

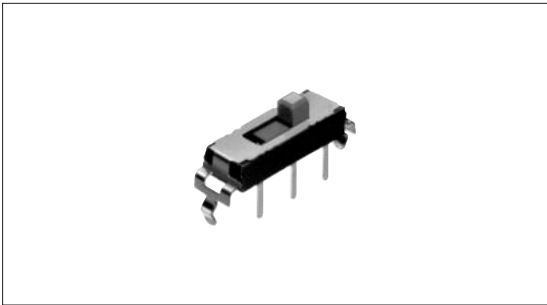
Slide Switch 4mm-travel, Self-return Type

SSST Series



Two types: one has a cover and the other is an integrated design without a cover.

- Detector
- Push
- Slide**
- Rotary
- Encoders
- Power



Features

- 4mm-travel.
- Reflow solderable type also available.

Applications

- AV devices including digital camcorders and industrial cameras

- Dual-in-line Package Type
- Multi Control Devices
- TACT Switch™
- Custom-Products

Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.1A 12V DC/50μA 3V DC
Contact resistance (Initial performance/After lifetime)		70mΩ max./130mΩ max.
Operating force		2±1N
Operating life	Without load	10,000 cycles
	With load	10,000 cycles (0.1A 12V DC)

- Small size General Use type

- Big size General Use type

- Other Use type

Products Line

Travel (mm)	Operating section directions	Length of operating section (mm)	Poles	Positions	Mounting method	Changeover timing	Soldering	Minimum packing unit (pcs.)	Products No.	Drawing No.
4	Vertical	2	1	2	Snap-in (t1)	Non shorting	Manual, Dip	100	SSST010600	1
		3							SSST010500	
		2			—		Reflow	1,100	SSST011000	2

Note

Additional switches not included in the above list are also available. Contact us for details.

For other specifications, see P.150
For specifications for the taping package, see P.152

Dimensions

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from the direction A)
1	<p>Insertion type</p>	
2	<p>Reflow type</p>	

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

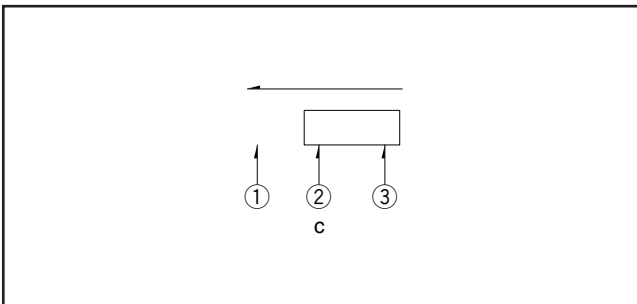
Custom-
Products

Small size
General Use type

**Big size
General Use type**

Other Use type

Circuit Diagram (Viewed from the Direction A)



