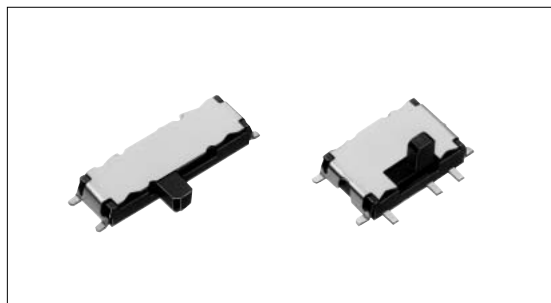


Slide Switch 1.4(H)mm, 1.5/2mm-travel Surface Mount Type SSSS8 Series



A low-profile slide switch with 1.4mm thickness.



Typical Specifications

Items		Specifications
Rating(max.)(min.) (Resistive load)		0.3A 4V DC/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 4V DC)

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

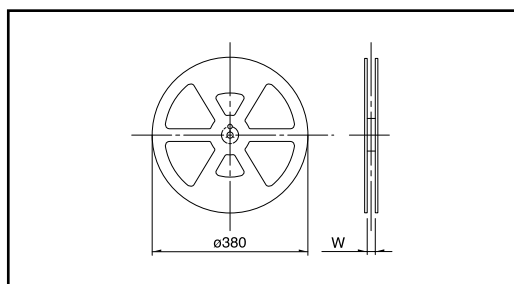
Product Line

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		With			SSSS820201	1
				3					SSSS820501	2
	Horizontal	t1.1	1	2		Without		18,000	SSSS810701	3
				3					SSSS811501	4
			2	2				With	10,000	SSSS821801
		t0.4	4	SSSS812701		5				
		t1.1	1	2		18,000			SSSS811101	3
				3				SSSS812201	4	
				2				SSSS810201	7	
				3				SSSS810301	8	
2										

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)	4,500	9,000	18,000	17.4	16
	1-pole, 2-positions(2mm)					
	1-pole, 3-positions(1.5mm)					
	1-pole, 3-positions(2mm)	2,500	5,000	10,000	25.4	24
	1-pole, 4-positions 2-poles, 2-positions					

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(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 } 2N c $\rightarrow$ b } 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 } 1.5N c $\rightarrow$ b } 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.

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		Terminal No. ① Operating force : a → b } 1.5N d → c } b → c } 2N c → b } b → a }	6-pattern section 4-pattern section for ground terminal
6		Terminal No. ① Operating force : 1.5N	6-pattern section 2-ø0.9 holes

Horizontal Operating Section Type 2mm-travel

Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
7		Terminal No. ① Operating force : 1.5N	2-ø0.9 holes 4-pattern section 4-pattern section for ground terminal
8		Terminal No. ① Operating force : a → b } 1.5N c → b } b → a } 2N b → c }	6-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™

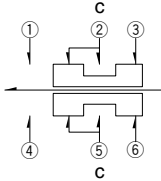
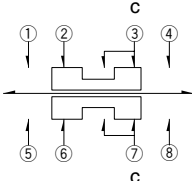
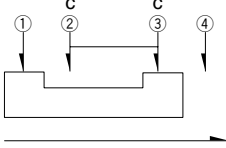
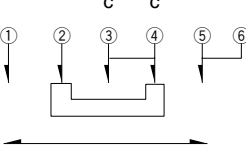
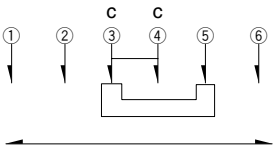
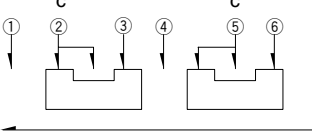
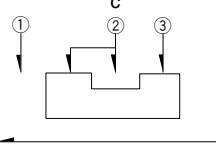
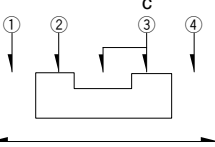
Custom-
Products

Small size
General Use type

Big size
General Use type

Other Use type

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™

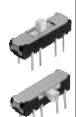
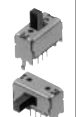
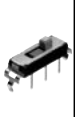
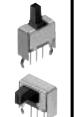
Custom-
Products

Small size
General Use type

Big size
General Use type

Other Use type

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	200mΩ max.		100mΩ max.	70mΩ max.			30mΩ max.	25mΩ max.		20mΩ max.	70mΩ max.	25mΩ max.	100mΩ max.	30mΩ max.	
	Insulation resistance	100MΩ min. 100V DC				100MΩ min. 500V DC									100MΩ 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
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 Static force				10N	30N Static force		10N	30N	40N				
Durability	Operating life without load	10,000cycles 500mΩ max.	10,000cycles 300mΩ max.	10,000cycles 100mΩ max. 2		10,000cycles 60mΩ max.		10,000cycles 45mΩ max.		10,000cycles 40mΩ max.	10,000cycles 100mΩ max.	10,000cycles 45mΩ max.	10,000cycles 200mΩ max.	1,000cycles 60mΩ max.		
	Operating life without load Load as rating	10,000cycles 200mΩ max.		10,000cycles 130mΩ max. 2		10,000cycles 80mΩ max.		10,000cycles 65mΩ max.		5,000cycles 60mΩ max.	10,000cycles 130mΩ max.	10,000cycles 65mΩ max.	10,000cycles 200mΩ max.	10,000cycles 80mΩ 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	—							•	•	•	—				
Page		112	115	117	119	123	126	130	135	139	143	146	147	150	152	

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

- Slide Switches Soldering Conditions154
- Slide Switches Cautions155

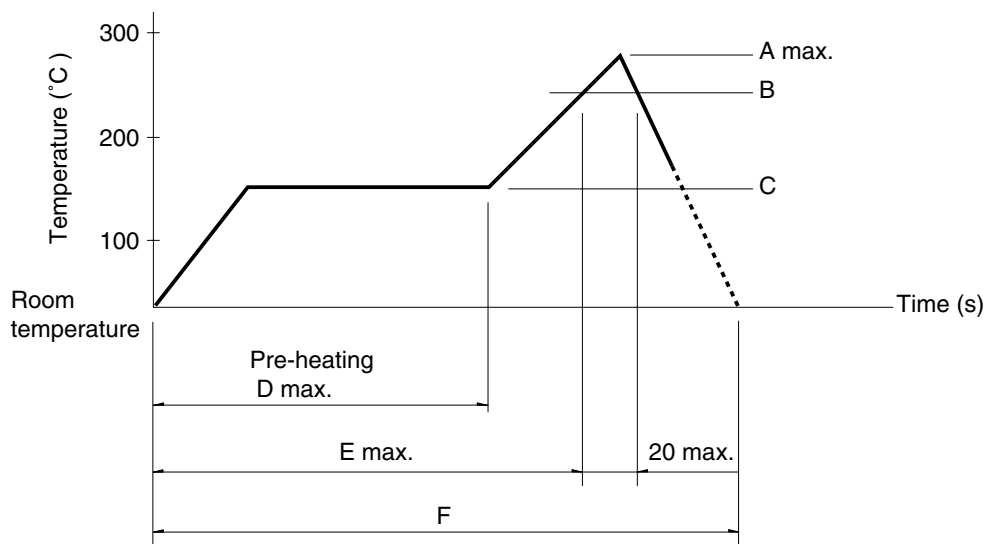
Note

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 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() 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				
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.