

A low-profile slide switch with 1.4mm thickness.

Detector

Slide

Push

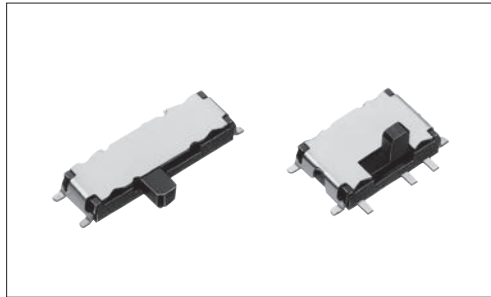
Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™



Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.3A 5V DC / 50 μ A 3V DC
Contact resistance (Initial performance / After lifetime)		70m Ω max. / 130m Ω max.
Operating force		Refer to the dimensions.
Operating life	Without load	10,000cycles 100m Ω max. (Automotive Use)
	With load	10,000cycles 130m Ω max. (0.3A 5V DC) (Automotive Use)

Product Line

Travel (mm)	Actuator direction	Actuator thickness (mm)	Poles	Positions	Changeover timing	Ground terminal	Soldering	Minimum order unit (pcs.)		Products No.	Drawing No.
								Japan	Export		
1.5	Vertical	0.8	2	2	Not specified	Without	Reflow	1,800	7,200	SSSS820101	1
				3						SSSS820301	2
				2						SSSS820201	1
				3						SSSS820501	2
	Horizontal	1.1	1	2		Without		4,500	18,000	SSSS810701	3
				3		SSSS811501				4	
				2		SSSS811101				3	
				3		SSSS812201				4	
2				2		With			SSSS810201	5	

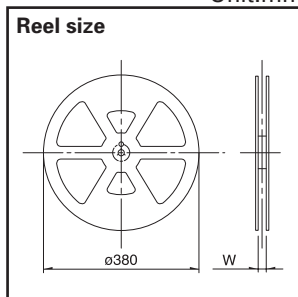
Note

Other varieties are also available. Please inquire.

Packing Specifications

Taping

Unit:mm


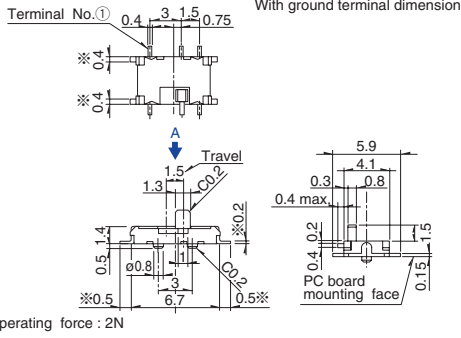
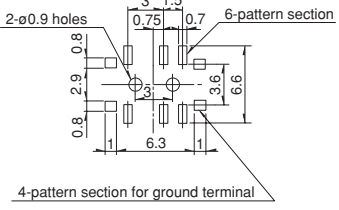
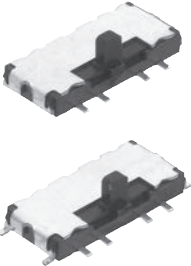
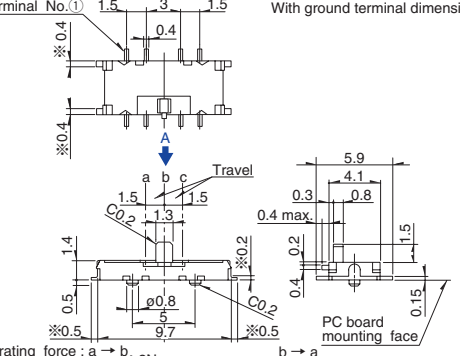
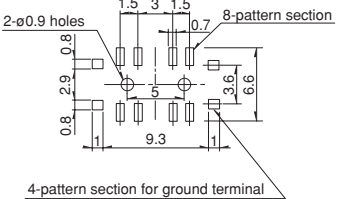

