# **Slide Switches**

### List of Varieties

	Series	SSAJ	SSSS8	SSAG	SSSS7	SSSS2	SSSS9	SSSF	
	Photo	Sui?	Saper Sagge	Town of					
Actuator	Horizontal	•	•	•	•	•	•	•	
directions	Vertical	_	•	_	_	•	•	•	
Dim	ensions (mm)	2.5×5.5×0.7	6.7×2.6×1.4 6.7×4.1×1.4 9.7×2.6×1.4 9.7×4.1×1.4	3.0×9.05×1.15	8.8×3.0×2.0 12.5×3.0×2.0	8.5×3.5×3.5 9.0×3.5×3.5 13.0×3.5×3.5 15.0×3.5×3.5	11.5×4.7×5.0 11.5×4.7×5.5 11.5×7.2×5.0 11.5×7.2×5.5 14.0×4.7×5.5 14.0×4.7×5.5 14.0×7.2×5.0 14.0×7.2×5.5	14.5×7.0×8.5 16.5×7.0×8.5	
	Poles	1	1 2	-	l		1	1 2 4	
	Positions	2	2	3	2	2 3 4	3	2	
Ор	erating force	1.5±1N	Refer to the dimensions	1N (Recoil side) 1N (Recoil side), 1.5N (Lock side)	Refer to the	dimensions.	3±1.5N a, c → b 2±1N b → a, c 3±1.5N	Refer to the dimensions.	
Operating	g temperature range	-10°C to +60°C	-40℃ to +85℃	-10°C to +60°C	-4		o +85℃		
	ng (max.)/(min.) esistive load)	10mA 5V DC/ 50μA 3V DC	0.3A 5V DC/ 50μA 3V DC	10mA 5V DC/ 50μA 3V DC	0.3A 4V DC/ 50μA 3V DC	0.3A 6V DC/ 50μA 3V DC	0.1A 12V DC/ 1mA 5V DC	0.1A 30V DC/ 50μA 3V DC	
Electrical	Contact resistance (Initial performance/ After lifetime)	300mΩ max./ 500mΩ max.	70mΩ max./ 130mΩ max.	200mΩ max./ 500mΩ max.		max./ D max.	30mΩ max./ 80mΩ max.	25mΩ max./ 65mΩ max.	
performance	Insulation resistance	10	)OMΩ min. 100V [	OC		100MΩ mir	n. 500V DC		
	Voltage proof	10	OOV AC for 1 minu	te		500V AC f	or 1 minute		
	Terminal strength			3N for 1	minute		5N for 1 minute		
Mechanical performance	Actuator Operating direction		10	N		30	N		
	strength Pulling direction			10	N			30N	
Durability	Operating life without load	10,000 cycles 500mΩ max.	10,000 cycles 100mΩ max.	100,000 cycles 500mΩ max. 100,000 cycles 500mΩ max. (Recoil side) 30,000 cycles 500mΩ max. (Lock side)	10,000 cycles 100mΩ max.	100 cycles 100m $\Omega$ max. 10,000 cycles 100m $\Omega$ max.	10,000 cycles 60mΩ max.	10,000 cycles 45mΩ max.	
Operating life with load (at max. rated load)		10,000 cycles 500mΩ max.	10,000 cycles 130mΩ max.	100,000 cycles 500mΩ max. 100,000 cycles 500mΩ max. (Recoil side) 30,000 cycles 500mΩ max. (Lock side)	10,000 cycles 130mΩ max.	100 cycles 130mΩ max. 10,000 cycles 130mΩ max.	10,000 cycles 80mΩ max.	10,000 cycles 65mΩ max.	
	Cold	-40℃ 96h	-40°C 500h	-40℃ 96h		-40°C	500h		
Environmental performance	Dry heat	85℃ 96h	85℃ 500h	85℃ 96h	85℃ 500h				
	Damp heat	40°C, 90 to 95%RH 96h	60°C, 90 to 95%RH 500h	40°C, 90 to 95%RH 96h		60°C, 90 to 9	95%RH 500h		
F	Automotive	_	-	_	-	-	_	_	



<sup>•</sup> Indicates applicability to all products in the series, while O indicates applicability to some products in the series.

### **Slide Switches**

	Serie	es	sssu
	Phot	0	
Actuator	Н	orizontal	•
directions	١	/ertical	•
Dim	ension	s (mm)	18.5×7.0×8.5 21.5×7.0×8.5 24.5×7.0×8.5
	Pole	S	1 2 4
	Positio	2 3	
Ор	erating	force	Refer to the dimensions.
Operating	tempe	erature range	-40℃ to +85℃
	ıg (max esistive	c.)/(min.) e load)	0.1A 30V DC/ 50μA 3V DC
	(Initial	ot resistance performance/ er lifetime)	25mΩ max./ 65mΩ max.
Electrical performance	Insulati	on resistance	100MΩ min. 500V DC
	Volt	age proof	500V AC for 1 minute
	Termi	nal strength	5N for 1 minute
Mechanical performance	Actuator	Operating direction	30N
	strength	Pulling direction	30N
		erating life hout load	10,000 cycles 45mΩ max.
Durability	w	erating life ith load x. rated load)	10,000 cycles 65mΩ max.
		-40℃ 500h	
Environmental performance	С	ry heat	85℃ 500h
,	Da	ımp heat	60°C, 90 to 95%RH 500h
A	Automo	tive	_



• Indicates applicability to all products in the series, while  $\bigcirc$  indicates applicability to some products in the series.

# 0.7mm (H), 1.4mm-travel (Surface Mount) **SSAJ Series**

#### Compact type with a body height of 0.7mm.



- Rating (max.)/(min.) (Resistive load): 10mA 5V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

 $300m\Omega$  max./ $500m\Omega$  max.

- Operating life without load: 10,000 cycles 500mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles 500mΩ max.

Applications: Mobile: Smartphones, tablets, Headsets, wearables, Notebooks, peripherals

Energy\_Industrial:Robots, drones,Industrial equipment, Converters

Game: Home handheld consoles, Virtual/augmented reality Healthcare: Healthcare equipment, Nursing care equipment,

Analysis, test equipment

Audio\_TV: Audio, Cameras

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Location lug	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSAJ110100	Horizontal	1.4	1	2	1.5±1N	Not specified	Reflow	With	2.5×5.5×0.7	_	1
SSAJ120100	Horizontal	1.4	1	2	1.5±1N	Not specified	Reflow	Without	2.5×5.5×0.7	_	2

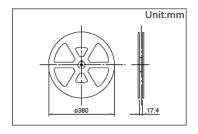
#### ⚠Note

- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

#### ■ Packing Specifications

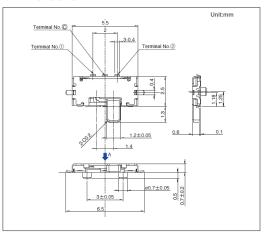
#### Taping

Numb	er of packages	(pcs.)	Tape width	Export package		
1 reel	eel 1 case / Japan 1 case / export packin		(mm)	measurements (mm)		
5,000	10,000	20,000	16	417 x 409 x 139		

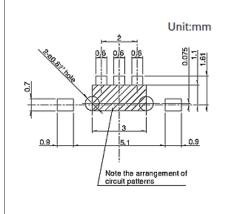


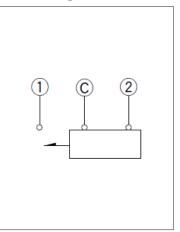
#### Drawing No.1

Dimensions



■ Land Dimensions

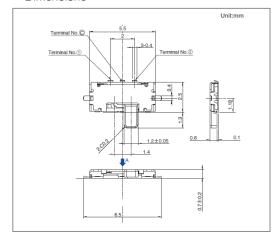




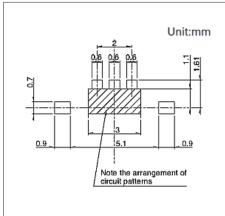
0.7mm (H), 1.4mm-travel (Surface Mount) SSAJ Series

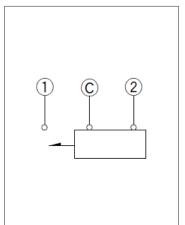
#### Drawing No.2

Dimensions



■ Land Dimensions





### SSSS8 Series

#### Thin-profile type with a body height of 1.4mm.



- Rating (max.)/(min.) (Resistive load): 0.3A 5V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

70mΩ max./130mΩ max.

- Operating life without load: 10,000 cycles 100mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles 130mΩ max.

