP203K	AC125V 3A				
SPP203N	AC125V 3A AC250V 1A	AC1500V 1 minute			

Panel Cut-Out Dimensions



Panel thickness : 11.5 mm Max.

SPP210 (2 poles)



Terminal numbers are shown on the switch.

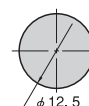
Switching function	Viewed from part No. and rating marking side	
	Pull	Push
Part No.	★SPP210K-Z	ON OFF
Connecting terminals	1-3 4-6	—
Part No.	★SPP210N-Z	ON ON
Connecting terminals	2-3 5-6	2-1 5-4

Terminal pins No.2 and No.5 are not available in switches with Switching Function "K".

Specifications

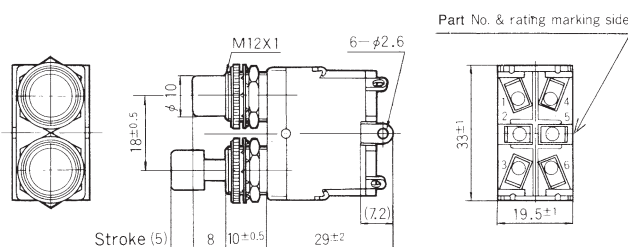
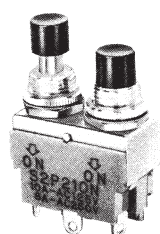
Rating		Initial contact resistance	Dielectric strength	Insulation resistance	Electrical life
SPP210K-N	AC125V 10A AC250V 6A				

Panel Cut-Out Dimensions



Panel thickness : 11.5 mm Max.

S2P210 (2 poles)



Terminal numbers are shown on the switch.

Switching function	Viewed from part No. and rating marking side		
	Pull	Push	Push
Part No.	★S2P210K-Z	ON — OFF	
Connecting terminals	1-3 4-6	—	—
Part No.	★S2P210N-Z	ON — ON	
Connecting terminals	2-3 5-6	—	2-1 5-4

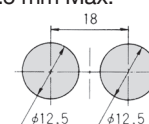
Terminal pins No.2 and No.5 are not available in switches with Switching Function "K".

Specifications

Rating		Initial contact resistance	Dielectric strength	insulation resistance	Electrical life
S2P210K-N	AC125V 10A AC250V 6A				

Panel Cut-Out Dimensions

Panel thickness : 4.5 mm Max.



★ : Made to order products. (ON) : Momentary.

SPP·S2P

Standard Accessories

《Supplied with switch》

Hex Nut ① 140008010235	Knurled Nut ② 140008010236	Hex Nut ③ 140008010221	Lockwasher ④ 140008030055
Nickel plated	Tin-cobalt plated	Zinc plated	

Standard Accessories Combination

(Q'ty/switch)

Part No.	Accessories	①	②	③	④	⑤	⑥
SP110		1		1	1		1
SP210			1	1	1		1
SPP203			1	1	1	1	
SPP210			1	1	1	1	
S2P210			1	1	1		2

The figures in the table show the quantities of accessories enclosed with the switch.

⑥ Color Buttons for SP, SPP, S2P

A 10 mm dia. Black Color Button is supplied with the switch. If a Color Button in a different size or color is required, please select from the below table.

⑤ Button for SPP

Dimensions	Color	Part No.	Dimensions	Color	Part No.	Dimensions	Color	Part No.
	White	140008050162		White	140008050158		Black	140008050156
	Red	140008050155		Red	140008050164			
	Black	140008050153		Black	140008050163			
				Gray	140008050165			Red

Packaging Specifications

Plastic Bag		1 pcs./pack
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Soldering Specifications

(SP · SPP · S2P)

- Manual Soldering
Device : Soldering iron
- 420°C, Max.; 3 seconds, Max.

UL and CSA listed

SP Series

Poles	Switching function	UL (※2.)	CSA (※3.)
2 poles	SPP203K-Z ON - OFF	○	○
	SP210N-Z ON - ON	○	○
		SPP203N-Z	○

(※2.) UL File No.E43275

(※3.) CSA File No.LR38341

If UL or CSA marking is required, please specify when ordering.