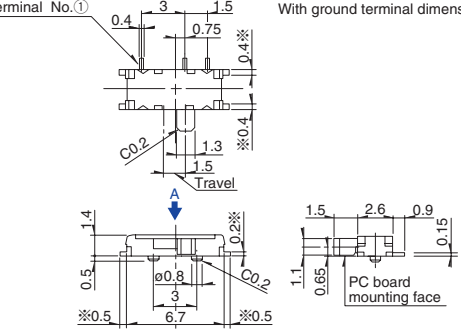
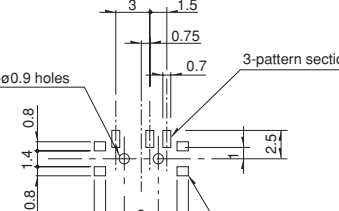

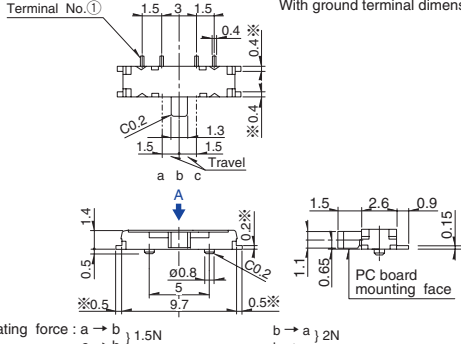
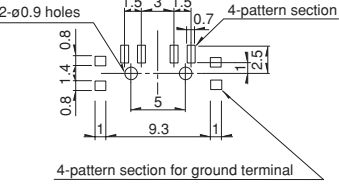


Product No.	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)
	1 reel	1 case / Japan	1 case / export packing			
SSSS820101, SSSS820301, SSSS820201, SSSS820501	1,800	3,600	7,200	25.4	24	406 × 406 × 190
SSSS810701, SSSS811501, SSSS811101, SSSS812201, SSSS810201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

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 With ground terminal dimensions</p>  <p>Operating force : 2N</p>	 <p>2-ø0.9 holes 3 1.5 0.75 0.7 6-pattern section</p> <p>4-pattern section for ground terminal</p>
2		<p>Terminal No.① 1.5 3 1.5 With ground terminal dimensions</p>  <p>Operating force : a → b, c → b } 2N b → a, b → c } 2.5N</p>	 <p>2-ø0.9 holes 1.5 3 1.5 0.7 8-pattern section</p> <p>4-pattern section for ground terminal</p>
3		<p>Terminal No.① 0.4 3 1.5 With ground terminal dimensions</p>  <p>Operating force : 1.5N</p>	 <p>2-ø0.9 holes 3 1.5 0.75 0.7 3-pattern section</p> <p>4-pattern section for ground terminal</p>
4		<p>Terminal No.① 1.5 3 1.5 With ground terminal dimensions</p>  <p>Operating force : a → b, c → b } 1.5N b → a, b → c } 2N</p>	 <p>2-ø0.9 holes 1.5 3 1.5 0.7 4-pattern section</p> <p>4-pattern section for ground terminal</p>

Note

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

Detector

Slide

Push

Rotary

Encoders

Power

Dual-in-line Package Type

TACT Switch™

Small size General Use type

Big size General Use type

- Detector
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- TACT Switch™

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.








- Small size General Use type
- Big size General Use type

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>1-pole, 2-positions Drawing No. : 5</p>

