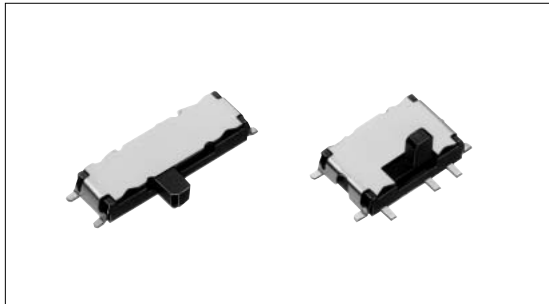


# Slide Switch 1.4(H)mm, 1.5/2mm-travel Surface Mount Type

SSSS8 Series



A low-profile slide switch with 1.4mm thickness.



## Typical Specifications

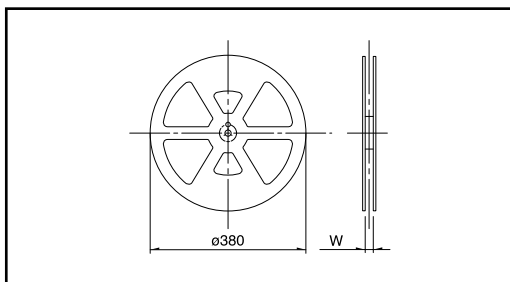
Items		Specifications
Rating( max. )( min. ) ( Resistive load )		0.3A 4V DC/50 $\mu$ A 3V DC
Contact resistance ( Initial performance/After lifetime )		70m max./130m max.
Operating force		Refer to the dimensions.
Operating life	Without load	10,000cycles
	With load	10,000cycles( 0.3A 4V DC )

## 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
		t0.4	2	2		With		10,000	SSSS821801	6
				4					SSSS812701	5
				2					SSSS811101	3
				3					SSSS812201	4
2	t1.1	1	2	With	18,000	SSSS810201	7			
			3			SSSS810301	8			
			3							

## Taping Specification(Taping Packaging)

Reel Size Unit:mm



Series		Number of packages(pcs.)			Reel width W (mm)	Tape width (mm)
		1 reel	1 case /Japan	1 case /export packing		
Vertical		1,800	3,600	7,200	25.4	24
Horizontal	1-pole, 2-positions( 1.5mm ) 1-pole, 2-positions( 2mm ) 1-pole, 3-positions( 1.5mm )	4,500	9,000	18,000	17.4	16
	1-pole, 3-positions( 2mm )				25.4	24
	1-pole, 4-positions 2-poles, 2-positions	2,500	5,000	10,000		

## Notes

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



Detector  
 Push  
**Slide**  
 Rotary  
 Encoders  
 Power  
 Dual-in-line  
 Package Type  
 TACT Switch™  
 Custom-  
 Products

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

**Dimensions**

**Horizontal Operating Section Type 1.5mm-travel**

Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
5		<p>Terminal No. ①</p> <p>Operating force : a → b } 1.5N                      d → c }                      b → c } 2N                      c → d }                      b → a }</p>	<p>6-pattern section</p> <p>4-pattern section for ground terminal</p> <p>2-φ0.9 holes</p>
6		<p>Terminal No. ①</p> <p>Operating force : 1.5N</p>	<p>6-pattern section</p> <p>2-φ0.9 holes</p>

**Horizontal Operating Section Type 2mm-travel**

Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
7		<p>Terminal No. ①</p> <p>Operating force : 1.5N</p>	<p>2-φ0.9 holes</p> <p>4-pattern section</p> <p>4-pattern section for ground terminal</p>
8		<p>Terminal No. ①</p> <p>Operating force : a → b } 1.5N                      c → b }                      b → a } 2N                      b → c }</p>	<p>6-pattern section</p> <p>4-pattern section for ground terminal</p> <p>2-φ0.9 holes</p>

**Note**

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

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

<p><b>2-poles, 2-positions</b></p>	<p><b>2-poles, 3-positions</b></p>	
<p><b>1-pole, 2-positions 2mm-travel</b></p>	<p><b>1-pole, 3-positions 2mm-travel</b></p>	<p><b>1-pole, 4-positions</b></p>
<p><b>2-poles, 2-positions</b></p>	<p><b>1-pole, 2-positions 1.5mm-travel</b></p>	<p><b>1-pole, 3-positions 1.5mm-travel</b></p>

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line  
Package Type

TACT Switch™










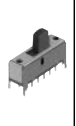
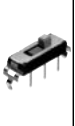


