

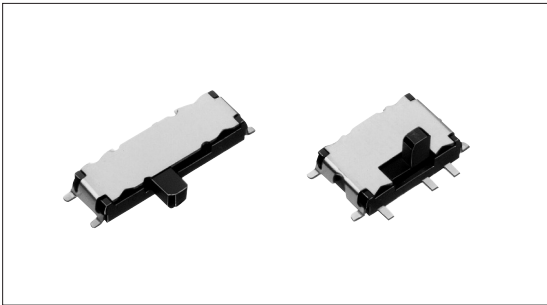
# Slide Switch 1.4(H)mm, 1.5/2mm-travel Surface Mount Type

SSSS8 Series



A low-profile slide switch with 1.4mm thickness.

- Detector
- Push
- Slide**
- Rotary
- Encoders
- Power



## Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.3A 5V DC/50μA 3V DC
Contact resistance (Initial performance/After lifetime)		70mΩ max./130mΩ max.
Operating force		Refer to the dimensions.
Operating life	Without load	10,000cycles
	With load	10,000cycles (0.3A 5V DC)

Dual-in-line  
Package Type

TACT Switch™

Custom-  
Products

Small size  
General Use type

Big size  
General Use type

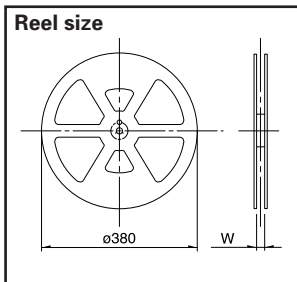
Other Use type

## Product Line

Travel (mm)	Actuator direction	Actuator thickness (mm)	Poles	Positions	Changeover timing	Ground terminal	Soldering	Minimum order unit (pcs.)	Products No.	Drawing No.
1.5	Vertical	t0.8	2	2	Not specified	Without	Reflow	7,200	SSSS820101	1
				3					SSSS820301	2
				2					SSSS820201	1
				3					SSSS820501	2
	Horizontal	t1.1	1	2		Without		18,000	SSSS810701	3
				3					SSSS811501	4
				2					SSSS811101	3
				3					SSSS812201	4
2				2		With		SSSS810201	5	

## Packing Specifications

Taping Unit:mm



Product No.	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)
	1 reel	1 case /Japan	1 case /export packing			
SSSS820101,SSSS820301, SSSS820201,SSSS820501	1,800	3,600	7,200	25.4	24	406 × 406 × 190
SSSS810701,SSSS811501, SSSS811101,SSSS812201, SSSS810201	4,500	9,000	18,000	17.4	16	417 × 409 × 139

## Notes

- 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).



Automotive  
Use

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Push

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Automotive  
 Use

**Dimensions**

1.5mm-travel

Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from direction A)
1		<p>Terminal No.① 0.4 3 1.5 0.75</p> <p>With ground terminal dimensions</p> <p>Travel</p> <p>Operating force : 2N</p>	<p>2-<math>\phi</math>0.9 holes</p> <p>6-pattern section</p> <p>4-pattern section for ground terminal</p>
2		<p>Terminal No.① 1.5 3 1.5</p> <p>With ground terminal dimensions</p> <p>Travel</p> <p>Operating force : a <math>\rightarrow</math> b } 2N                      c <math>\rightarrow</math> b }                      b <math>\rightarrow</math> a } 2.5N                      b <math>\rightarrow</math> c }</p>	<p>2-<math>\phi</math>0.9 holes</p> <p>8-pattern section</p> <p>4-pattern section for ground terminal</p>
3		<p>Terminal No.① 0.4 3 1.5</p> <p>With ground terminal dimensions</p> <p>Travel</p> <p>Operating force : 1.5N</p>	<p>2-<math>\phi</math>0.9 holes</p> <p>3-pattern section</p> <p>4-pattern section for ground terminal</p>
4		<p>Terminal No.① 1.5 3 1.5</p> <p>With ground terminal dimensions</p> <p>Travel</p> <p>Operating force : a <math>\rightarrow</math> b } 1.5N                      c <math>\rightarrow</math> b }                      b <math>\rightarrow</math> a } 2N                      b <math>\rightarrow</math> c }</p>	<p>2-<math>\phi</math>0.9 holes</p> <p>4-pattern section</p> <p>4-pattern section for ground terminal</p>