Applications: Mobile: Smartphones, tablets, Headsets, wearables, Notebooks, peripherals

Energy\_Industrial:Robots, drones,Industrial equipment, Converters

Game: Home handheld consoles, Virtual/augmented reality Healthcare: Healthcare equipment, Nursing care equipment, Analysis, test equipment

Audio\_TV: Audio, Cameras

#### ■ Product List

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Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Ground terminal	Soldering	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSSS820101	Vertical	1.5	2	2	Refer to the dimensions	Not specified	Without	Reflow	6.7×4.1×1.4	_	1
SSSS820301	Vertical	1.5	2	3	Refer to the dimensions	Not specified	Without	Reflow	9.7×4.1×1.4	_	2
SSSS820201	Vertical	1.5	2	2	Refer to the dimensions	Not specified	With	Reflow	6.7×4.1×1.4	_	3
SSSS820501	Vertical	1.5	2	3	Refer to the dimensions	Not specified	With	Reflow	9.7×4.1×1.4	_	4
SSSS810701	Horizontal	1.5	1	2	Refer to the dimensions	Not specified	Without	Reflow	6.7×2.6×1.4	_	5
SSSS811501	Horizontal	1.5	1	3	Refer to the dimensions	Not specified	Without	Reflow	9.7×2.6×1.4	_	6
SSSS811101	Horizontal	1.5	1	2	Refer to the dimensions	Not specified	With	Reflow	6.7×2.6×1.4	_	7
SSSS812201	Horizontal	1.5	1	3	Refer to the dimensions	Not specified	With	Reflow	9.7×2.6×1.4	_	8
SSSS810201	Horizontal	2.0	1	2	Refer to the dimensions	Not specified	With	Reflow	9.7×2.6×1.4	_	9

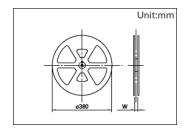


- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

#### ■ Packing Specifications

Taping

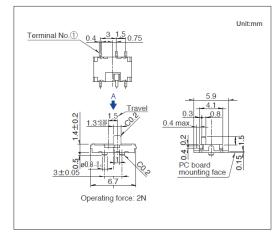
	Numb	er of packages	(pcs.)	Tape width	Export package
Products No.	1 reel	1 case / Japan	1 case / export packing	(mm)	measurements (mm)
SSSS820101 SSSS820301 SSSS820201 SSSS820501	1,800	3,600	7,200	24	406 x 406 x 190
SSSS810701 SSSS811501 SSSS811101 SSSS812201 SSSS810201	4,500	9,000	18,000	16	417 x 409 x 139



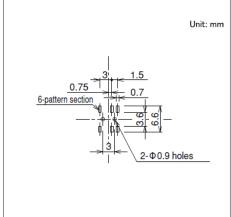
#### **SSSS8 Series**

#### Drawing No.1

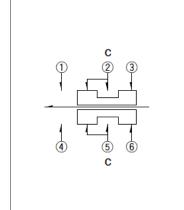
■ Dimensions



■ Land Dimensions



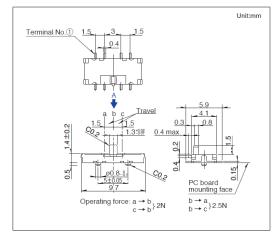
■ Circuit Diagram



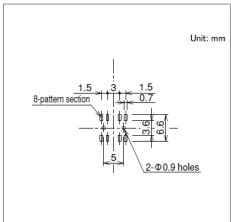
Viewed from direction A in the dimensions.

#### Drawing No.2

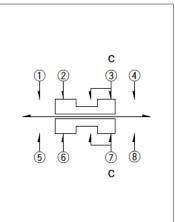
■ Dimensions



■ Land Dimensions



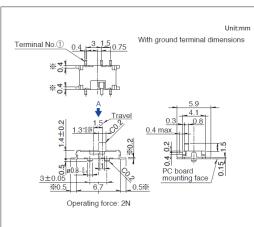
■ Circuit Diagram



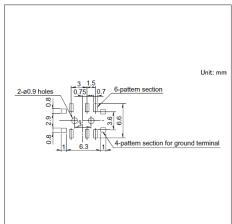
Viewed from direction A in the dimensions.

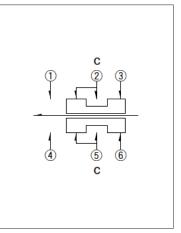
#### Drawing No.3

■ Dimensions



■ Land Dimensions



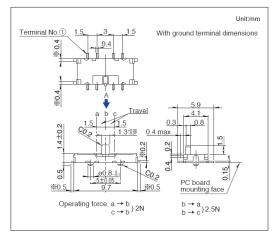


Viewed from direction A in the dimensions.

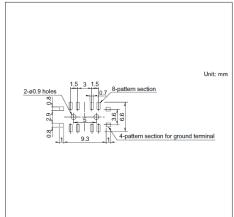
#### **SSSS8** Series

#### Drawing No.4

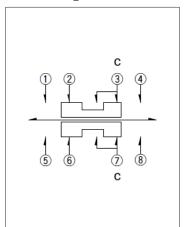
#### ■ Dimensions



#### ■ Land Dimensions



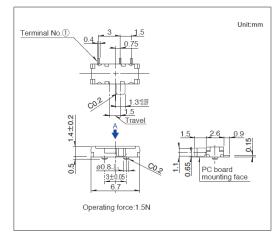
#### ■ Circuit Diagram



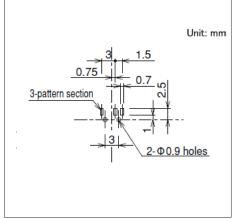
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#### **Drawing No.5**

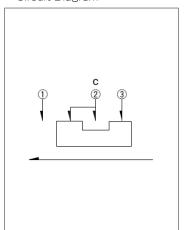
#### ■ Dimensions



#### ■ Land Dimensions



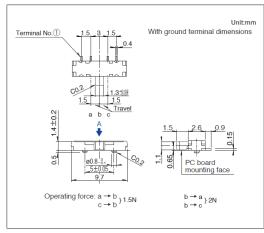
■ Circuit Diagram



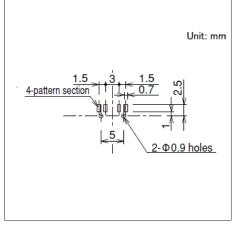
Viewed from direction A in the dimensions.

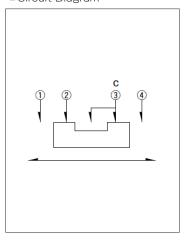
#### **Drawing No.6**

#### ■ Dimensions



#### ■ Land Dimensions



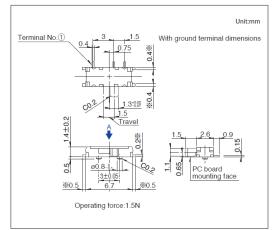


Viewed from direction A in the dimensions.

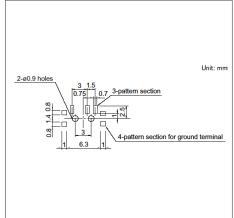
#### **SSSS8 Series**

#### Drawing No.7

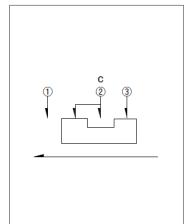
■ Dimensions



■ Land Dimensions



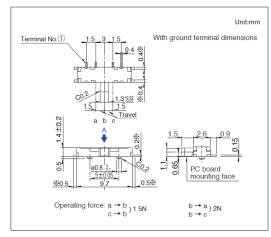
■ Circuit Diagram



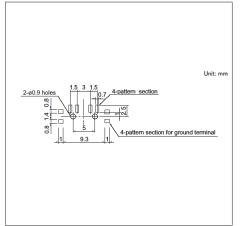
Viewed from direction A in the dimensions.

#### **Drawing No.8**

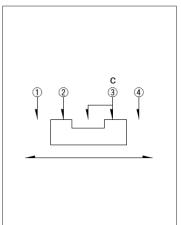
Dimensions



■ Land Dimensions



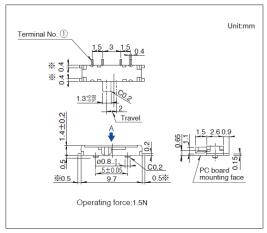
■ Circuit Diagram



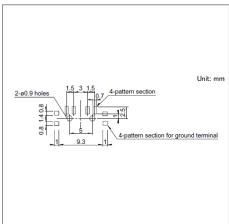
Viewed from direction A in the dimensions.

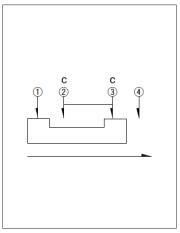
#### Drawing No.9

■ Dimensions



■ Land Dimensions





Viewed from direction A in the dimensions.

# 0.9 (H) mm, Recoil for Single-side and Both-sides **SSAG Series**

#### Long-life type designed to meet the evolution toward miniaturization and thin profiles.



- Rating (max.)/(min.) (Resistive load): 10mA 5V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

 $200m\Omega$  max./ $500m\Omega$  max.

- Operating life without load: 100,000 cycles  $500m\Omega$  max. (Recoil side) 30,000 cycles  $500m\Omega$  max. (Lock side)
- Operating life with load (at max. rated load):

100,000 cycles 500mΩ max. (Recoil side) 30,000 cycles 500mΩ max. (Lock side)

Applications: Mobile: Smartphones, tablets, Headsets, wearables, Notebooks, peripherals

Energy\_Industrial:Robots, drones,Industrial equipment, Converters

Game: Home handheld consoles, Virtual/augmented reality
Healthcare: Healthcare equipment, Nursing care equipment,
Analysis, test equipment

Audio\_TV: Audio, Cameras

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Operation	Shape of frame leg	Location lug	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSAG130100	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Left-side recoil	For PC board insert	Without	3.0×9.05×1.15	_	1
SSAG130200	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Left-side recoil	For PC board insert	With	3.0×9.05×1.15	_	2
SSAG130300	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Left-side recoil	Flat	Without	3.0×9.05×1.15	_	3
SSAG130400	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Left-side recoil	Flat	With	3.0×9.05×1.15	_	4
SSAG230100	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Right- side recoil	For PC board insert	Without	3.0×9.05×1.15	_	5
SSAG230200	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Right- side recoil	For PC board insert	With	3.0×9.05×1.15	_	6
SSAG230300	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Right- side recoil	Flat	Without	3.0×9.05×1.15	_	7
SSAG230400	Horizontal	1.5	1	3	1N (Recoil side), 1.5N (Lock side)	Not specified	Reflow	Right- side recoil	Flat	With	3.0×9.05×1.15	_	8
SSAG330100	Horizontal	1.5	1	3	1N (Recoil side)	Not specified	Reflow	Double- side recoil	For PC board insert	Without	3.0×9.05×1.15	_	9
SSAG330200	Horizontal	1.5	1	3	1N (Recoil side)	Not specified	Reflow	Double- side recoil	For PC board insert	With	3.0×9.05×1.15	_	10
SSAG330300	Horizontal	1.5	1	3	1N (Recoil side)	Not specified	Reflow	Double- side recoil	Flat	Without	3.0×9.05×1.15	_	11
SSAG330400	Horizontal	1.5	1	3	1N (Recoil side)	Not specified	Reflow	Double- side recoil	Flat	With	3.0×9.05×1.15	_	12



<sup>1.</sup> This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.