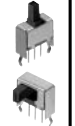
Custom-  
Products

Small size  
General Use type

Big size  
General Use type

Other Use type

# List of Varieties

Series		SSAG	SSAH	SSAD	SSSS8	SSSS7	SSSS2	SSSS9	SSSF	SSSU	SSSB	SSST	SSAA	SSAC	SSAB		
Photo																	
Outline specifications	Travel (mm)	1.5			1.5 2		2		3		4		2	1.5	1.9 2		
	Actuator direction	Horizontal			Vertical Horizontal	Horizontal	Vertical Horizontal			Vertical		Horizontal		Vertical Horizontal			
	Number of poles	1			1 2		1 2 4		2 4	1	1 2	2	1				
Dimensions (mm)	W	9.05	9.5	6.7	11.2	8.8	13	14	16.5	24.5	29	13	12.4	9.5	9		
	D	3		3.2	2.6	3	3.5	4.7	7		9	4.3	6	5.5	4.2		
	H	1.15	0.9	0.7	1.4	2		5	8.5		12	3.5	5	5.2	8.5		
Operating temperature range		-10 to +60			-40 to +85		-10 to +60										
Rating (max. )( min. ) (Resistive load)		10mA 5V DC	1mA 5V DC		0.3A 4V DC		0.3A 6V DC	0.1A 12V DC	0.1A 30V DC		0.3A 30V DC	0.1A 12V DC	0.1A 30V DC	1mA 5V DC	0.1A 12V DC		
		50μA 3V DC															
Electrical performance	Initial contact resistance	200m max.		100m max.	70m max.			30m max.	25m max.		20m max.	70m max.	25m max.	100m max.	30m max.		
	Insulation resistance	100M min. 100V DC				100M min. 500V DC										100M min. 100V DC	100M min. 500V DC
	Voltage proof	100V AC for 1minute				500V AC for 1minute								100V AC for 1minute		500V AC for 1minute	
Mechanical performance	Robustness of terminal	3N for 1minute					5N for 1minute			3N for 1minute	5N for 1minute						
	Robustness of actuator	Operating direction	10N		5N	10N	20N	30N		50N	20N	10N	5N	30N			
		Pulling direction	10N		10N Static force			10N	30N Static force		10N	10N	5N	40N			
Durability	Operating life without load	10,000cycles	10,000cycles	10,000cycles 100m max. 2			10,000cycles 60m max.	10,000cycles 45m max.		10,000cycles 40m max.	10,000cycles 100m max.	10,000cycles 45m max.	10,000cycles 200m max.	1,000cycles 60m max.			
	Operating life without load Load as rating	500m max.	300m max.	10,000cycles 200m max.	10,000cycles 130m max. 2			10,000cycles 80m max.	10,000cycles 65m max.		5,000cycles 60m max.	10,000cycles 130m max.	10,000cycles 65m max.	10,000cycles 80m max.			
Environmental performance	Cold	-40 ± 2 for 96h		-20 ± 2 for 96h													
	Dry heat	85 ± 2 for 96h															
	Damp heat	40 ± 2 , 90 to 95%RH for 96h															
Soldering	Manual soldering	350 ± 5 3s max.		300 ± 5 5s max.		260 ± 5 3s max.	350 ± 10 4s max.	300 ± 10 5s max.	350 ± 10 5s max.	350 ± 10 3 ± 1s		350 ± 10 3s max.	300 ± 10 3 ± 1s	300 ± 10 2s	350 ± 10 3 ± 1s		
	Dip soldering						260 ± 5 3 ± 1s	260 ± 5 5 ± 1s		260 ± 5 10 ± 1s		260 ± 5 5 ± 1s	260 ± 10 10 ± 1s	260 ± 10 5 ± 1s	260 ± 5 10 ± 1s		
	Reflow soldering	Please see P.154															
Poles-positions	1-2	—	—								—			—			
	1-3			—											—		
	1-4	—				—					—						
	2-2	—				—										—	
	2-3	—				—										—	
	2-4	—									—						
	4-2	—											—				
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- Detector
- Push
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- Rotary
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- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

- Small size General Use type
- Big size General Use type
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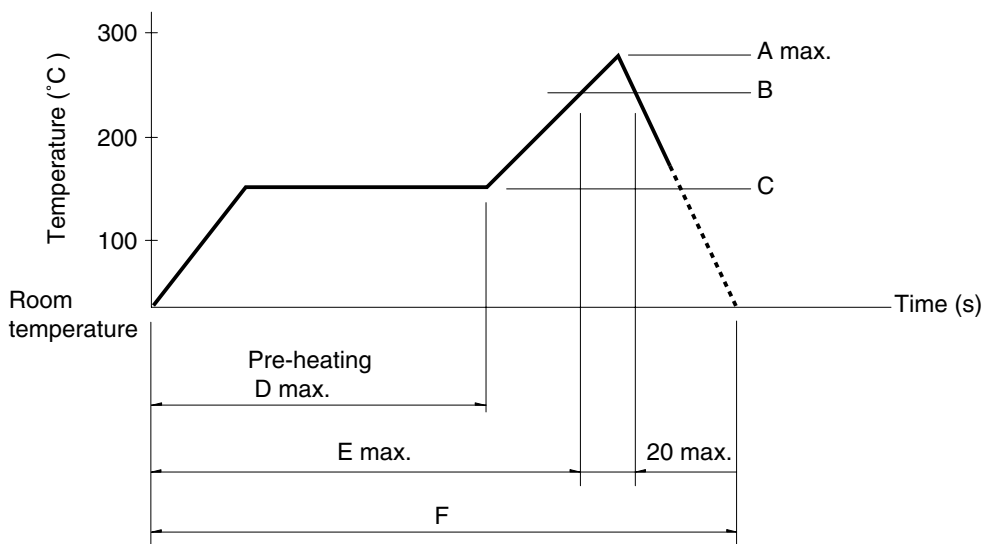
**Note**

The operating temperature range for automotive applications can be raised upon request. Please contact us for requirements of this kind.

## 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 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( ) 3s max.	B( )	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			260	230	150	120	—	—
SSAD			240	220				
SSSS8	Horizontal	1-pole, 2-positions 1-pole, 3-positions( 1.5mm )	255	200				
		1-pole, 3-positions( 2mm ) 1-pole, 4-positions 2-poles, 2-positions	240	220				
	Vertical							

### 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.