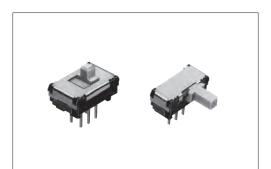
## Mid-size general purpose type well established for user friendliness

5(H)mm, 2mm-travel Type





## ■ Typical Specifications

Ite	ms	Specifications			
Rating (max.)/(mi	n.) (Resistive load)	0.1A 12V DC / 1mA 5V DC			
Contact resistance (Initial performance		$30 \text{m}\Omega$ max. $/$ $80 \text{m}\Omega$ max.			
Operating force		2-position	3-position		
Operating force		$3\pm 1.5N$ a, c $\rightarrow$ b $2\pm 1N$ b $\rightarrow$ a, c $3\pm 1.5N$			
Operating life	Without load	10,000 cycles			
Operating life	With load	10,000 cycles	(0.1A 12V DC)		

### Product Line

Travel (mm)	Actuator direction	Actuator length (mm)	Poles	Positions	Mounting method	Changeover timing	Soldering	Minimum ord  Japan	er unit (pcs.) Export	Products No.	Drawing No.
. ,					Standard			Саран	ZAPORE	SSSS912000	1
				2	Snap-in (t1.6)	Non shorting				SSSS910400	2
			1		Standard		-	1,000	5,000	SSSS919500	3
		2		3	Snap-in (t1.6)	Not specified				SSSS918500	4
				2	Standard	Non shorting	-			SSSS922000	5
			2	3		Not specified	-	800	4,000	SSSS921800	6
	Vertical						-			SSSS912500	1
				2	Snap-in (t1.6)	Non shorting				SSSS910800	2
			1		Standard			1,000	5,000	SSSS919800	3
		4		3	Snap-in (t1.6)	Not specified				SSSS918700	4
				2	0	Non shorting				SSSS922500	5
			2	3	Standard		1	800	4,000	SSSS923200	6
					Snap-in (t1.6)	Not specified	Manual,			SSSS920600	7
2		2	1	2	Standard	Dip				SSSS916900	8
				2	Snap-in (t1.6)	Non shorting		1,000 5,000	F 000	SSSS915001	9
				3		Not specified			5,000	SSSS91B900	10
			2	2	Ottomaloud	Non shorting				SSSS926400	12
				3	Standard	Not specified		800	4,000	SSSS928500	14
				2		Non shorting	]			SSSS916400	8
	Horizontal	ntal	1		Snap-in (t1.6)	Non Shorting				SSSS914503	9
			'	3	Standard	Not specified		1,000	5,000	SSSS91B600	10
		4		3	Snap-in (t1.6)	Not specified		1,000	5,000	SSSS91A601	11
		4		0	Standard	Non abouting				SSSS925800	12
				2	Snap-in (t1.6)	Non shorting				SSSS923802	13
			2	0	Standard	Not openified	1	800	4,000	SSSS928200	14
				3	Snap-in (t1.6)	Not specified				SSSS925701	15

## Packing Specifications

Bulk

Products No.	Number of pa	ckages (pcs.)	Export package	
Floudets No.	1 case / Japan	1 case / export packing	measurements (mm)	
SSSS921800, SSSS923200, SSSS920600, SSSS928500, SSSS928200, SSSS925701	800	4,000		
SSSS912000, SSSS910800, SSSS926400, SSSS910400, SSSS919800, SSSS916400, SSSS919500, SSSS918700, SSSS914503, SSSS918500, SSSS922500, SSSS91B600, SSSS922000, SSSS916900, SSSS91A601, SSSS912500, SSSS915001, SSSS925800, SSSS91B900, SSSS923802	1,000	5,000	400×270×290	