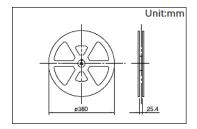
<sup>2.</sup> Please place purchase orders for taping products per minimum order unit (1 reel or a case).

#### **SSAG Series**

#### ■ Packing Specifications

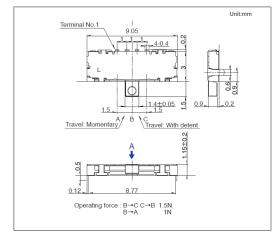
Taping

N	umbe	er of packages	(pcs.)	Tape width	Export package	
1 reel	I case / Japan 1 case / export packin		1 case / export packing	(mm)	measurements (mm)	
4,000		8,000	16,000	24	428 x 413 x 172	

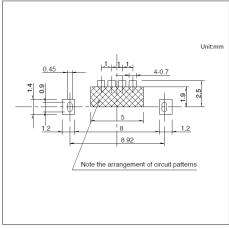


#### Drawing No.1

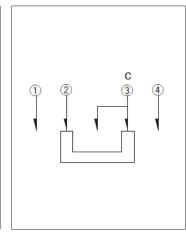
■ Dimensions



■ Land Dimensions



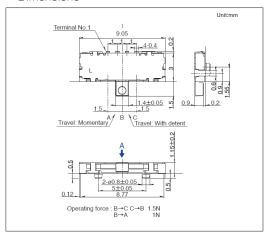
■ Circuit Diagram



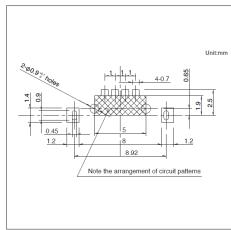
Viewed from direction A in the dimensions.

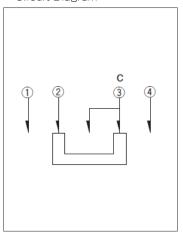
#### Drawing No.2

■ Dimensions



■ Land Dimensions



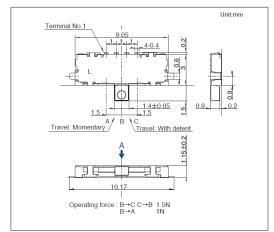


Viewed from direction A in the dimensions.

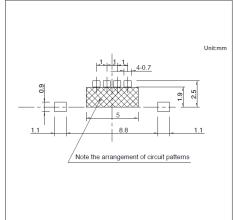
#### **SSAG Series**

#### Drawing No.3

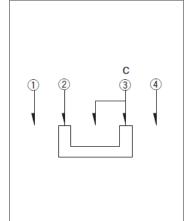
■ Dimensions



■ Land Dimensions



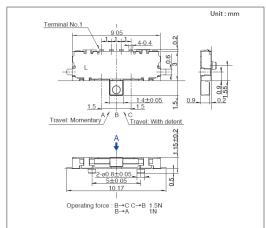
■ Circuit Diagram



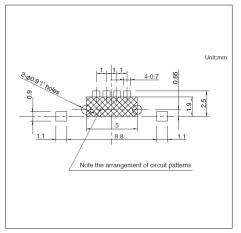
Viewed from direction A in the dimensions.

#### Drawing No.4

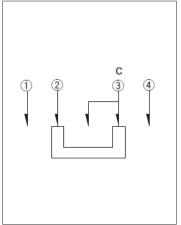
■ Dimensions



■ Land Dimensions



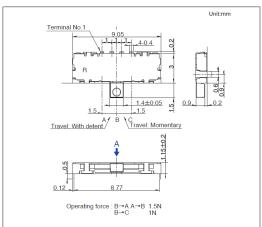
■ Circuit Diagram



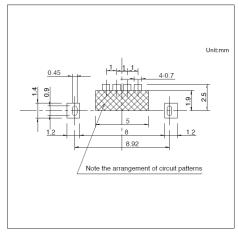
Viewed from direction A in the dimensions.

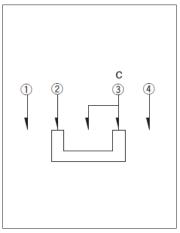
#### Drawing No.5

■ Dimensions



■ Land Dimensions



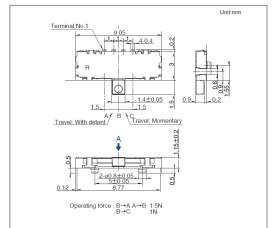


Viewed from direction A in the dimensions.

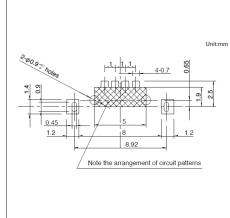
#### **SSAG Series**

#### **Drawing No.6**

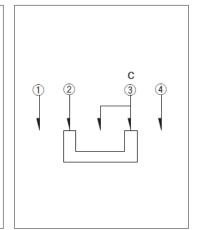
■ Dimensions



■ Land Dimensions



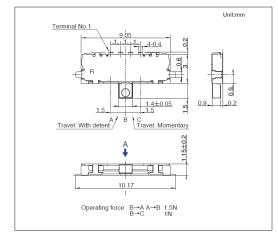
■ Circuit Diagram



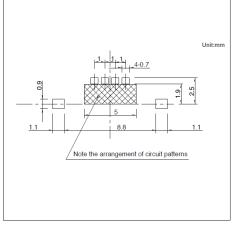
Viewed from direction A in the dimensions.

#### Drawing No.7

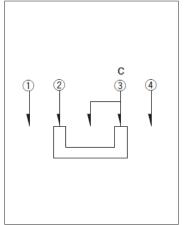
■ Dimensions



■ Land Dimensions



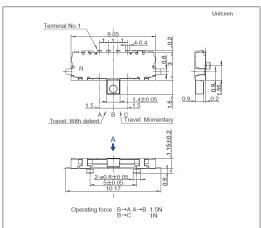
■ Circuit Diagram



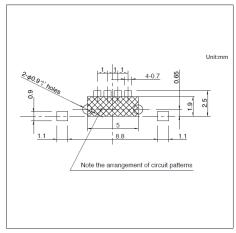
Viewed from direction A in the dimensions.

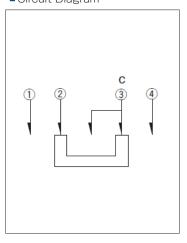
#### **Drawing No.8**

■ Dimensions



■ Land Dimensions



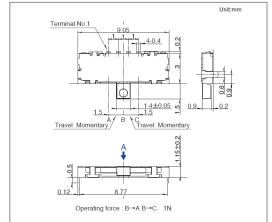


Viewed from direction A in the dimensions.

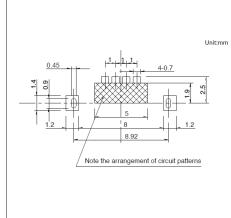
#### **SSAG Series**

#### Drawing No.9

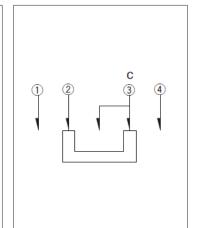
■ Dimensions



■ Land Dimensions



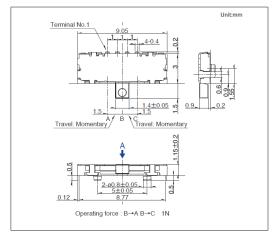
■ Circuit Diagram



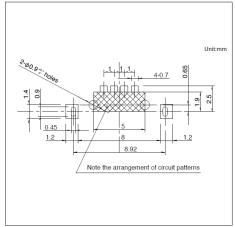
Viewed from direction A in the dimensions.

#### Drawing No.10

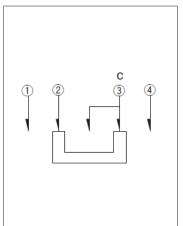
Dimensions



■ Land Dimensions



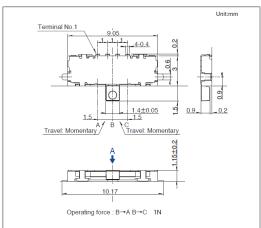
■ Circuit Diagram



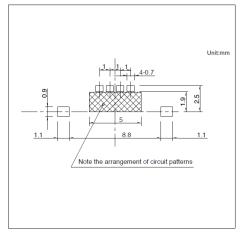
Viewed from direction A in the dimensions.

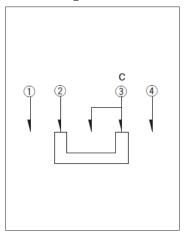
#### Drawing No.11

■ Dimensions



■ Land Dimensions



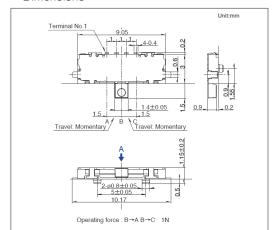


Viewed from direction A in the dimensions.

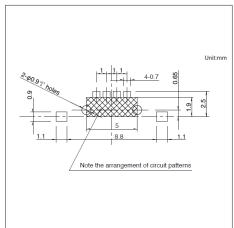
0.9 (H) mm, Recoil for Single-side and Both-sides **SSAG Series** 

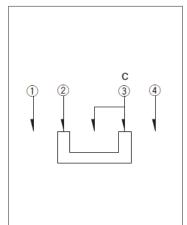
#### Drawing No.12

■ Dimensions



■ Land Dimensions





Viewed from direction A in the dimensions.

