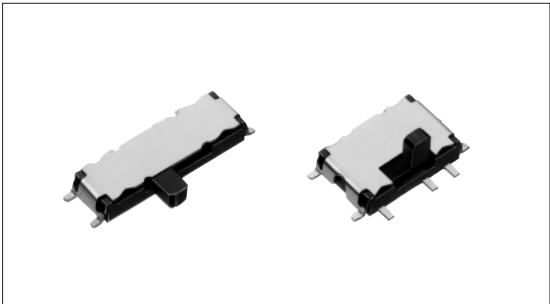


Slide Switch
1.4(H)mm, 1.5/2mm-travel Surface Mount Type
SSSS8 Series



A low-profile slide switch with 1.4mm thickness.

- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line Package Type
- TACT Switch™
- Custom-Products
- Small size General Use type
- Big size General Use type
- Other Use type



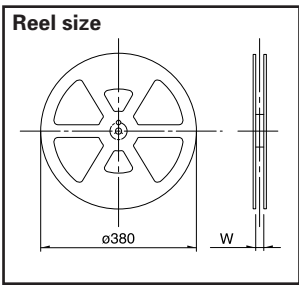
Typical Specifications

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)

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

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
SSSS810301				25.4	24	428×413×172
SSSS812701,SSSS821801	2,500	5,000	10,000			406×406×190

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).



Dimensions

1.5mm-travel

Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
1		2-poles, 2-positions Terminal No.① 0.4 3 1.5 0.75 With ground terminal dimensions Travel Operating force : 2N	2-ϕ0.9 holes 6-pattern section 4-pattern section for ground terminal
2		2-poles, 3-positions Terminal No.① 1.5 3 1.5 0.4 With ground terminal dimensions Travel Operating force : a $\rightarrow$ b c $\rightarrow$ b } 2N b $\rightarrow$ a b $\rightarrow$ c } 2.5N	2-ϕ0.9 holes 8-pattern section 4-pattern section for ground terminal
3		1-pole, 2-positions Terminal No.① 0.4 3 1.5 0.75 With ground terminal dimensions Travel Operating force : 1.5N	2-ϕ0.9 holes 3-pattern section 4-pattern section for ground terminal
4		1-pole, 3-positions Terminal No.① 1.5 3 1.5 0.4 With ground terminal dimensions Travel Operating force : a $\rightarrow$ b c $\rightarrow$ b } 1.5N b $\rightarrow$ a b $\rightarrow$ c } 2N	2-ϕ0.9 holes 4-pattern section 4-pattern section for ground terminal

Note

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

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



Automotive
Use

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			
6			

Horizontal Operating Section Type 2mm-travel

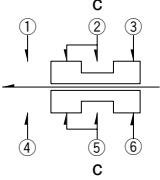
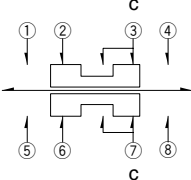
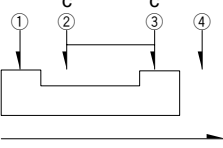
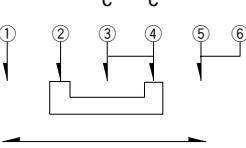
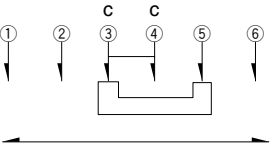
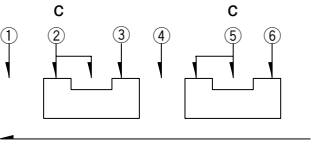
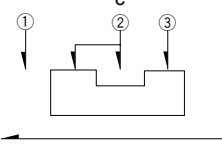
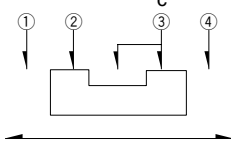
Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
7			
8			

Note

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

Circuit Diagram (Viewed from Direction A)

2-poles, 2-positions 		2-poles, 3-positions 	
1-pole, 2-positions 2mm-travel 	1-pole, 3-positions 2mm-travel 	1-pole, 4-positions 	
2-poles, 2-positions 	1-pole, 2-positions 1.5mm-travel 	1-pole, 3-positions 1.5mm-travel 	