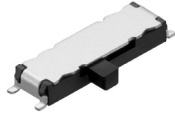
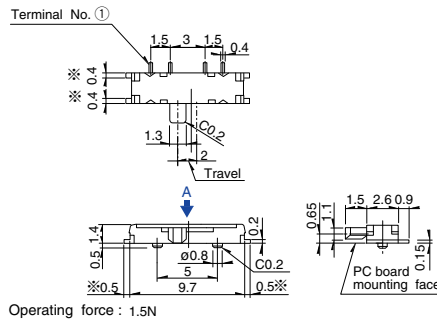
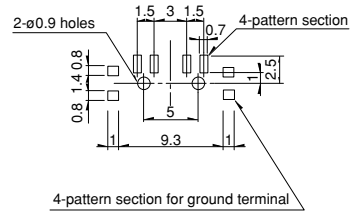
**Note**

Products not marked with ※ in the drawing have no ground terminal.

**Dimensions**

Horizontal Operating Section Type 2mm-travel

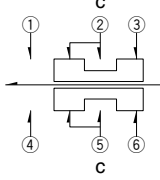
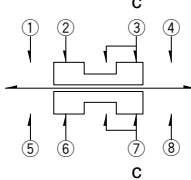
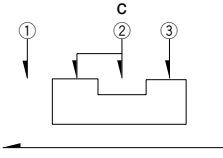
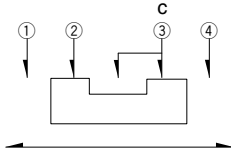
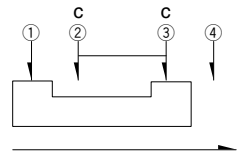
Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from direction A)
5			

**Note**

Products not marked with ※ in the drawing have no ground terminal.








**Circuit Diagram (Viewed from Direction A)**

<p>2-poles, 2-positions                      Drawing No. : 1</p> 	<p>2-poles, 3-positions                      Drawing No. : 2</p> 	
<p>1-pole, 2-positions                      1.5mm-travel                      Drawing No. : 3</p> 	<p>1-pole, 3-positions                      1.5mm-travel                      Drawing No. : 4</p> 	<p>2-poles, 2-positions                      Drawing No. : 5</p> 

Small size  
 General Use type  
 Big size  
 General Use type  
 Other Use type



## List of Varieties

Series		SSAL	SSAJ	SSAG	SSAH	SSSS8	SSSS7 ※1	SSSS2	
Photo									
Outline specifications	Travel (mm)	2	1.4	1.5		1.5 2		2	
	Actuator direction	Horizontal				Vertical Horizontal	Horizontal	Vertical Horizontal	
	Number of poles	1				1 2			
Dimensions (mm)	W	7.6	5.5	9.05	9.5	11.2	8.8	13	
	D	2.6	2.5	3		2.6	3	3.5	
	H	1.2	0.7	1.15	0.9	1.4	2		
Operating temperature range		-10°C to +60°C			-30°C to +60°C	-40°C to +85°C			
Automotive use		—	—	—	—	○	—	—	
Rating (max.)/(min.) (Resistive load)		10mA 5V DC			1mA 5V DC	0.3A 5V DC	0.3A 4V DC	0.3A 6V DC	
		50μA 3V DC							
Electrical performance	Initial contact resistance	10Ω max.	300mΩ max.	200mΩ max.		70mΩ max.			
	Insulation resistance	100MΩ min. 100V DC					100MΩ min. 500V DC		
	Voltage proof	100V AC for 1minute					500V AC for 1minute		
Mechanical performance	Terminal strength	3N for 1minute							
	Actuator strength	Operating direction				10N		20N	
		Pulling direction				10N Static force			
Durability	Operating life without load	100,000cycles 10Ω max.	10,000cycles 500mΩ max.	30,000cycles (Lockside) 100,000cycles 500mΩ max. (Recoilside)	10,000cycles 300mΩ max.	10,000cycles 100mΩ max. ※2			
	Operating life without load Load:as rating					10,000cycles 130mΩ max. ※2			
Environmental performance	Cold	-40±2°C for 96h		-20±2°C for 96h		-40°C±2°C for 96h		-20°C±2°C for 96h	
	Dry heat	85±2°C for 96h							
	Damp heat	40±2°C, 90 to 95%RH for 96h							
Soldering	Manual soldering	350±5°C 3s max.				300±5°C 5s max.	300±5°C 3s max.	350±10°C 4s max.	
	Dip soldering	—							
	Reflow soldering	Please see P.175							
Poles-positions	1-2	●	●	—	—	●	●	●	
	1-3	—	—	●	●	●	●	●	
	1-4	—				●	—	●	
	2-2	—				●	—	●	
	2-3	—				●	—	●	
	2-4	—				—			
	4-2	—				—			
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### Notes