# 2.0 (H) mm, 2.0mm-travel SSSS7 Series

#### Compact general-purpose type with selectable soldering methods.



- Rating (max.)/(min.) (Resistive load): 0.3A 4V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

 $70m\Omega$  max./130m $\Omega$  max.

- Operating life without load: 10,000 cycles 100mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles 130mΩ max.

Applications: Mobile: Notebooks, peripherals Audio\_TV: Cameras

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Operation	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSSS710100	Horizontal	2.0	1	2	Refer to the dimensions.	Not specified	Manual	Standard	8.8×3.0×2.0	_	1
SSSS710607	Horizontal	2.0	1	2	Refer to the dimensions.	Not specified	Reflow	Standard	8.8×3.0×2.0	_	2
SSSS711100	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Manual	Standard	12.5×3.0×2.0	_	3
SSSS711403	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Reflow	Standard	12.5×3.0×2.0	_	4

#### ⚠Note

- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).
- 3. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

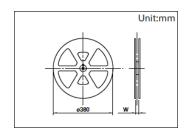
#### ■ Packing Specifications

Bulk

Products No.	Number of pa	ackages(pcs.)	Export package measurements	
Floudets No.	1 case / Japan	1 case / export packing	(mm)	
SSSS710100	10,000	50,000	400 x 270 x 290	
SSSS711100	8,000	40,000	400 x 270 x 290	

#### Taping

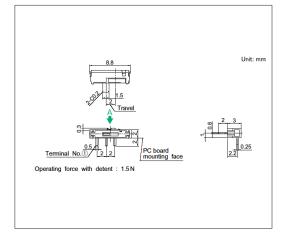
	Numb	er of packages	(pcs.)	Tape width	Export package
Products No.	1 reel	1 case / Japan	1 case / export packing	(mm)	measurements (mm)
SSSS710607	2,000	4,000	8,000	16	417 x 409 x 139
SSSS711403	2,000	4,000	8,000	24	406 x 406 x 190



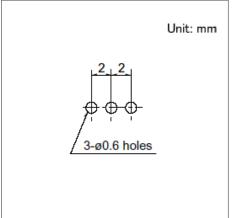
#### SSSS7 Series

#### Drawing No.1

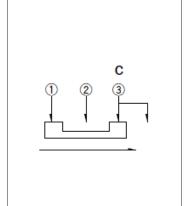
■ Dimensions



■ Mounting Hole Dimensions



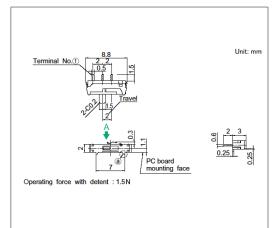
■ Circuit Diagram



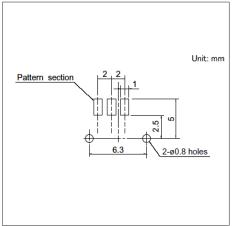
Viewed from direction A in the dimensions.

#### Drawing No.2

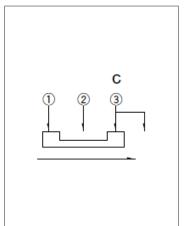
■ Dimensions



■ Land Dimensions



■ Circuit Diagram

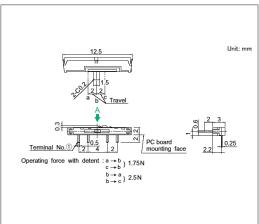


Refer to the website for detail of @

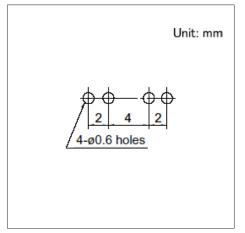
Viewed from direction A in the dimensions.

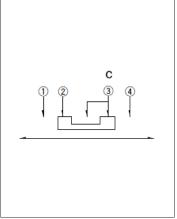
#### Drawing No.3

■ Dimensions



■ Mounting Hole Dimensions



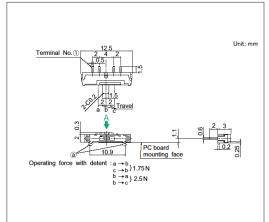


Viewed from direction A in the dimensions.

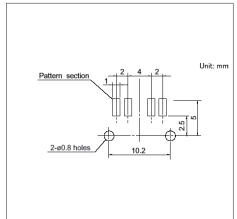
## 2.0 (H) mm, 2.0mm-travel SSSS7 Series

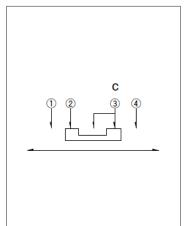
#### Drawing No.4

Dimensions



■ Land Dimensions





Refer to the website for detail of ⓐ

Viewed from direction A in the dimensions.

# 3.5 (H) mm, 2.0mm-travel SSSS2 Series

#### Supports miniaturization and high-density integration for various mobile devices.



- Rating (max.)/(min.) (Resistive load): 0.3A 6V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

 $70m\Omega$  max./ $130m\Omega$  max.

- Operating life without load: 10,000 cycles 100mΩ max. ※
- Operating life with load (at max. rated load): 10,000 cycles 130mΩ max. ※

Note \*SSSS213202 only 100 cycles

Applications:Healthcare:Healthcare equipment Home:Major home appliances Audio\_TV:Audio

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSSS213000	Vertical	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	9.0×3.5×3.5	_	1
SSSS211900	Vertical	2.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	13.0×3.5×3.5	_	2
SSSS222700	Vertical	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	9.0×3.5×3.5	_	3
SSSS223600	Vertical	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	13.0×3.5×3.5	_	4
SSSS213202	Vertical	2.0	1	2	Refer to the dimensions.	Non shorting	Reflow	8.5×3.5×3.5	_	5
SSSS212901	Vertical	2.0	1	3	Refer to the dimensions.	Non shorting	Reflow	13.0×3.5×3.5	_	6
SSSS213100	Horizontal	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	9.0×3.5×3.5	_	7
SSSS212200	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	13.0×3.5×3.5	_	8
SSSS212400	Horizontal	2.0	1	4	Refer to the dimensions.	Non shorting	Manual, Dip	15.0×3.5×3.5	_	9
SSSS223200	Horizontal	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	9.0×3.5×3.5	_	10
SSSS223900	Horizontal	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	13.0×3.5×3.5	_	11
SSSS224100	Horizontal	2.0	2	4	Refer to the dimensions.	Non shorting	Manual, Dip	15.0×3.5×3.5	_	12
SSSS211603	Horizontal	2.0	1	2	Refer to the dimensions.	Non shorting	Reflow	9.0×3.5×3.5	_	13
SSSS213800	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Reflow	13.0×3.5×3.5	_	14
SSSS224500	Horizontal	2.0	2	3	Refer to the dimensions.	Non shorting	Reflow	13.0×3.5×3.5	_	15

#### Note

- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).
- 3. Please place purchase orders for taping products per minimum order unit (1 reel or a case).

#### ■ Packing Specifications

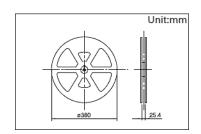
Bulk

Products No.	Number of pa	ackages(pcs.)	Export package measurements	
	1 case / Japan	1 case / export packing	(mm)	
SSSS213000 SSSS211900 SSSS222700 SSSS223600 SSSS213100 SSSS212200 SSSS212400 SSSS223200 SSSS223200 SSSS223900 SSSS2234100	2,000	10,000	400 x 270 x 290	

## 3.5 (H) mm, 2.0mm-travel SSSS2 Series

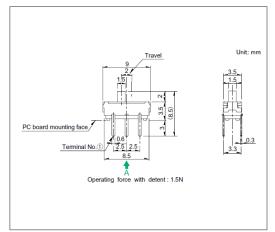
Taping

Products No.	Numb	per of packages	(pcs.)	Tape width	Export package measurements (mm)		
	1 reel	1 case / Japan	1 case / export packing	(mm)			
SSSS213202	1,200	2,400	4,800	24	428 x 413 x 172		
SSSS212901	1,000	2,000	4,000	24	406 x 406 x 190		
SSSS211603 SSSS213800 SSSS224500	1,400	2,800	5,600	24	406 x 406 x 190		

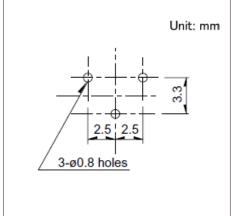


#### Drawing No.1

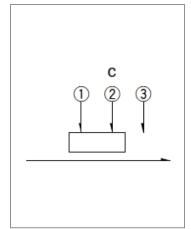
■ Dimensions



■ Mounting Hole Dimensions



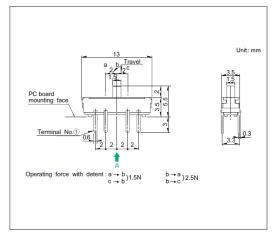
■ Circuit Diagram



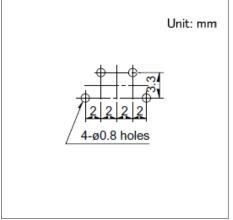
Viewed from direction A in the dimensions.

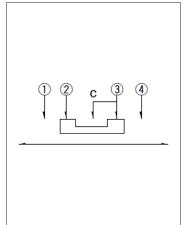
#### Drawing No.2

■ Dimensions



■ Mounting Hole Dimensions



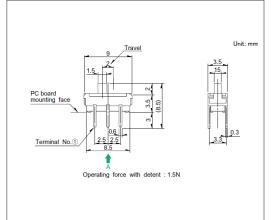


Viewed from direction A in the dimensions.

