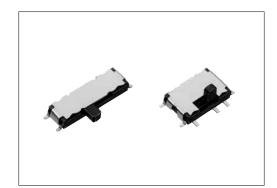
1.4(H)mm, 1.5/2mm-travel Surface Mount Type

A low-profile slide switch with 1.4mm thickness





■ Typical Specifications

Ite	ms	Specifications		
Rating (max.)/(m (Resistive load)	in.)	0.3A 5V DC / 50 μA 3V DC		
Contact resistand (Initial performand	e e / After lifetime)	70mΩ max. / 130mΩ max.		
Operating force		Refer to the dimensions.		
Operating life	Without load	10,000 cycles 100mΩ max.		
Operating life	With load	10,000 cycles 130mΩ max. (0.3A 5V DC)		

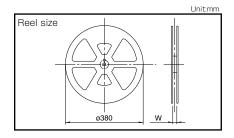
Product Line

Travel	Actuator	Actuator	Poles	Positions	Changeover	Ground	Soldering	Minimum order unit (pcs.)		Products No.	Drawing
(mm)	direction	thickness (mm)			timing	terminal		Japan	Export		No.
			2	2	Not specified	Without		1,800	7,200	SSSS820101	1
Vertic	Vertical	l t0.8		3		Without				SSSS820301	2
	Vertical			2		With				SSSS820201	1
				3			Reflow			SSSS820501	2
1.0	Horizontal	t1.1		2				4,500	18,000	SSSS810701	3
				3						SSSS811501	4
			1	2		With				SSSS811101	3
				3						SSSS812201	4
2				2							SSSS810201

Packing Specifications

Taping

Product No.	Numbe	r of package:	s (pcs.)	Reel width	Tape width	Export package measurements (mm)	
T TOUGET NO.	1 reel	1 case /Japan	1 case /export packing	W (mm)	(mm)		
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

Vertical Actuator Type/Horizontal Actuator Type 1.5mm-travel PC board mounting hole and land dimensions (Viewed from direction A) Photo Style 2-pole, 2-position With ground terminal dimensions 6-pattern section 2-ø0.9 hole 1 4-pattern section for ground terminal Operating force : 2N 2-pole, 3-position Terminal No.1 .5 With ground terminal dimensions 2-ø0.9 hole 2 4-pattern section for ground terminal **%**0.5 Operating force $b \rightarrow c^{3}$ $\{2.5N\}$ 1-pole, 2-position Terminal No.① 1.5 With ground terminal dimensions 0.75 3-pattern section 0.7 2-ø0.9 hole 3 PC board mounting face <u></u>*0.5 4-pattern section for ground terminal Operating force: 1.5N 1-pole, 3-position With ground terminal dimensions Terminal No.1 2-ø0.9 hole 4-pattern section 4 4-pattern section for ground terminal PC board Operating force : $a \rightarrow b \\ c \rightarrow b$ } 1.5N $b \rightarrow a_{}^{}2N$ $b \rightarrow c$

Note

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



Dimensions

SSSS8

Horizontal Actuator Type 2mm-travel

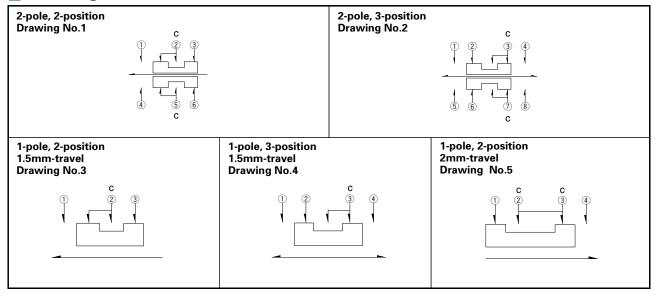
Unit:mm

No.	Photo	Style	PC board mounting hole and land dimensions (Viewed from direction A)
5	1-pole, 2-position	Terminal No.① 1.5 3 1.5 0.4 1.3 1.5 0.4 1.5 2.6 0.9 1	2-ø0.9 holes 1.5 3 1.5 0.7 4-pattern section 3 1.5 0.7 4-pattern section 4-pattern section for ground terminal

Note

Products not marked with $\mbox{\%}$ in the drawing have no ground terminal.

