

Detector

Slide

Push

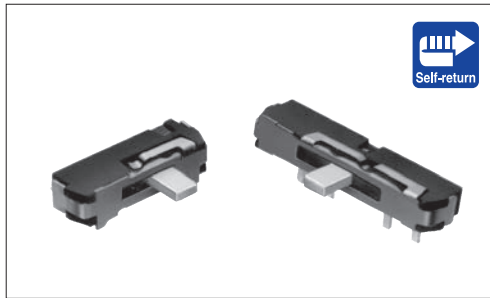
Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Small size
General Use typeBig size
General Use type

■ Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.3A 4V DC / 50μA 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
	With load	10,000cycles (0.3A 4V DC)

■ Product Line

Travel (mm)	Actuator direction	Actuator length (mm)	Poles	Positions	Changeover timing	Soldering	Operation	Minimum order unit (pcs.)		Products No.	Drawing No.
								Japan	Export		
2	Horizontal	2	1	2	Not specified	Manual	Standard	100	50,000	SSSS710100	1
						Reflow		2,000	8,000	SSSS710607	2
				3	Non shorting	Manual		100	40,000	SSSS711100	4
						Reflow	2,000	8,000	SSSS711403	5	
									SSSS7A0101	6	
									SSSS7A0202	7	
				2		Double-side recoil			SSSS7B0101	3	

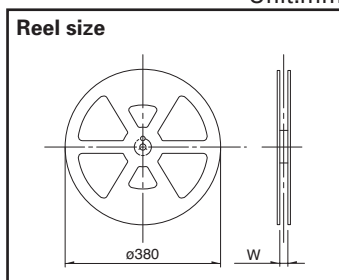
■ Notes

1. Other varieties are also available. Please inquire.
2. Please contact us for automotive use products.

■ Packing Specifications

Taping

Unit:mm



Series	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)	Export package measurements (mm)
	1 reel	1 case / Japan	1 case / export packing			
SSSS710607	2,000	4,000	8,000	17.4	16	417 × 409 × 139
SSSS711403				25.4	24	406 × 406 × 190
SSSS7A, SSSS7B						

■ Bulk

Series	Number of packages (pcs.)		Export package measurements (mm)
	1 case / Japan	1 case / export packing	
SSSS710100	10,000	50,000	400 × 270 × 290
SSSS711100	8,000	40,000	

Dimensions

Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from direction A)
1	1-pole, 2-positions	Operating force with detent : 1.5N	3-ϕ0.6 holes
2	1-pole, 2-positions Reflow	Operating force with detent : 1.5N	Pattern section 2-ϕ0.8 holes
3	1-pole, 2-positions reflow Double-side recoil type	Operating force with detent : $b \rightarrow a$, $b \rightarrow c$ 2N	Pattern section 2-ϕ0.8 holes
4	1-pole, 3-positions	Operating force with detent : $a \rightarrow b$, $c \rightarrow b$ 1.75N $b \rightarrow a$, $b \rightarrow c$ 2.5N	4-ϕ0.6 holes

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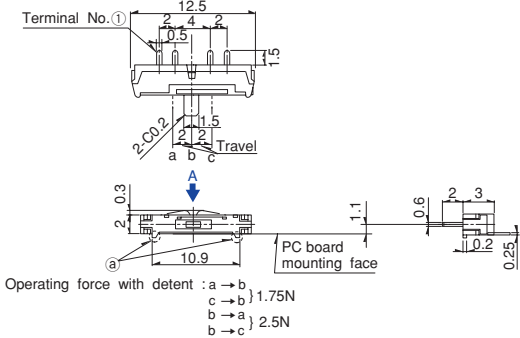
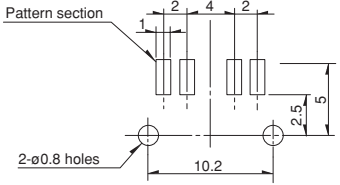
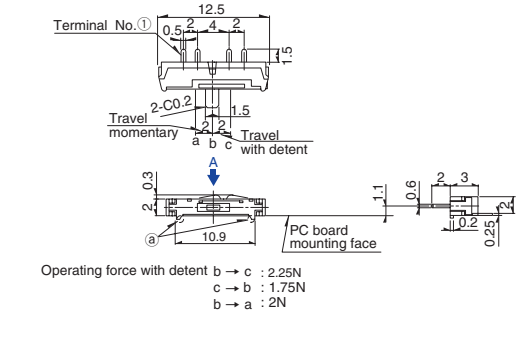
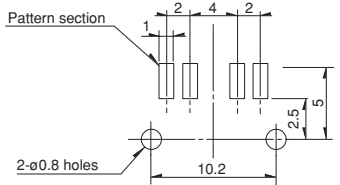
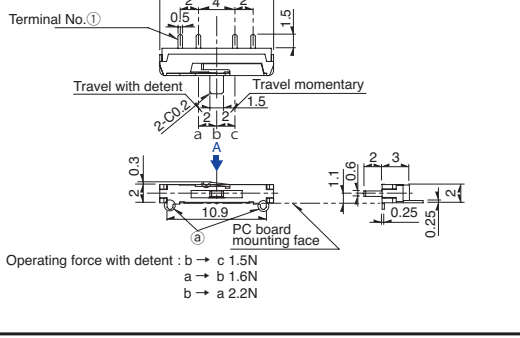
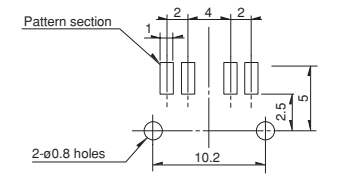
Dual-in-line
Package Type