### Dimensions

Vertical Actuator Type

Unit:mm

No.	Style	PC board mounting hole dimensions (Viewed from direction A)
1	1-pole, 2-position Standard type  PC board mounting face  11.5  PC board mounting face  11.5  1.5  1.5  1.5  1.5  1.5  1.5  1	3-ø0.7 hole 2 2
2	1-pole, 2-position Snap-in type  PC board mounting face  13.3 11.5 PC board mounting face  13.3 13.3 PC board mounting face  13.3 13.3 PC board mounting face  13.3 14.3 PC board mounting face  15.3 PC board mounting face  15.3 PC board mounting face  16.3 PC board mounting face  16.3 PC board mounting face  17.3 PC board mounting face  18.3 PC board mounting	13.9 1.5 2 2 1.5 3-ø0.7 hole
3	1-pole, 3-position Standard type  PC board mounting face  Terminal No. 1 222 4  A  A	4-ø0.7 hole

### Dimensions

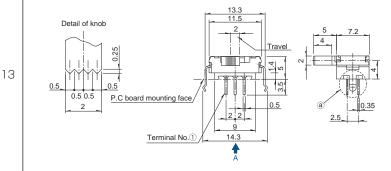
Vertical Actuator Type PC board mounting hole dimensions (Viewed from direction A) No. Style 1-pole, 3-position Snap-in type 16.5 1.5 4 4-ø0.7 hole Terminal No.1 2-pole, 2-position Standard type 6-ø0.7 hole 5 PC board mounting face Terminal No. 1 Α 2-pole, 3-position Standard type PC board mounting face 8-ø0.7 hole 6 Terminal No.1 2-pole, 3-position Snap-in ty PC board mounting face 7 Terminal No.1

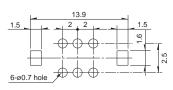
#### Dimensions

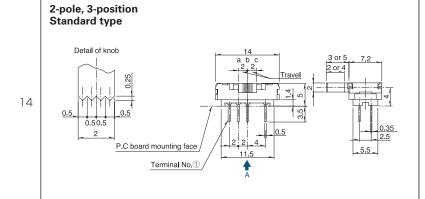
Horizontal Actuator Type Unit:mm PC board mounting hole dimensions (Viewed from direction A) No. Style 1-pole, 2-position Standard type Detail of knob 3-ø0.7 hole 8 0.5 PC board mounting face 3.7 Terminal No.1 1-pole, 2-position Snap-in type Detail of knob 13.9 9 3.5 3-ø0.7 hole 0.5 0.5 PC board mounting face 0.35 Terminal No.1 14.3 1-pole, 3-position Standard type Detail of knob 4-ø0.7 hole 10 0.50.5 0.35 PC board mounting face Terminal No.1 1-pole, 3-position Snap-in type Detail of knob 3 or 5 11 0.5 0.5 4-ø0.7 hole 0.35 P.C board mounting face Terminal No.1

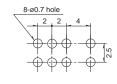
Dimensions

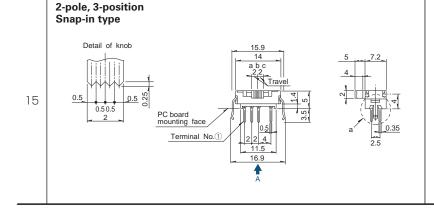
Horizontal Actuator Type PC board mounting hole dimensions (Viewed from direction A) Style No. 2-pole, 2-position Standard type Detail of knob 3 or 5 2 or 4 12 0.50.5 P.C board mounting face Terminal No.1 2-pole, 2-position Snap-in type

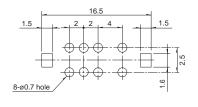


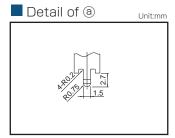




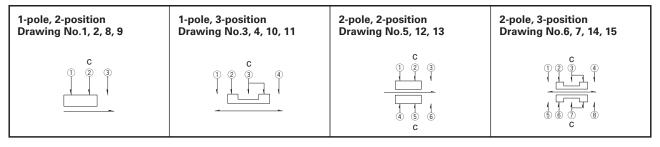








■ Circuit Diagram (Viewed from Direction A)



