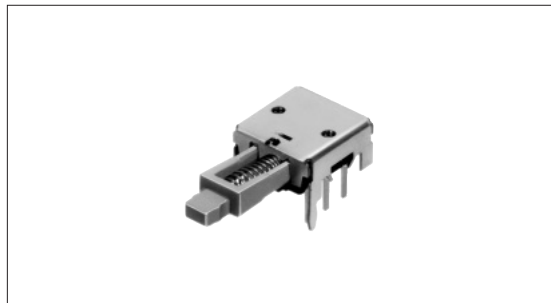


# Push Switch 1.5mm-travel Low-profile Horizontal Type

SPPJ6 Series



4.5mm height low-profile switch, ideal for compact devices.



## Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.2A 12V DC/50 $\mu$ A 3V DC
Contact resistance (Initial performance./After lifetime)		20m $\Omega$ max./40m $\Omega$ max.
Operating force		2 $\pm$ 1N
Operating life	Without load	10,000cycles
	With load	10,000cycles (0.2A 12V DC)

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™

Custom-  
Products

Horizontal  
Type

Vertical  
Type

## Product Line

Changeover timing	Travel (mm)	Total travel (mm)	Mounting method	Poles	Operation	Terminal type	Minimum order unit (pcs.)	Product No.
Non shorting	1.5	2.5	PC board	2	Latching	For PC board	5,000	SPPJ620800
					Momentary			SPPJ621100

## Packing Specifications

### Bulk

Number of packages (pcs.)		Export package measurements (mm)
1 case /Japan	1 case/export packing	
1,000	5,000	400 $\times$ 270 $\times$ 290

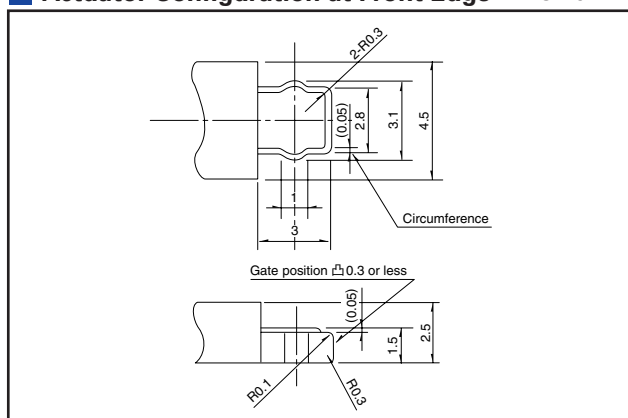
## Dimensions

Unit:mm

Style	PC board mounting hole dimensions (Viewed from the direction A)

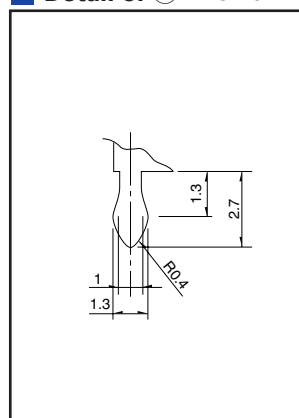
## Actuator Configuration at Front Edge

Unit:mm



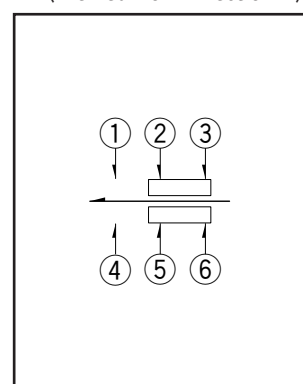
## Detail of ①

Unit:mm



## Circuit Diagram

(Viewed from Direction A)



## Note

- Products other than those listed in the above chart are also available. Please contact us for details.
- Please place purchase orders per minimum order unit N (integer).

## List of Varieties

Series		SPEE	SPPJ6	SPPJ3	SPPJ2	SPUJ ※1	SPUP ※1	SPUN	SPUN medium current※1	SPEG	SPEJ	
Detector	Photo											
Push	Travel (mm)	0.3 0.71	1.5	2.5		2	1.5 2	2.5		—	1.7	
Slide	Total travel (mm)	0.9	2.5	3.5		3	2.5 3	3.5		1.2	1.7	
Rotary	Number of poles	1	2	1 2	2	2 4				1	2	
Encoders	Dimensions (mm)	W	4	9	6.6	7.2	7.5		10		7.15	7
Power		D	5		12		15.2 22.7		24 36		8.35	7
Dual-in-line Package Type		H	1.22	4.5	8.3	9.6	8.8	10.3	13		3.5	8
TACT Switch™	Operating temperature range	-10°C to +60°C		-40°C to +85°C		-10°C to +60°C				-40°C to +85°C		
Custom-Products	Rating (max.) (Resistive load)	20mA 5V DC	0.2A 12V DC	0.2A 30V DC		0.1A 30V DC			1A 25V DC	50mA 16V DC	0.2A 14V DC	
	Rating (min.) (Resistive load)	100μA 3V DC	50μA 3V DC							50μA 3V DC	—	
Horizontal Type	Electrical performance	Initial contact resistance	※2	20mΩ max.					200mΩ max.	150mΩ max.		
		Insulation resistance	10MΩ min. 100V DC	100MΩ min. 500V DC					3MΩ min. 100V DC	100MΩ min. 500V DC		
		Voltage proof	100V AC for 1minute	500V AC for 1minute					100V AC for 1minute	500V AC for 1minute		
Vertical Type	Mechanical performance	Terminal strength	5N for 1minute							0.5N for 1minute	—	
		Actuator strength	Operating direction	50N		30N		50N			50N	49N
Pulling direction	—							—	—			
Durability	Durability	Operating life without load	100,000 cycles	10,000cycles 40mΩ max.			30,000cycles 40mΩ max.	10,000cycles 40mΩ max.	30,000cycles 500mΩ max.	10,000 cycles		
		Operating life without load Load:as rating	100,000 cycles	10,000cycles 40mΩ max.			5,000cycles 40mΩ max.		10,000cycles 14V DC, 0.2A			
Environmental performance	Environmental performance	Cold	-40±2°C for 96h	-20±2°C for 96h					-40±2°C for 500h			
		Dry heat	85±2°C for 96h							85±2°C for 500h		
		Damp heat	40±2°C, 90 to 95%RH for 96h							60±2°C, 90 to 95% RH for 500h		
Soldering	Soldering	Manual soldering	350±10°C 4 <sup>+1</sup> <sub>0</sub> s	350±10°C 3 <sup>+1</sup> <sub>0</sub> s		300±10°C 3 <sup>+1</sup> <sub>0</sub> s	350±10°C 3 <sup>+1</sup> <sub>0</sub> s		350±5°C 3s max.	350±10°C 4s max.		
		Dip soldering	—	260±5°C 5±1s	260±5°C 10±1s	260±5°C 5±1s	260±5°C 10±1s		—	—		
		Reflow soldering	Please see P.133	—							Please see P.133	
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- Soldering Conditions .....133
- Push Switches Products Caution .....134

### Notes

1. ※1. The operating temperature range for automotive applications can be raised upon request. Please contact us for details.
2. ※2. 1V or less, at the present rating of 1mA 5V DC for output voltage.