

Slide Switch 0.7(H)mm, 1.5mm-travel Surface Mount Type SSAD Series



Low-profile design of 6.7×3.2×0.7mm, height reduced by 50% (compared to our conventional models).

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



Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		1mA 5V DC/50μA 3V DC
Contact resistance (Initial performance/After lifetime)		100m Ω max./150m Ω max.
Operating force		1 (+1, -0.5)N
Operating life	Without load	10,000cycles
	With load	10,000cycles (1mA 5V DC)

- Dual-in-line Package Type
- TACT Switch™
- Custom-Products

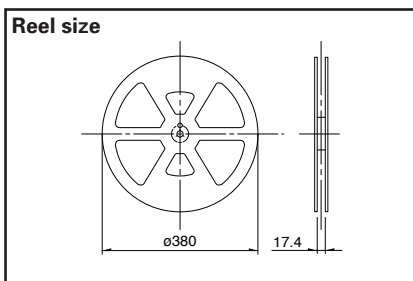
Product Line

Travel (mm)	Actuator direction	Operating section thickness (mm)	Poles	Positions	Changeover timing	Ground terminal	Soldering	Location lug	Minimum order unit (pcs.)	Products No.	Drawing No.
1.5	Horizontal	0.65	1	2	Not specified	With	Reflow	Without	20,000	SSAD120100	1
		0.85						With		SSAD110100	2

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

Packing Specifications

Taping Unit:mm



Number of packages (pcs.)			Tape width (mm)	Export package measurements (mm)
1 reel	1 case /Japan	1 case /export packing		
5,000	10,000	20,000	16	417×409×139

Notes

1. Products other than those listed in the above chart are also available. Please contact us for details.
2. Please place purchase orders per minimum order unit N (integer).

Dimensions

Unit:mm

No.	Style	PC board mounting hole and land dimensions (Viewed from the direction A)
1	<p>Terminal No. ①</p> <p>Dimensions: 7.5, 6.7, 4.5, 0.4, 0.12, 4.7, 3.2, 0.6, 1.82, 0.9, C0.1, 1.5, 0.7, 0.05, 0.65</p> <p>Travel A</p> <p>PC board mounting face</p>	<p>Dimensions: 5.3, 3.7, 0.8, 2.3, 1.5, 6.5, 8.5</p>
2	<p>Terminal No. ①</p> <p>Dimensions: 7.8, 7.5, 6.7, 4.5, 0.4, 0.12, 4.7, 3.2, 0.6, 1.82, 0.9, C0.1, 1.5, 1.3, 0.7, 0.05, 0.85, 1.2, 0.18, 2, 2, 2-C0.2, 2-0.8</p> <p>Travel A</p>	<p>Dimensions: 5.3, 3.7, 0.8, 2.3, 1.5, 4, 6.5, 8.5, 0.18, 2-φ0.9 holes</p>

Detector

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Dual-in-line
Package Type

TACT Switch™

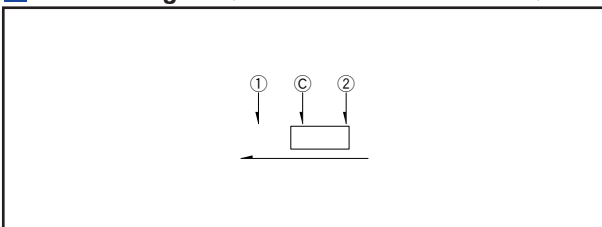
Custom-
Products

Small size
General Use type







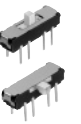

Big size
General Use type

Other Use type

Circuit Diagram (Viewed from Direction A)