Series		SSSS2*	SSSS9	SSAC	SSSF	SSSU		
Photo								
Actuat		Horizontal	•	•	•	•	•	
directi	on	Vertical	•	•	_	•	•	
		1-2	•	•	_	•	•	
		1-3	•	•	_	•	•	
		1-4	•	_	_	_	_	
Poles-pos	itions	2-2	•	•	•	•	•	
		2-3	•	•	•	•	•	
		2-4	•	_	_	_	_	
		4-2	_	_	_	•	•	
Т	ravel (mm	)	2	2	1.5	2	3	
Operating	temperat	ure range	-40℃ t	o +85℃	-10℃ to +60℃	-10℃ to +60℃		
Au	Automotive use		_	_	_	_	_	
	Life cycle		*3	*3	<b>*</b> 3	*3	<b>*</b> 2	
	ating (max esistive loa		0.3A 6V DC	0.1A 12V DC	1mA 5V DC	0.1A 3	OV DC	
	ating (min		50μA 3V DC 1mA 5V DC			50μA 3V DC		
D. and billion		ating life out load	10,000 cycles 100mΩ max.%	10,000 cycles 60mΩ max.	10,000 cycles	10,000 cycle	s 45mΩ max.	
Durability		ing life with ad: as rating	10,000 cycles 130mΩ max.%	10,000 cycles 80mΩ max.	200mΩ max.	10,000 cycles 65mΩ max.		
		contact istance	70mΩ max.	30mΩ max.	100mΩ max.	25m(	) max.	
Electrical performance	Insulation	n resistance	100MΩ min. 500V DC		100MΩ min. 100V DC	100MΩ min. 500V DC		
	Volta	age proof	500 for In	V AC ninute	100V AC for 1minute	500V AC for 1minute		
	Termina	al strength	3N for	lminute	5N for 1minute			
Mechanical performance	Actuator	Operating direction	20N	30N	- 5N			
	strength	Pulling direction	10	DN	NIC	30N		
	(	Cold	-20°C 500h		-20℃ 96h	-40°C 500h		
Environmental performance	Dr	y heat	85℃	500h	85℃ 96h	85°C 500h		
	Dan	np heat	60°C, 90 to 9	95%RH 500h	40℃, 90 to 95%RH 96h	60°C, 90 to 95%RH 500h		
Page			85	90	96	98	102	

#### Notes

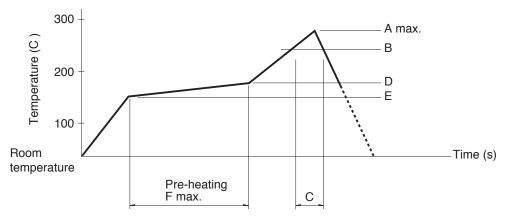
- 1. \* Operating life for SSSS213202 is 100 cycles.
- 2.  $\blacksquare$  Indicates applicability to all products in the series.

## Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater. 
2. Temperature measurement: Thermocouple  $\phi$  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, 2-position 1-pole, 3-position 2-pole, 3-position	260	230	40	180	150	120
Ve	Vertical	1-pole, 2-position	250					
SSAG, S	SSAG, SSAJ, SSAL, SSSS8, SSS7		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.		
SSAG, SSAJ, SSAL	350±5℃	3s max.		
SSSS8	330±5℃	3s max.		
SSSS7	320±5℃	3s max.		
SSAC	300±10℃	2s max.		

#### ■ Reference for Dip Soldering

(For PC board terminal types)

Series	Ite	ms	Dip soldering		
Jelles	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.	100°C max. 60s max.		10±1s/5±1s	
SSAC	100°C max.	60s max.	260±5℃	5±1s	



# **Mouser Electronics**

Authorized Distributor

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

# Alps Alpine:

SSSS920600	SSSS910800	SSSS918500	SSSS910400	SSSS918700	SSSS922500	SSSS922000	SSSS926400
SSSS912500	SSSS919800	SSSS921800	SSSS925800	SSSS916900	SSSS912000	SSSS928500	SSSS923200
SSSS91B900	SSSS916400	SSSS919500	SSSS91B600	SSSS928200	SSSS91A601	SSSS923802	SSSS925701
SSSS915001	SSSS914503						