TACT Switch™

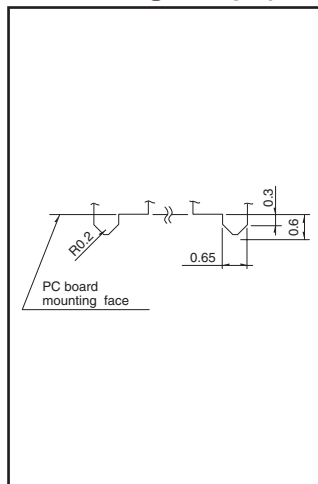
Small size
General Use typeBig size
General Use type

Dimensions

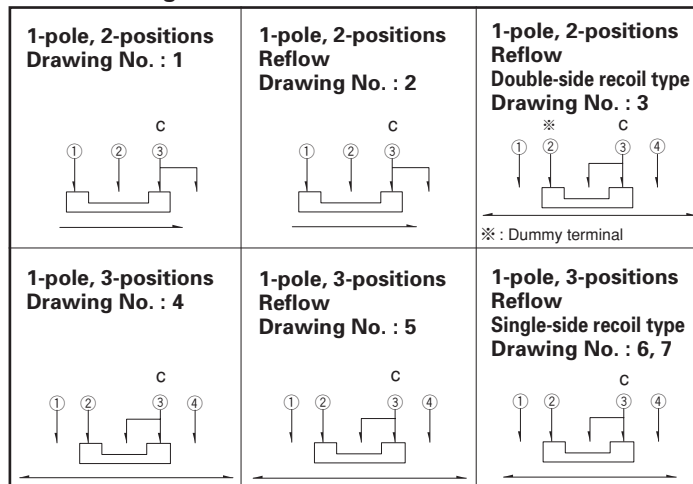
Unit:mm

No.	Photo	Style	PC board mounting hole dimensions (Viewed from direction A)
5	1-pole, 3-positions Reflow 	 Operating force with detent : a → b : 1.75N c → b : 2.5N b → a : 2.5N b → c : 2.5N	
6	1-pole, 3-positions Reflow Single-side recoil type 	 Operating force with detent b → c : 2.25N c → b : 1.75N b → a : 2N b → c : 2N	
7	1-pole, 3-positions Reflow Single-side recoil type 	 Operating force with detent : b → c : 1.5N a → b : 1.6N b → a : 2.2N b → c : 2.2N	

Detail of ① Unit:mm



Circuit Diagram (Viewed from Direction A)



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℃ to +60℃	−30℃ to +60℃	−40℃ to +85℃	−10℃ to +60℃		−40℃ to +85℃	
Automotive use		—	—	●	—	—	—	—
Life cycle								
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	Operating direction	10N	10N	10N	10N	10N	20N
				10N Static force			10N Static force	
Environmental performance	Cold		−40±2℃ for 96h		−40±2℃ for 96h		−20±2℃ for 500h	
	Dry heat		85±2℃ for 96h		85±2℃ for 96h		85±2℃ for 500h	
	Damp heat		40±2℃, 90 to 95%RH for 96h	60±2℃, 90 to 95%RH for 240h	60±2℃, 90 to 95%RH for 500h	40±2℃, 90 to 95%RH for 96h		40±2℃, 90 to 95%RH for 500h
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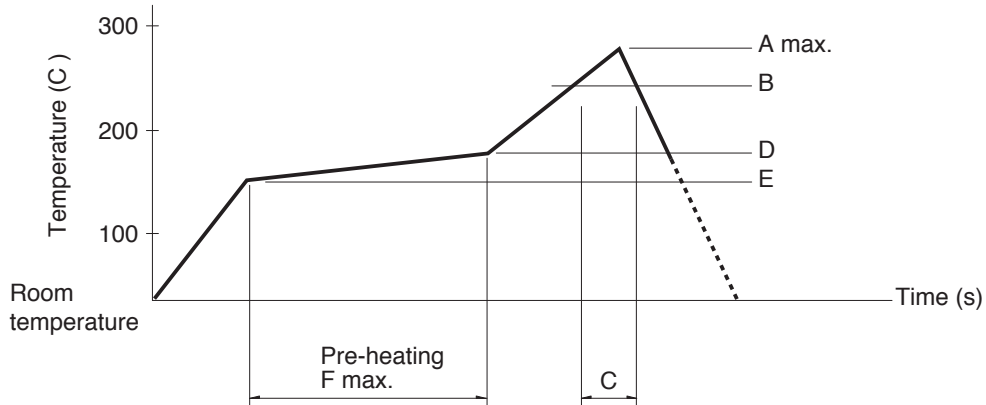
Notes

- ※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
- 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								

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

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