Slide Switches

List of Varieties

Series		SSAJ	SSAH	SSSS8	SSAL	SSAG	SSSS7※1	SSSS2	
Photo									
Actuator direction	Horizontal	●	●	●	●	●	●	●	
	Vertical	—	—	●	—	—	—	●	
Dimensions (mm)	W	5.5	9.5	9.7	7.6	9.05	8.8	13	
	D	2.5	3	2.6		3		3.5	
	H	0.7	0.9	1.4	1.2	1.15	2		
Poles-positions	1-2	●	—	●	●	—	●	●	
	1-3	—	●	●	—	●	●	●	
	1-4	—	—	—	—	—	—	●	
	2-2	—	—	●	—	—	—	●	
	2-3	—	—	●	—	—	—	●	
	2-4	—	—	—	—	—	—	●	
	4-2	—	—	—	—	—	—	—	
Travel (mm)		1.4	1.5	1.5 2	2	1.5	2	2	
Operating temperature range		-10°C to +60°C	-30°C to +60°C	-40°C to +85°C	-10°C to +60°C		-40°C to +85°C		
Automotive use		—	—	●	—	—	—	—	
Life cycle		★3	★3	★3	★3	★3	★3	★3	
Rating (max.) (Resistive load)		10mA 5V DC	1mA 5V DC	0.3A 5V DC	10mA 5V DC		0.3A 4V DC	0.3A 6V DC	
Rating (min.) (Resistive load)		50μA 3V DC	—	50μA 3V DC					
Durability	Operating life without load	10,000cycles 500mΩ max.	10,000cycles 300mΩ max.	10,000cycles 100mΩ max.	100,000cycles 10Ω max.	30,000cycles (Lockside) 100,000cycles (Recoilside) 500mΩ max.	10,000cycles 100mΩ max.※2		
	Operating life without load Load:as rating			10,000cycles 130mΩ max.				10,000cycles 130mΩ max.※2	
Electrical performance	Initial contact resistance	300mΩ max.	200mΩ max.	70mΩ max.	10Ω 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	10N		10N	10N		10N	20N	
				10N Static force			10N Static force		
Environmental performance	Cold	-40±2°C for 96h		-40±2°C for 500h	-40±2°C for 96h		-20±2°C for 500h		
	Dry heat	85±2°C for 96h		85±2°C for 500h	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 240h	60±2°C, 90 to 95%RH for 500h	40±2°C, 90 to 95%RH for 96h		40±2°C, 90 to 95%RH for 500h		
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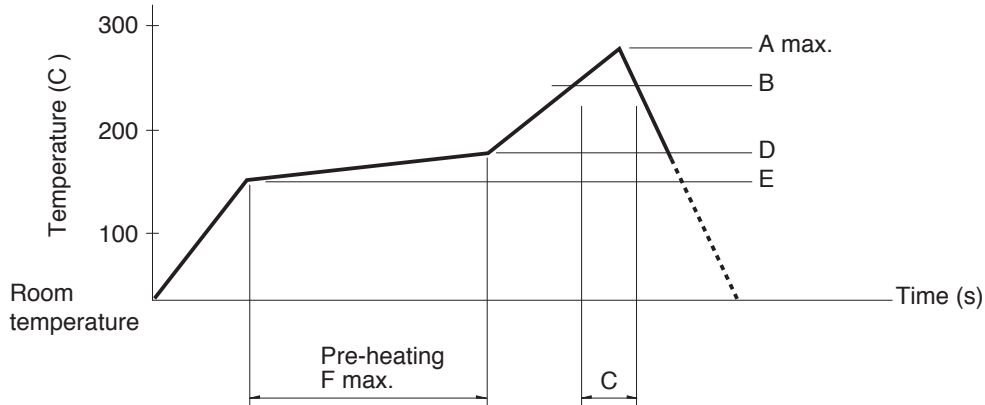
Notes

1. ※1. The operating temperature range for automotive applications can be raised upon request. Please contact us for details.
2. ※2. Operating life for SSSS213202 is 100 cycles
3. ● indicates applicability to all products in the series.

Slide Switches 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 (s)	D (°C)	E (°C)	F (s)
SSSS2	Vertical	1-pole, 3-positions	250	230	40	180	150	120
	Horizontal	1-pole, 2-positions 1-pole, 3-positions 2-poles, 3-positions	260					
	Vertical	1-pole, 2-positions	250					
SSSS7			260					
SSAH, SSAG, SSAJ, SSAL, SSSS8			260					

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.

Reference for Hand Soldering

Series	Soldering temperature	Soldering time
SSSF, SSSU, SSSB, SSAA	350±10°C	3+1 / 0s
SSSS2	350±10°C	4s max.
SSSS9	350±10°C	3s max.
SSAH, SSAG, SSAJ, SSAL, SSSS8, SSSS7	350±5°C	3s max.
SSAC	300±5°C	2s max.

Reference for Dip Soldering

(For PC board terminal types)

Series	Items		Dip soldering	
	Preheating temperature	Preheating time	Soldering temperature	Duration of immersion
SSSS2	100°C max.	60s max.	260±5°C	3±1s
SSSS9	120°C max.	60s max.	260±5°C	5+ 0 / -1s (2times)
SSAA	100°C max.	60s max.	260±5°C	10±1s
SSSF, SSSU, SSSB	—		260±5°C	10±1s
SSAC	—		260±5°C	5±1s

Detector

Slide

Push

Rotary

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Power

Dual-in-line
Package Type

TACT Switch™

Small size
General Use type

Big size
General Use type