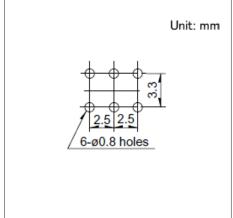
#### SSSS2 Series

#### Drawing No.3

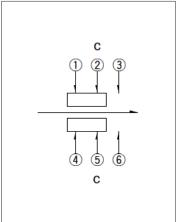
■ Dimensions



■ Mounting Hole Dimensions



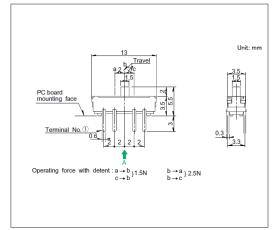
■ Circuit Diagram



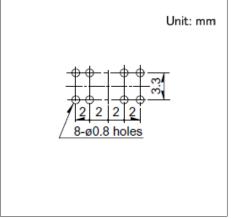
Viewed from direction A in the dimensions.

#### Drawing No.4

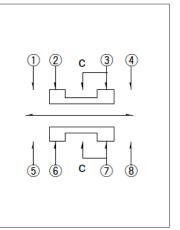
■ Dimensions



■ Mounting Hole Dimensions



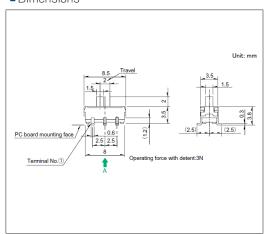
■Circuit Diagram



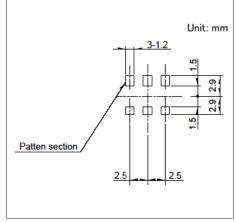
Viewed from direction A in the dimensions.

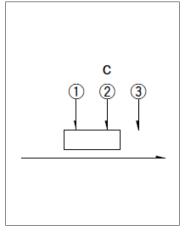
#### **Drawing No.5**

■ Dimensions



■ Land Dimensions



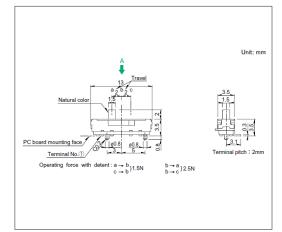


Viewed from direction A in the dimensions.

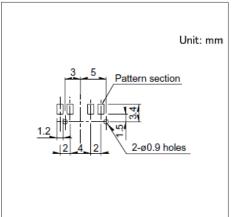
#### SSSS2 Series

#### **Drawing No.6**

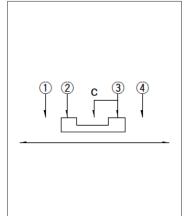
■ Dimensions



■ Land Dimensions



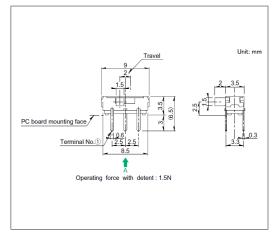
■ Circuit Diagram



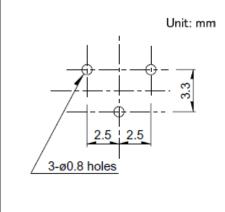
Viewed from direction A in the dimensions.

#### Drawing No.7

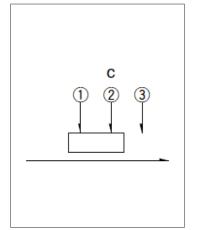
■ Dimensions



■ Mounting Hole Dimensions



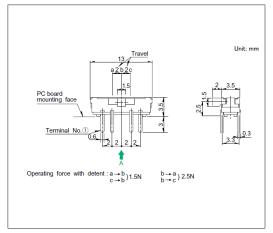
■ Circuit Diagram



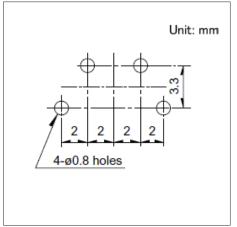
Viewed from direction A in the dimensions.

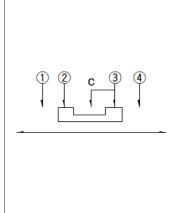
#### **Drawing No.8**

■ Dimensions



■ Mounting Hole Dimensions



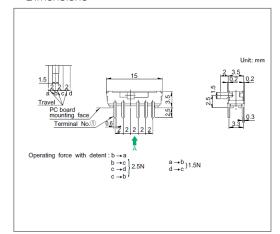


Viewed from direction A in the dimensions.

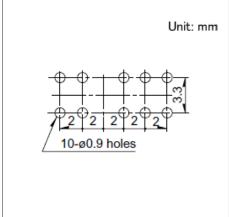
#### SSSS2 Series

#### **Drawing No.9**

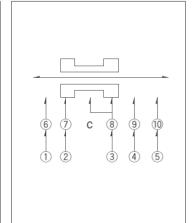
■ Dimensions



■ Mounting Hole Dimensions



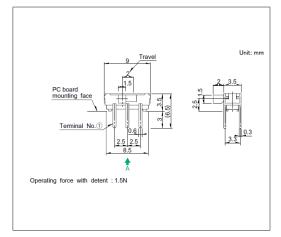
■ Circuit Diagram



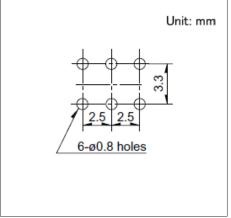
Viewed from direction A in the dimensions.

#### Drawing No.10

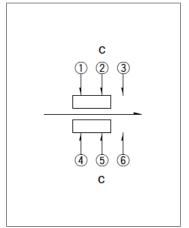
■ Dimensions



■ Mounting Hole Dimensions



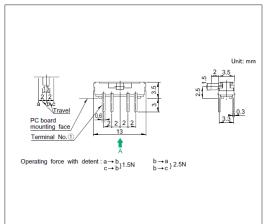
■ Circuit Diagram



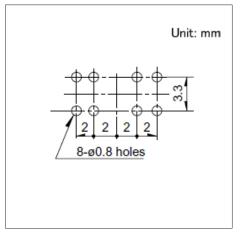
Viewed from direction A in the dimensions.

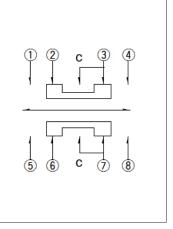
#### Drawing No.11

■ Dimensions



■ Mounting Hole Dimensions



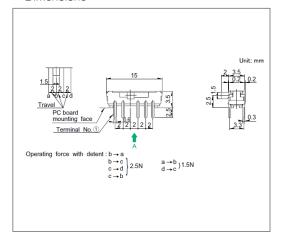


Viewed from direction A in the dimensions.

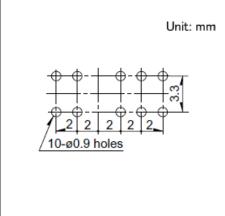
#### SSSS2 Series

#### Drawing No.12

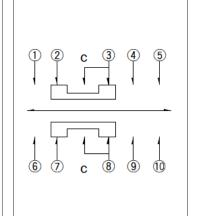
■ Dimensions



■ Mounting Hole Dimensions



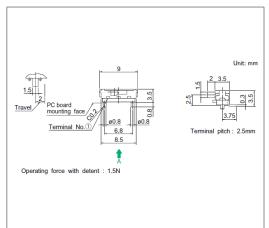
■ Circuit Diagram



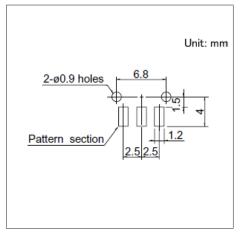
Viewed from direction A in the dimensions.

#### Drawing No.13

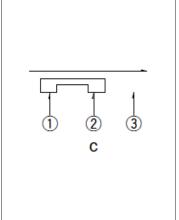
■ Dimensions



■ Land Dimensions



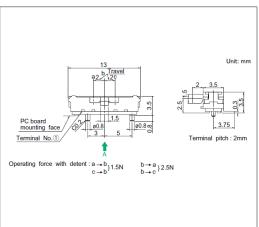
■ Circuit Diagram



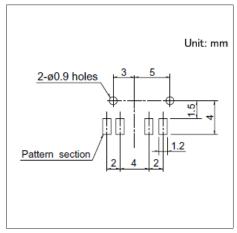
Viewed from direction A in the dimensions.

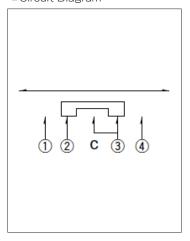
#### Drawing No.14

■ Dimensions



■ Land Dimensions



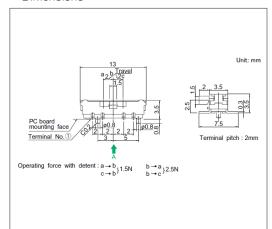


Viewed from direction A in the dimensions.

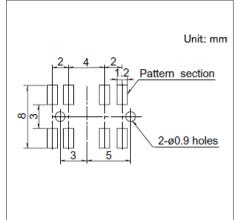
## 3.5 (H) mm, 2.0mm-travel SSSS2 Series

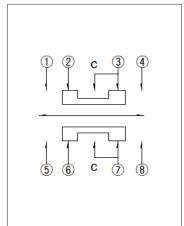
#### Drawing No.15

■ Dimensions



■ Land Dimensions

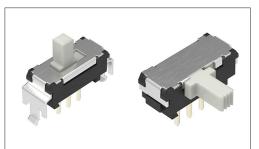




Viewed from direction A in the dimensions.