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



Automotive
Use

List of Varieties

Series		SSAJ	SSAG	SSAH	SSAD	SSSS8	SSSS7 ※	SSSS2	SSSS9 ※
Photo									
Outline specifications	Travel (mm)	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	5.5	9.05	9.5	6.7	11.2	8.8	13	14
	D	2.5	3		3.2	2.6	3	3.5	4.7
	H	0.7	1.15	0.9	0.7	1.4	2		5
Operating temperature range		-10℃ to +60℃		-30℃ to +60℃	-40℃ to +85℃	-40℃ to +85℃			-10℃ to +60℃
Rating (max.) / (min.) (Resistive load)		10mA 5V DC		1mA 5V DC		0.3A 5V DC	0.3A 4V DC	0.3A 6V DC	0.1A 12V DC
		50μA 3V DC							
Electrical performance	Initial contact resistance	300mΩ max.	200mΩ max.		100mΩ max.	70mΩ max.			30mΩ 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		5N	10N		20N	30N
		Pulling direction				10N Static force		10N	
Durability	Operating life without load	10,000cycles 500mΩ max.	100,000cycles 500mΩ max.	10,000cycles 300mΩ max.	10,000cycles 100mΩ max. ※2				10,000cycles 60mΩ max.
	Operating life without load Load as rating				10,000cycles 200mΩ max.				10,000cycles 80mΩ max.
Environmental performance	Cold	-40±2℃ for 96h	-20±2℃ for 96h			-40℃ for 96h	-20℃ for 96h		
	Dry heat	85±2℃ for 96h							
	Damp heat	40±2℃, 90~95%RH for 96h							
Soldering	Manual soldering	350±5℃ 3s max.			300±5℃ 5s max.		300±5℃ 3s max.	350±10℃ 4s max.	300±10℃ 5s max.
	Dip soldering							260±5℃ 3±1s	260±5℃ 5 [±] s (2回)
	Reflow soldering	Please see P.182							
Poles-positions	1-2	●	—	—	●	●	●	●	●
	1-3	—	●	●	—	●	●	●	●
	1-4	—				●	—	●	—
	2-2	—				●	—	●	●
	2-3	—				●	—	●	●
	2-4	—						●	—
	4-2	—							
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Note

※The operating temperature range for automotive applications can be raised upon request. Please contact us for details.

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

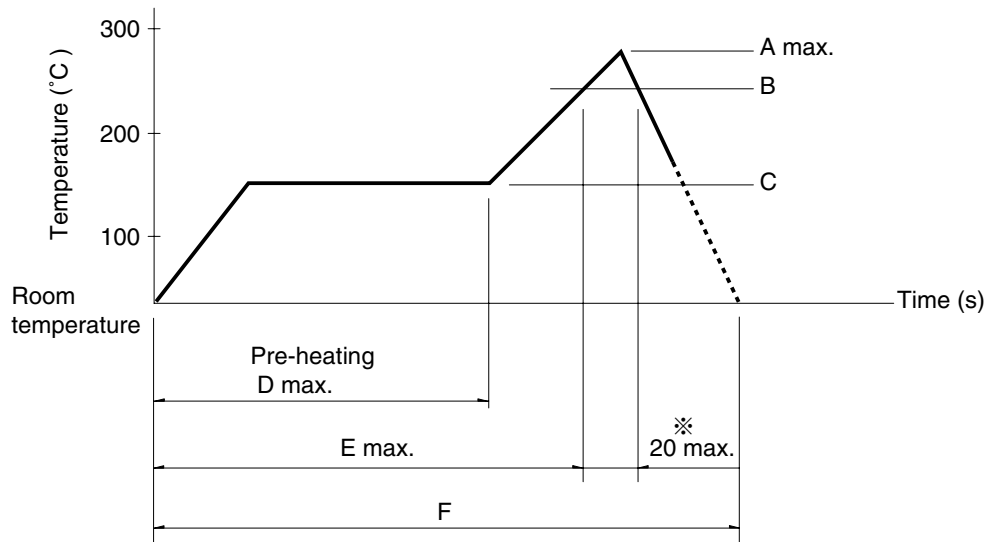
Custom-
ProductsSmall size
General Use typeBig size
General Use type

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



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

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			260	230				
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							

Small size
General Use typeBig size
General Use type

Other Use type

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.