

Detector

Slide

Push

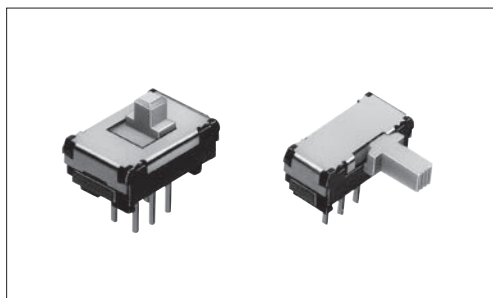
Rotary

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)		0.1A 12V DC / 1mA 5V DC	
Contact resistance (Initial performance / After lifetime)		30mΩ max. / 80mΩ max.	
Operating force		2-positions	3-positions
		3±1.5N	a, c → b 2±1N b → a, c 3±1.5N
Operating life	Without load	10,000cycles	
	With load	10,000cycles (0.1A 12V DC)	

Product Line

Product Line											
Travel (mm)	Actuator direction	Actuator length (mm)	Poles	Positions	Mounting method	Changeover timing	Soldering	Minimum order unit (pcs.)		Products No.	Drawing No.
								Japan	Export		
2	Vertical	2	1	2	Standard	Non shorting	Manual, Dip	100	5,000	SSSS912000	1
					Snap-in (t1.6)					SSSS910400	2
				3	Standard	Not specified				SSSS919500	3
					Snap-in (t1.6)					SSSS918500	4
			2	2	Standard	Non shorting				SSSS922000	5
				3		Not specified				4,000	SSSS921800
		4	1	2	Standard	Non shorting			5,000	SSSS912500	1
					Snap-in (t1.6)					SSSS910800	2
				3	Standard	Not specified				SSSS919800	3
					Snap-in (t1.6)					SSSS918700	4
			2	2	Standard	Non shorting				SSSS922500	5
				3		Not specified				4,000	SSSS923200
	Horizontal	2	1	2	Standard	Non shorting			5,000	SSSS916900	8
					Snap-in (t1.6)					SSSS915000	9
				3	Standard	Not specified				SSSS91B900	10
			2	2		Non shorting				SSSS926400	12
				3	Not specified	4,000				SSSS928500	14
				4	1	2				Standard	Non shorting
			Snap-in (t1.6)			SSSS914500			9		
		3	Standard			Not specified			SSSS91B600	10	
			Snap-in (t1.6)						SSSS91A600	11	
		2	2		Standard	Non shorting			SSSS925800	12	
					Snap-in (t1.6)				SSSS923800	13	
			3		Standard	Not specified			4,000	SSSS928200	14
					Snap-in (t1.6)				SSSS925700	15	

Notes

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

Packing Specifications

Bulk

Products No.	Number of packages (pcs.)		Export package measurements (mm)
	1 case / Japan	1 case / export packing	
SSSS921800, SSSS923200, SSSS920600, SSSS928500, SSSS928200, SSSS925700	800	4,000	400 × 270 × 290
SSSS912000, SSSS910800, SSSS926400, SSSS910400, SSSS919800, SSSS916400, SSSS919500, SSSS918700, SSSS914500, SSSS918500, SSSS922500, SSSS91B600, SSSS922000, SSSS916900, SSSS91A600, SSSS912500, SSSS915000, SSSS925800, SSSS91B900, SSSS923800	1,000	5,000	

Dimensions

Vertical Actuator Type

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
1	1-pole, 2-positions Standard type	
2	1-pole, 2-positions Snap-in type	
3	1-pole, 3-positions Standard type	
4	1-pole, 3-positions Snap-in type	

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Vertical Actuator Type/Horizontal Actuator Type

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
5	2-poles, 2-positions Standard type	
6	2-poles, 3-positions Standard type	
7	2-poles, 3-positions Snap-in type	
8	1-pole, 2-positions Standard type	

Horizontal Actuator Type

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
9	1-pole, 2-positions Snap-in type	
10	1-pole, 3-positions Standard type	
11	1-pole, 3-positions Snap-in type	
12	2-poles, 2-positions Standard type	

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■ Dimensions

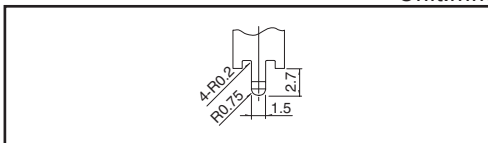
Horizontal Actuator Type

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
13	2-poles, 2-positions Snap-in type 	
14	2-poles, 3-positions Standard type 	
15	2-poles, 3-positions Snap-in type 	