### 5.0 (H) mm, 2.0mm-travel SSSS9 Series

#### Medium-sized general-purpose type well known for ease of use.



- Rating (max.)/(min.) (Resistive load): 0.1A 12V DC/1mA 5V DC
- Contact resistance (Initial performance/After lifetime):

 $30m\Omega$  max./80m $\Omega$  max.

- Operating life without load: 10,000 cycles 60mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles  $80m\Omega$  max.

Applications: Home: Major home appliances

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSSS912000	Vertical	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.5	_	1
SSSS910400	Vertical	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.5	_	2
SSSS919500	Vertical	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.5	_	3
SSSS918500	Vertical	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.5	_	4
SSSS922000	Vertical	2.0	2	2	3±1.5N	Non shorting	Manual, Dip	11.5×7.2×5.5	_	5
SSSS921800	Vertical	2.0	2	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.5	_	6
SSSS912500	Vertical	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.5	_	7
SSSS910800	Vertical	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.5	_	8
SSSS919800	Vertical	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.5	_	9
SSSS918700	Vertical	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.5	_	10
SSSS922500	Vertical	2.0	2	2	3±1.5N	Non shorting	Manual, Dip	11.5×7.2×5.5	_	11
SSSS923200	Vertical	2.0	2	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.5	_	12
SSSS920600	Vertical	2.0	2	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.5	_	13
SSSS916900	Horizontal	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.0	_	14
SSSS915001	Horizontal	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.0	_	15
SSSS91B900	Horizontal	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.0	_	16
SSSS926400	Horizontal	2.0	2	2	3±1.5N	Non shorting	Manual, Dip	11.5×7.2×5.0	_	17
SSSS928500	Horizontal	2.0	2	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.0	_	18
SSSS916400	Horizontal	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.0	_	19
SSSS914503	Horizontal	2.0	1	2	3±1.5N	Non shorting	Manual, Dip	11.5×4.7×5.0	_	20
SSSS91B600	Horizontal	2.0	1	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.0	_	21
SSSS91A601	Horizontal	2.0	1	3	a, c $\rightarrow$ b 2±1N b $\rightarrow$ a, c 3±1.5N	Not specified	Manual, Dip	14.0×4.7×5.0	_	22
SSSS925800	Horizontal	2.0	2	2	3±1.5N	Non shorting	Manual, Dip	11.5×7.2×5.0	_	23
SSSS923802	Horizontal	2.0	2	2	3±1.5N	Non shorting	Manual, Dip	11.5×7.2×5.0	_	24
SSSS928200	Horizontal	2.0	2	3	a, c → b 2±1N b → a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.0	_	25
SSSS925701	Horizontal	2.0	2	3	a, c $\rightarrow$ b 2±1N b $\rightarrow$ a, c 3±1.5N	Not specified	Manual, Dip	14.0×7.2×5.0	_	26

## 5.0 (H) mm, 2.0mm-travel SSSS9 Series



- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).

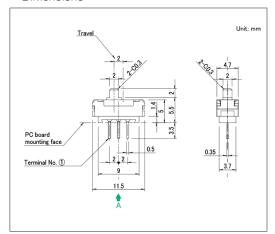
#### ■ Packing Specifications

Bulk

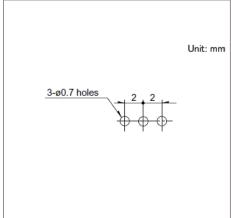
Products No.	Number of pa	ckages(pcs.)	Export package measurements (mm)	
	1 case / Japan	1 case / export packing		
\$\$\$\$912000 \$\$\$\$910400 \$\$\$\$919500 \$\$\$\$919500 \$\$\$\$918500 \$\$\$\$912500 \$\$\$\$912500 \$\$\$\$91800 \$\$\$\$91800 \$\$\$\$918700 \$\$\$\$918900 \$\$\$\$916900 \$\$\$\$916900 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400 \$\$\$\$916400	1,000	5,000	400 x 270 x 290	
SSSS921800 SSSS923200 SSSS928600 SSSS928500 SSSS928200 SSSS925701	800	4,000	400 x 270 x 290	

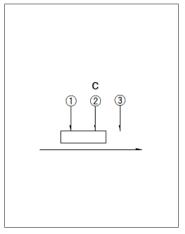
#### Drawing No.1

■ Dimensions



■ Mounting Hole Dimensions



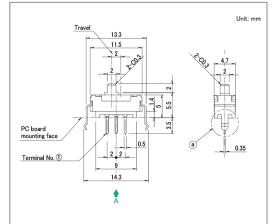


Viewed from direction A in the dimensions.

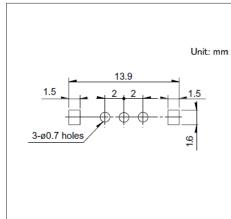
#### SSSS9 Series

#### Drawing No.2

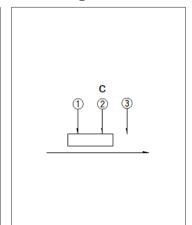
■ Dimensions



■ Mounting Hole Dimensions



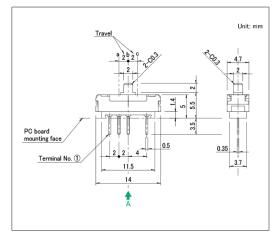
■ Circuit Diagram



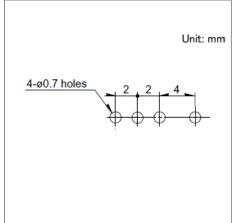
Viewed from direction A in the dimensions.

#### Drawing No.3

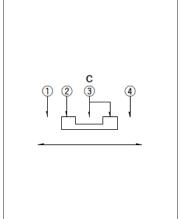
■ Dimensions



■ Mounting Hole Dimensions



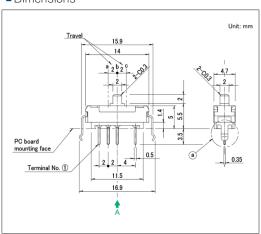
■ Circuit Diagram



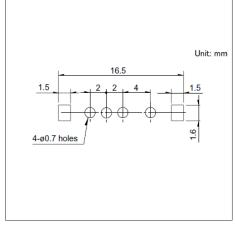
Viewed from direction A in the dimensions.

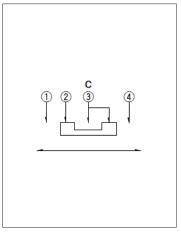
#### Drawing No.4

■ Dimensions



■ Mounting Hole Dimensions



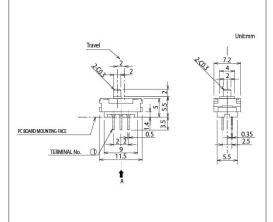


Viewed from direction A in the dimensions.

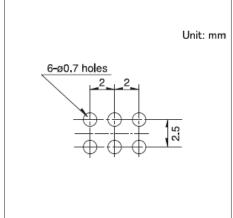
### SSSS9 Series

#### Drawing No.5

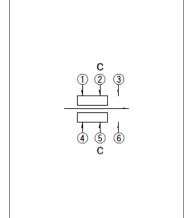
■ Dimensions



■ Mounting Hole Dimensions



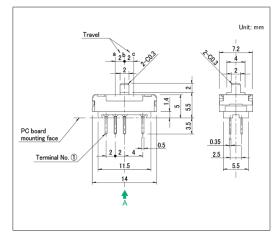
■ Circuit Diagram



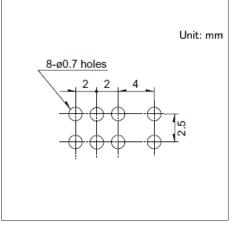
Viewed from direction A in the dimensions.

#### Drawing No.6

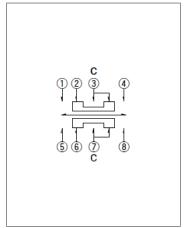
■ Dimensions



■ Mounting Hole Dimensions



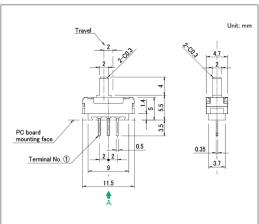
■ Circuit Diagram



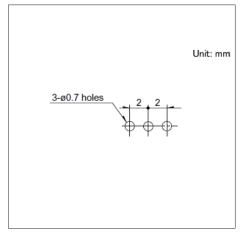
Viewed from direction A in the dimensions.

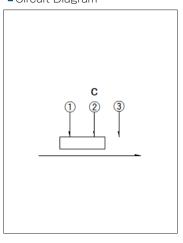
#### Drawing No.7

■ Dimensions



■ Mounting Hole Dimensions



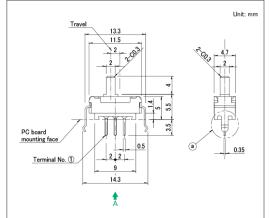


Viewed from direction A in the dimensions.

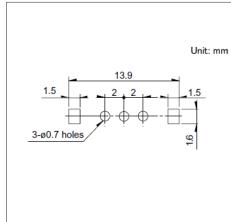
#### SSSS9 Series

#### **Drawing No.8**

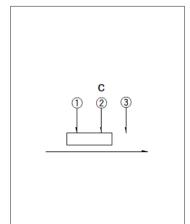
■ Dimensions



■ Mounting Hole Dimensions



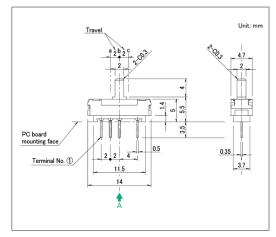
■ Circuit Diagram



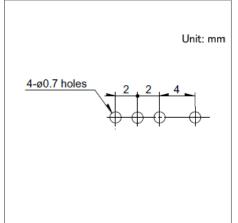
Viewed from direction A in the dimensions.