- ※1. The operating temperature range for automotive applications can be raised upon request. Please contact us for details.
- ※2. Operating life for SSSS213202 is 100 cycles
- 3. ○marks in "Available for automotive use" indicate that some of the series products can work at the operating temperature range from -40°C to +85°C.

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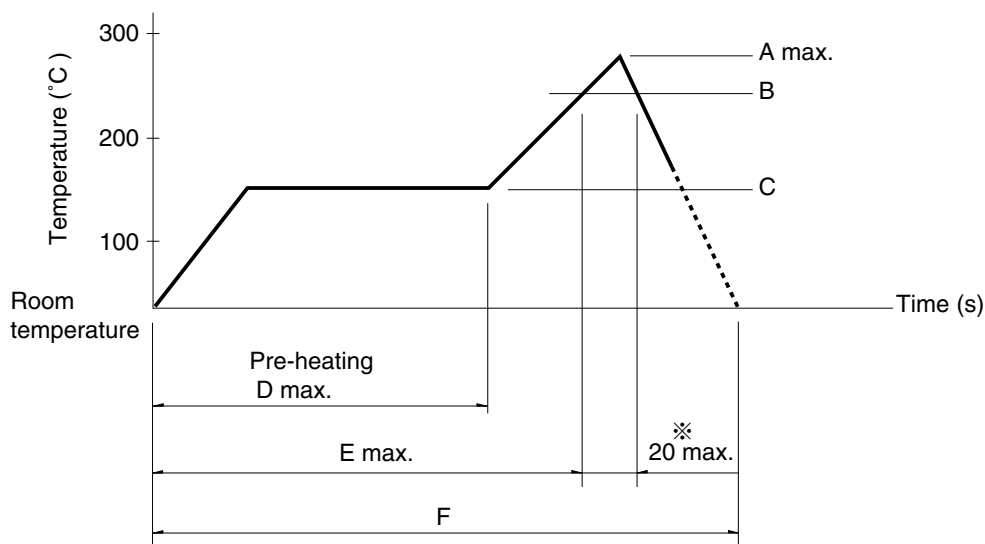
Big size  
General Use type

Other Use type

## Soldering Conditions

### Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple 0.1 to 0.2 φ CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.
3. Temperature profile



Series (Reflow type)			A (°C) 3s max.	B (°C)	C (°C)	D (s)	E (s)	F (s)
SSSS2	Vertical	1-pole, 3-positions	250	200	150	120	—	—
	Horizontal	1-pole, 2-positions						
	Vertical	1-pole, 2-positions	240					
	Horizontal	1-pole, 3-positions 2-poles, 3-positions						
SSSS7			250					
SSAH, SSAG, SSAJ			260	230				
SSSS8	Horizontal	1-pole, 2-positions 1-pole, 3-positions (1.5mm)	255	200				
	Vertical		240	220				

### Notes

1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the PC board's material, size, thickness, etc. The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.
3. ※SSAH and SSAG only 40's.

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