Detail of (a)

Unit:mm



Circuit Diagram (Viewed from Direction A)

1-pole, 2-positions Standard type Drawing No. : 1, 2, 8, 9 	1-pole, 3-positions Standard type Drawing No. : 3, 4, 10, 11 	2-poles, 2-positions Standard type Drawing No. : 5, 12, 13 	2-poles, 3-positions Standard type Drawing No. : 6, 7, 14, 15 
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List of Varieties

Series		SSSS9	SSAC	SSAA※	SSSF※	SSSU※	SSSB
Photo							
Actuator direction	Horizontal						—
	Vertical		—	—			
Dimensions (mm)	W	14	9.5	12.4	16.5	24.5	29
	D	4.7	5.5	6	7		9
	H	5	5.2	5	8.5		12
Poles-positions	1-2		—				—
	1-3		—				—
	1-4	—	—	—	—	—	—
	2-2						
	2-3						
	2-4	—	—	—	—	—	—
	4-2	—	—	—			
Travel (mm)		2	1.5	2		3	4
Operating temperature range		−40℃ to +85℃	−10℃ to +60℃	−40℃ to +85℃			
Automotive use		—	—	—	—	—	—
Life cycle							
Rating (max.) (Resistive load)		0.1A 12V DC	1mA 5V DC	0.1A 30V DC			0.3A 30V DC
Rating (min.) (Resistive load)		1mA 5V DC	—	—	10μA 1V DC		
Durability	Operating life without load	10,000cycles 60mΩ max.	10,000cycles 200mΩ max.	10,000cycles 45mΩ max.			10,000cycles 40mΩ max.
	Operating life without load Load:as rating	10,000cycles 80mΩ max.		10,000cycles 65mΩ max.			5,000cycles 60mΩ max.
Electrical performance	Initial contact resistance	30mΩ max.	100mΩ max.	25mΩ max.			20mΩ max.
	Insulation resistance	100MΩ min. 500V DC	100MΩ min. 100V DC	100MΩ min. 500V DC			
	Voltage proof	500V AC for 1minute	100V AC for 1minute	500V AC for 1minute			
Mechanical performance	Terminal strength		3N for 1minute	5N for 1minute			
	Actuator strength	Operating direction	30N	5N	10N	30N	50N
		Pulling direction	10N			30N Static force	
Environmental performance	Cold		−40±2℃ for 500h	−20±2℃ for 96h		−40±2℃ for 500h	
	Dry heat		85±2℃ for 500h	85±2℃ for 96h		85±2℃ for 500h	
	Damp heat		60±2℃, 90 to 95%RH for 500h	40±2℃, 90 to 95%RH for 96h	40±2℃, 90 to 95%RH for 500h	60±2℃, 90 to 95%RH for 500h	
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Note

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

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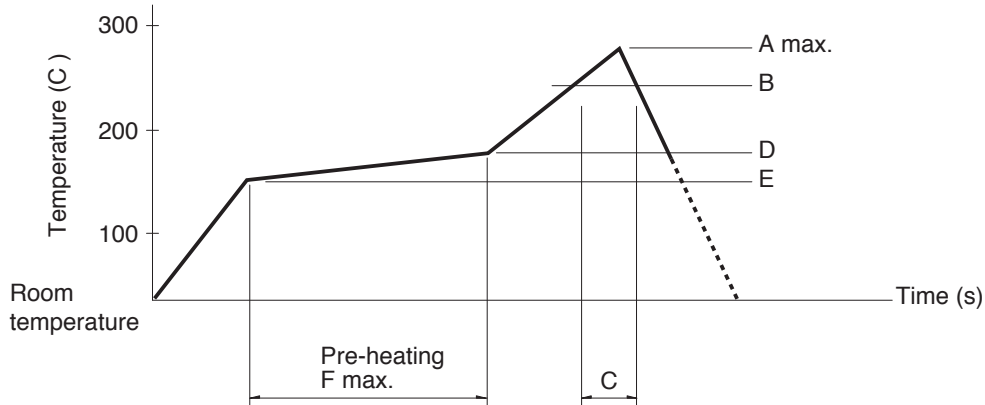
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Slide Switches Soldering Conditions

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

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