#### Drawing No.9

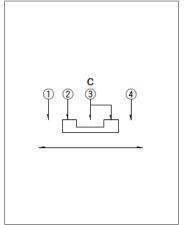
■ Dimensions



■ Mounting Hole Dimensions



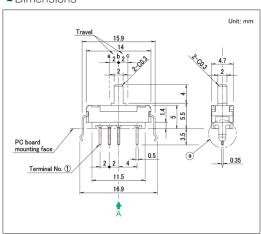
■ Circuit Diagram



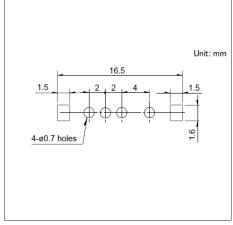
Viewed from direction A in the dimensions.

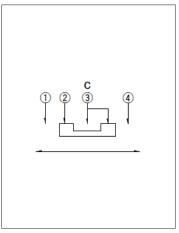
#### Drawing No.10

■ Dimensions



■ Mounting Hole Dimensions



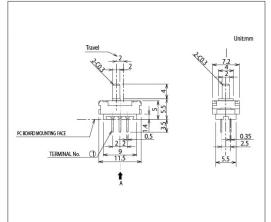


Viewed from direction A in the dimensions.

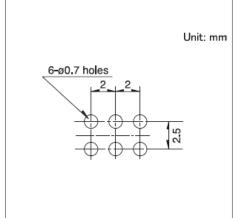
#### SSSS9 Series

#### Drawing No.11

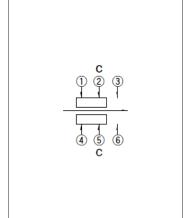
■ Dimensions



■ Mounting Hole Dimensions



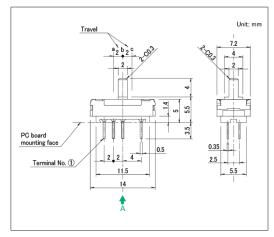
■ Circuit Diagram



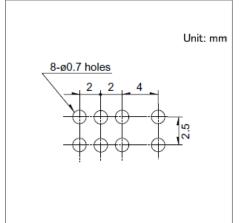
Viewed from direction A in the dimensions.

#### Drawing No.12

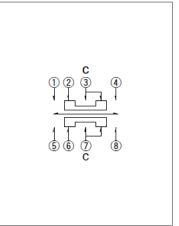
■ Dimensions



■ Mounting Hole Dimensions



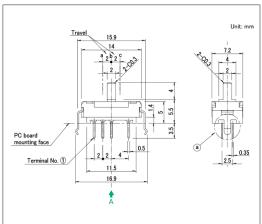
■Circuit Diagram



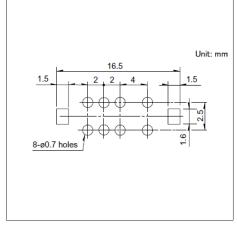
Viewed from direction A in the dimensions.

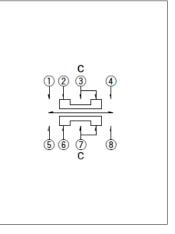
#### Drawing No.13

■ Dimensions



■ Mounting Hole Dimensions



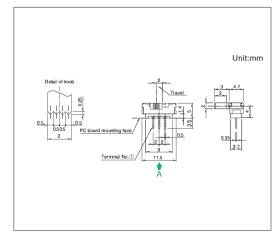


Viewed from direction A in the dimensions.

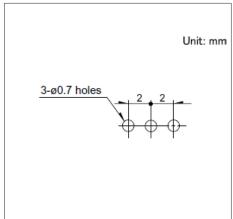
#### SSSS9 Series

#### Drawing No.14

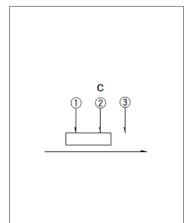
■ Dimensions



■ Mounting Hole Dimensions



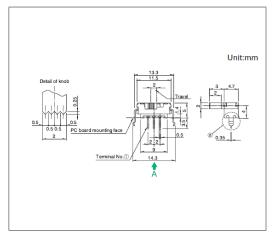
■ Circuit Diagram



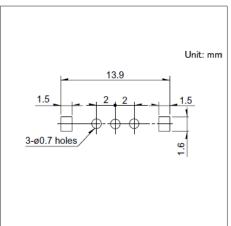
Viewed from direction A in the dimensions.

#### Drawing No.15

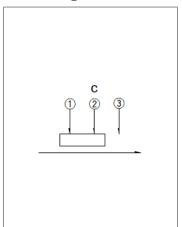
■ Dimensions



■ Mounting Hole Dimensions



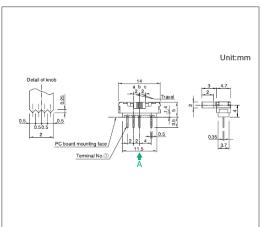
■ Circuit Diagram



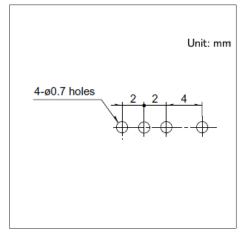
Viewed from direction A in the dimensions.

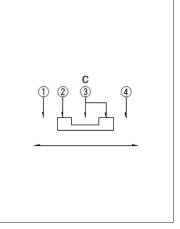
#### Drawing No.16

■ Dimensions



■ Mounting Hole Dimensions



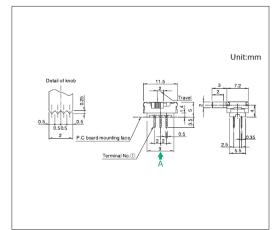


Viewed from direction A in the dimensions.

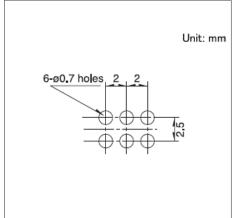
#### SSSS9 Series

#### Drawing No.17

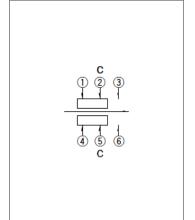
■ Dimensions



■ Mounting Hole Dimensions



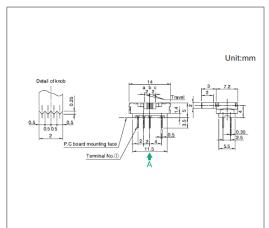
■ Circuit Diagram



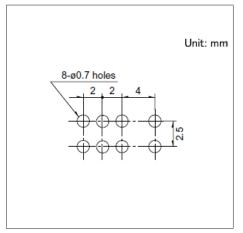
Viewed from direction A in the dimensions.

#### Drawing No.18

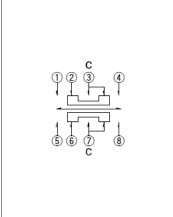
■ Dimensions



■ Mounting Hole Dimensions



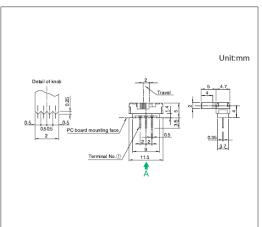
■ Circuit Diagram



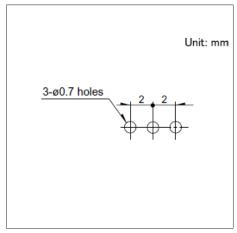
Viewed from direction A in the dimensions.

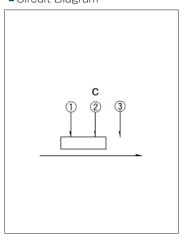
#### Drawing No.19

■ Dimensions



■ Mounting Hole Dimensions



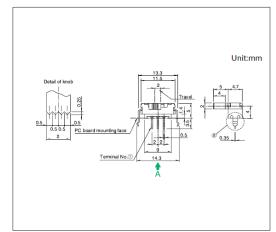


Viewed from direction A in the dimensions.

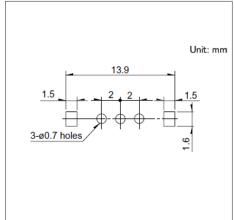
#### SSSS9 Series

#### Drawing No.20

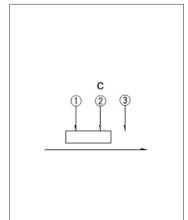
■ Dimensions



■ Mounting Hole Dimensions



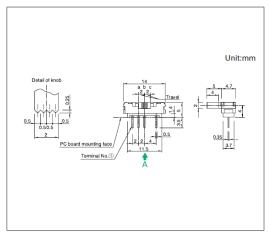
■ Circuit Diagram



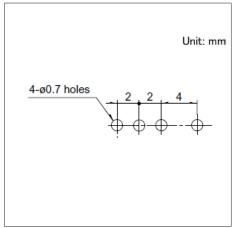
Viewed from direction A in the dimensions.

#### Drawing No.21

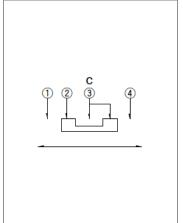
■ Dimensions



■ Mounting Hole Dimensions



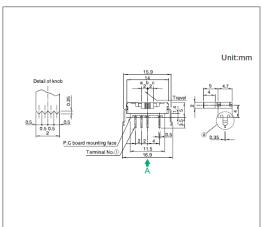
■ Circuit Diagram



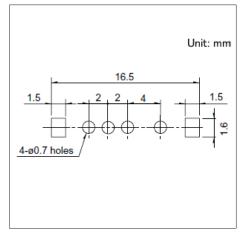
Viewed from direction A in the dimensions.