List of Varieties

Series		SSAJ	SSAG	SSAH	SSAD	SSSS8	SSSS7 ※	SSSS2	SSSS9 ※	
Photo										
Outline specifications	Travel (mm)	1.4	1.5			1.5 2		2		
	Actuator direction	Horizontal				Vertical Horizontal	Horizontal	Vertical Horizontal		
	Number of poles	1				1 2				
Dimensions (mm)	W	5.5	9.05	9.5	6.7	11.2	8.8	13	14	
	D	2.5	3		3.2	2.6	3	3.5	4.7	
	H	0.7	1.15	0.9	0.7	1.4	2		5	
Operating temperature range		-10°C to +60°C		-30°C to +60°C	-40°C to +85°C	-40°C to +85°C			-10°C to +60°C	
Rating (max.) / (min.) (Resistive load)		10mA 5V DC		1mA 5V DC		0.3A 5V DC	0.3A 4V DC	0.3A 6V DC	0.1A 12V DC	
		50μA 3V DC								
Electrical performance	Initial contact resistance	300mΩ max.	200mΩ max.		100mΩ max.	70mΩ max.			30mΩ 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			5N	10N		20N	30N	
						10N Static force				10N
Durability	Operating life without load	10,000cycles 500mΩ max.	100,000cycles 500mΩ max.	10,000cycles 300mΩ max.	10,000cycles 100mΩ max. ※2				10,000cycles 60mΩ max.	
	Operating life without load Load:as rating				10,000cycles 200mΩ max.				10,000cycles 80mΩ max.	
Environmental performance	Cold	-40±2°C for 96h	-20±2°C for 96h			-40°C for 96h	-20°C for 96h			
	Dry heat	85±2°C for 96h								
	Damp heat	40±2°C, 90~95%RH for 96h								
Soldering	Manual soldering	350±5°C 3s max.			300±5°C 5s max.		300±5°C 3s max.	350±10°C 4s max.	300±10°C 5s max.	
	Dip soldering							260±5°C 3±1s	260±5°C 5 ⁹ s (2回)	
	Reflow soldering	Please see P.182								
Poles-positions	1-2	●	—	—	●	●	●	●	●	
	1-3	—	●	●	—	●	●	●	●	
	1-4	—				●	—	●	—	
	2-2	—				●	—	●	●	
	2-3	—				●	—	●	●	
	2-4	—						●	—	
	4-2	—								
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Detector

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Dual-in-line
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Products

Small size
General Use type

Big size
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Other Use type

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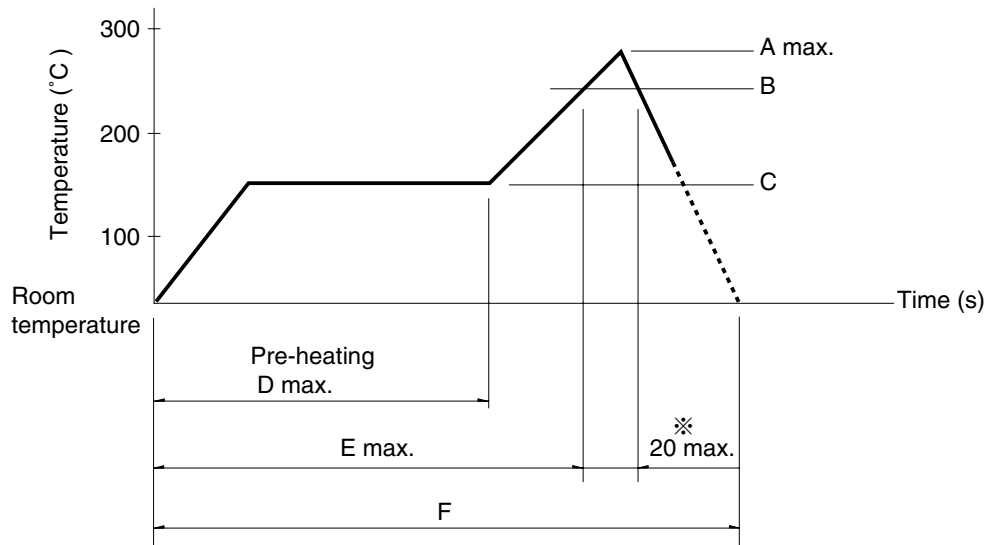
Note

※The operating temperature range for automotive applications can be raised upon request. Please contact us for details.

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					
SSAH, SSAG			260	230	150	120	—	—
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.