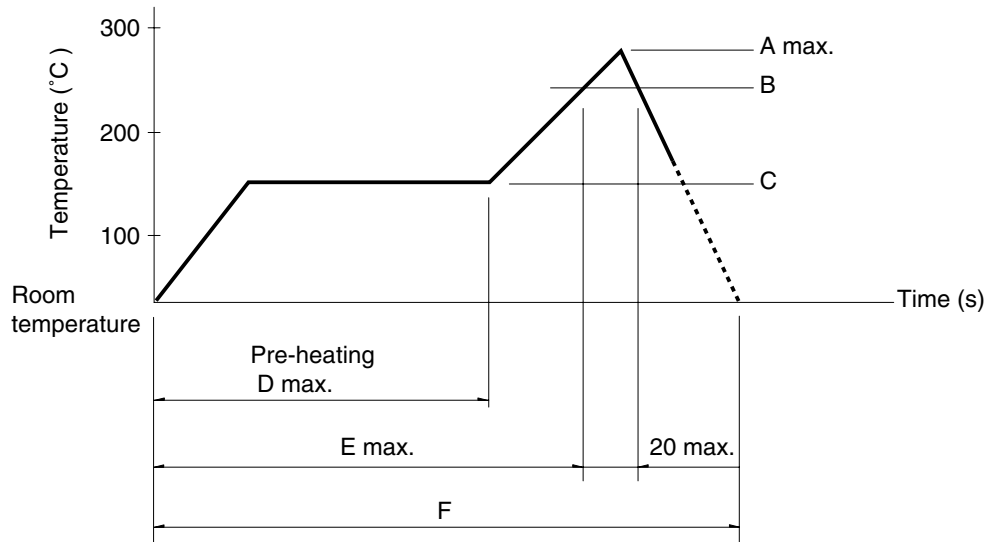
Products Specifications

Items		Series						
		SSSB	SSAA	SSAC	SSAB	SSST		
Detector	Operating temperature range		-10°C to +60°C					
Push	Rating (max.) (Resistive load)		0.3A 30V DC	0.1A 30V DC	1mA 5V DC	0.1A 12V DC		
Slide	Electrical performance	Initial contact resistance	20mΩ max.	25mΩ max.	100mΩ max.	30mΩ max.	70mΩ max.	
		Insulation resistance	100MΩ min. 500V DC		100MΩ min. 100V DC	100MΩ min. 500V DC		
		Voltage proof	500V AC for 1 min.		100V AC for 1 min.	500V AC for 1 min.		
Rotary	Mechanical performance	Robustness of terminal	5N for 1 min.				3N for 1 min.	
Encoders		Robustness of actuator	Operating direction	50N	10N	5N	30N	20N
Power			Pulling direction	30N Static force			40N	10N
Dual-in-line Package Type	Mechanical performance	Vibration		10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2 hours respectively				
Multi Control Devices		Resistance to soldering heat	Manual soldering	350±10°C 3 ⁺ ½s		300±10°C 2s max.	350±10°C 3 ⁺ ½s	350±10°C 3s max.
TACT Switch™			Dip soldering	260±5°C 10±1s		260±10°C 5±1s	260±5°C 10±1s	260±5°C 5 ⁺ ½s
Custom-Products			Reflow soldering	-----				
Durability	Operating life without load		10,000 cycles 40mΩ max.	10,000 cycles 45mΩ max.	10,000 cycles 200mΩ max.	1,000 cycles 60mΩ max.	10,000 cycles 100mΩ max.	
	Operating life with load Load : as rating		5,000 cycles 60mΩ max.	10,000 cycles 65mΩ max.		1,000 cycles 80mΩ max.	10,000 cycles 130mΩ max.	
Small size General Use type	Environmental performance	Cold		-20±2°C for 96h				
		Dry heat		85±2°C for 96h				
		Damp heat		40±2°C, 90 to 95%RH for 96h				
Big 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



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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					
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				200			
SSST			200					

Notes

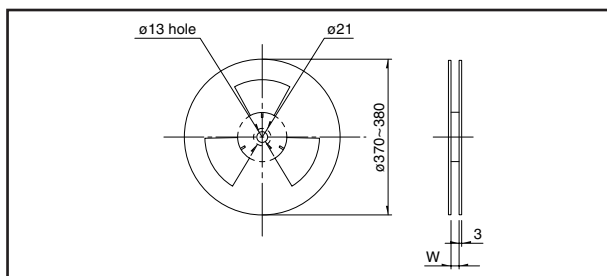
1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the PC board's material, size, thickness, etc. The above-stated conditions shall also apply to switch surface temperatures.
2. Soldering conditions differ depending on reflow soldering machines. You are requested to verify the soldering conditions thoroughly beforehand.

Taping Specifications

Taping Packaging

Reel Size

Unit:mm



Series			Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)
			1 reel	1 case/domestic	1 case/export packing		
SSSS2	Vertical	1-pole, 2-positions	1,200	2,400	4,800	24.4	24
		1-pole, 3-positions	1,000	2,000	4,000		
	Horizontal		1,400	2,800	5,600		
SSSS7 ※	SSSS71		2,000	4,000	8,000	16.4	16
	SSSS7A SSSS7B		2,000	4,000	8,000	25.5	24
	SSSS7C		4,800	9,600	19,200	24.4	
SSSS8	Vertical		1,800	3,600	7,200	16.4	16
	Horizontal	1-pole, 2-positions (1.5mm) 1-pole, 2-positions (2mm) 1-pole, 3-positions (1.5mm)	4,500	9,000	18,000		
		1-pole, 3-positions (2mm)	2,500	5,000	10,000		
		1-pole, 4-positions 2-poles, 2-positions					
SSST			1,100	2,200	4,400	16.4	16
SSAD			5,000	10,000	20,000		

Notes

1. Order products in N minimum packing units (1 reel or 1 case).
2. ※For the SSSS7 Series only, the reel is different from what is illustrated.