Circuit Diagram (Viewed from Direction A)



Series			SSAJ	SSAH	SSSS8	SSAL	SSAG	SSSS7	
Photo		9		W.	F				
Actuat		Horizontal	•	•	•	•	•	•	
directi	on	Vertical	_	_	•	_	_	_	
		1-2	•	_	•	•	_	•	
		1-3	_	•	•	_	•	•	
	-	1-4	_	_	_	_	_	_	
Poles-pos	sitions	2-2	_	_	•	_	_	_	
	-	2-3	_	_	•	_	_	_	
	-	2-4	_	_	_	_	_	_	
		4-2	_	_	_	_	_	_	
Т	ravel (mm)		1.4	1.5	1.5, 2	2	1.5	2	
Operating	temperatu	ure range	-10℃ to +60℃	−30°C to +60°C	-40℃ to +85℃	-10°C t	0 +60℃	-40℃ to +85℃	
Aut	omotive u	se	_	_	_	_	_	_	
1	Life cycle			* 2	*3	*3	*3	*3	
Ra (Re	ating (max. esistive loa	.) id)	10mA 5V DC	1mA 5V DC	0.3A 5V DC	10mA	5V DC	0.3A 4V DC	
	ating (min.) esistive loa		50 μ A 3V DC						
6	Operating life without load			10,000 cycles 300mΩ max.	10,000 cycles 100mΩ max.	100,000 cycles 10Ω max.	30,000 cycles (Lock side) 100,000 cycles (Recoil side) 500mΩ max.	10,000 cycles 100mΩ max.	
Durability	Operating life with load Load: as rating				10,000 cycles 130mΩ max.			10,000 cycles 130mΩ max.	
		contact stance	300mΩ max.	200mΩ max.	70mΩ max.	10Ω max.	200mΩ max.	70mΩ max.	
Electrical performance	Insulation	resistance		100MΩ min. 500V DC					
	Voltag	ge proof		500V AC for 1minute					
	Termina	al strength		3N for 1minute					
Mechanical performance Actuator strength Operating direction Pulling direction			10N						
	C	Cold	-40°	C 96h	-40℃ 500h	-40°	C 96h	-20°C 500h	
Environmental performance	Dry	heat	85°C	96h	85°C 500h	85°C 96h		85°C 500h	
	Dam	ip heat	40°C, 90 to 95%RH 96h	60°C, 90 to 95%RH 240h	60°C, 90 to 95%RH 500h		to 95%RH 6h	60°C, 90 to 95%RH 500h	
	Page		70	72	74	77	79	82	

Note

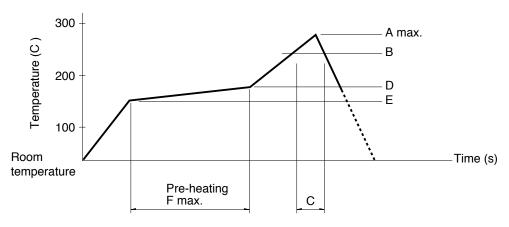
Indicates applicability to all products in the series.

Example of Reflow Soldering Condition

- 1. Heating method: Double heating method with infrared heater.
- 2. Temperature measurement: Thermocouple ϕ 0.1 to 0.2 CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.

Slide Switches / Soldering Conditions

3. Temperature profile



Series (Reflow type)		A (℃) 3s max.	B (℃)	C (s)	D (°C)	E (℃)	F(s)	
Vertical 1-pole, 3-position								
SSSS2	SSSS2 Horizontal 1-pole, 3-p	1-pole, 2-position 1-pole, 3-position 2-pole, 3-position	260	230	40	180	150	120
	Vertical	1-pole, 2-position	250	230				
SSSS7		250						
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	350±10℃	3+1/0s
SSSS2	350±10°C	4s max.
SSSS9	350±10°C	3s max.
SSAH, SSAG, SSAJ, SSAL	350±5℃	3s max.
SSSS8	330±5℃	3s max.
SSSS7	320±5℃	3s max.
SSAC	300±10°C	2s max.

Reference for Dip Soldering (For PC board terminal types)

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ALPS:

<u>SSSS811501</u> <u>SSSS820301</u> <u>SSSS812201</u> <u>SSSS810201</u> <u>SSSS811101</u> <u>SSSS820501</u> <u>SSSS810701</u> <u>SSSS820101</u> SSSS820201