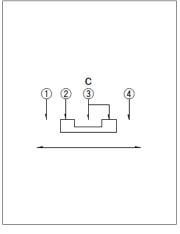
#### Drawing No.22

■ Dimensions



■ Mounting Hole Dimensions



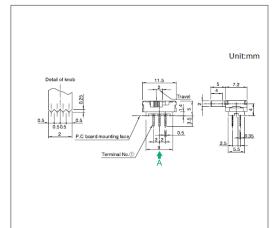


Viewed from direction A in the dimensions.

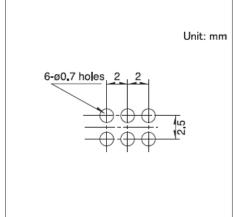
#### SSSS9 Series

#### Drawing No.23

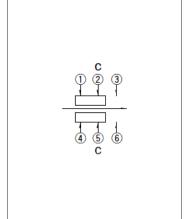
■ Dimensions



■ Mounting Hole Dimensions



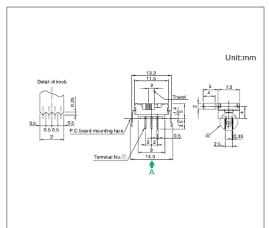
■ Circuit Diagram



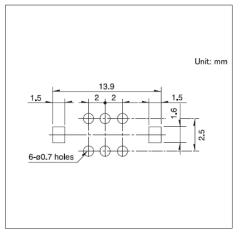
Viewed from direction A in the dimensions.

#### Drawing No.24

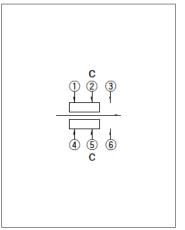
■ Dimensions



■ Mounting Hole Dimensions



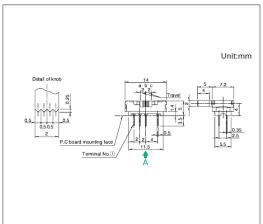
■ Circuit Diagram



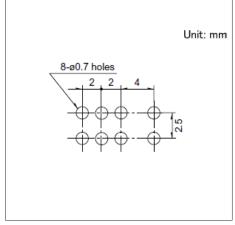
Viewed from direction A in the dimensions.

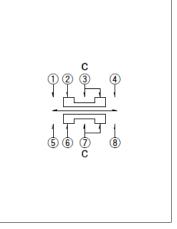
#### Drawing No.25

■ Dimensions



■ Mounting Hole Dimensions



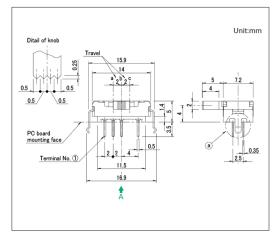


Viewed from direction A in the dimensions.

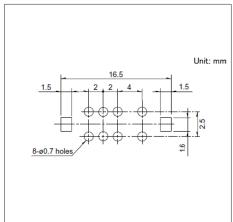
## 5.0 (H) mm, 2.0mm-travel SSSS9 Series

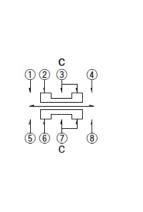
#### **Drawing No.26**

Dimensions



■ Mounting Hole Dimensions

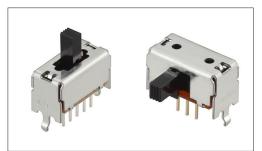




Viewed from direction A in the dimensions.

# 8.5 (H) mm, 2.0mm-travel SSSF Series

### Large general-purpose type with a proven track record across diverse industries.



- Rating (max.)/(min.) (Resistive load): 0.1A 30V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

25m $\Omega$  max./65m $\Omega$  max.

- Operating life without load: 10,000 cycles 45mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles 65mΩ max.

Applications: Audio\_TV: Audio

#### ■ Product List

Products No.	Actuator directions	Travel (mm)	Poles	Positions	Operating force	Changeover timing	Soldering	Dimensions (W×D×H) (mm)	Automotive	Drawing No.
SSSF011700	Vertical	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	1
SSSF012100	Vertical	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	2
SSSF014800	Vertical	2.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	3
SSSF021500	Vertical	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	4
SSSF021900	Vertical	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	5
SSSF024800	Vertical	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	-	6
SSSF025100	Vertical	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	7
SSSF040800	Vertical	2.0	4	2	Refer to the dimensions.	Non shorting	Manual, Dip	16.5×7.0×8.5	_	8
SSSF111800	Horizontal	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	9
SSSF112500	Horizontal	2.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	10
SSSF114900	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	11
SSSF115300	Horizontal	2.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	12
SSSF121900	Horizontal	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	13
SSSF122400	Horizontal	2.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	14
SSSF125300	Horizontal	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	15
SSSF125800	Horizontal	2.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	14.5×7.0×8.5	_	16
SSSF141000	Horizontal	2.0	4	2	Refer to the dimensions.	Non shorting	Manual, Dip	16.5×7.0×8.5	_	17
SSSF141300	Horizontal	2.0	4	2	Refer to the dimensions.	Non shorting	Manual, Dip	16.5×7.0×8.5	_	18

#### ⚠Note

- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).

### SSSF Series

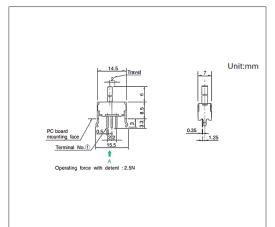
### ■ Packing Specifications

Bulk

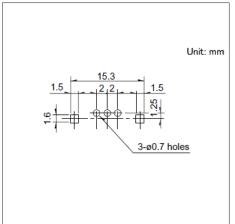
Products No.	Number of pa	ckages(pcs.)	Export package measurements	
	1 case / Japan	1 case / export packing	(mm)	
SSSF011700 SSSF012100 SSSF014800 SSSF021500 SSSF021900 SSSF024800 SSSF025100 SSSF040800 SSSF112500 SSSF115300 SSSF122400 SSSF12400 SSSF141300	800	4,000	400 x 270 x 290	
SSSF111800 SSSF114900 SSSF121900 SSSF125300	600	3,000	400 x 270 x 290	

### Drawing No.1

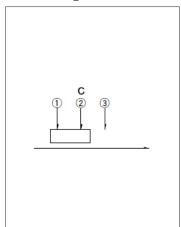
■ Dimensions



■ Mounting Hole Dimensions



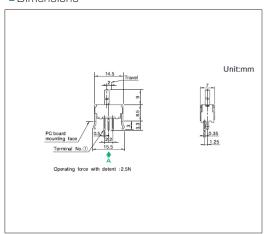
■ Circuit Diagram



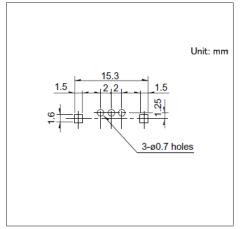
Viewed from direction A in the dimensions.

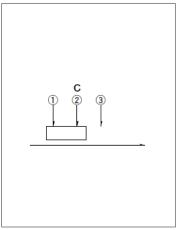
### Drawing No.2

Dimensions



■ Mounting Hole Dimensions



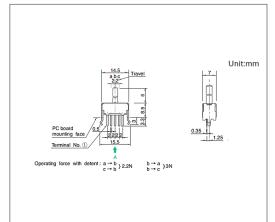


Viewed from direction A in the dimensions.

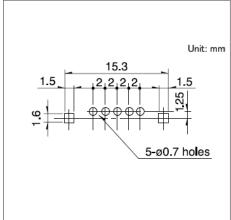
### SSSF Series

### Drawing No.3

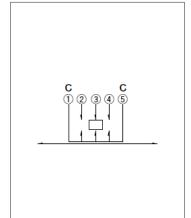
■ Dimensions



■ Mounting Hole Dimensions



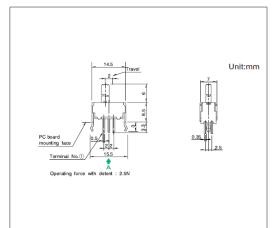
■ Circuit Diagram



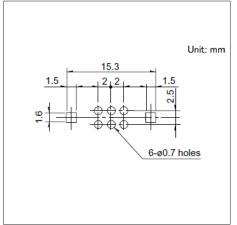
Viewed from direction A in the dimensions.

### Drawing No.4

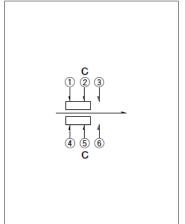
■ Dimensions



■ Mounting Hole Dimensions



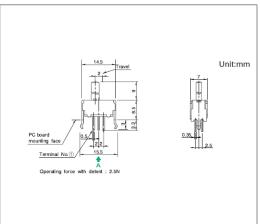
■ Circuit Diagram



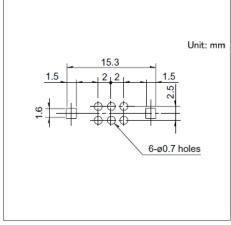
Viewed from direction A in the dimensions.

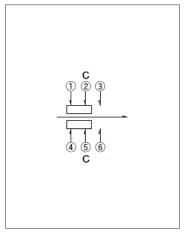
### **Drawing No.5**

■ Dimensions



■ Mounting Hole Dimensions



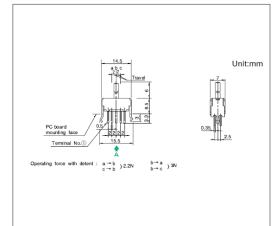


Viewed from direction A in the dimensions.

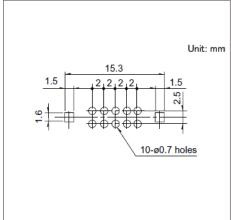
### SSSF Series

### **Drawing No.6**

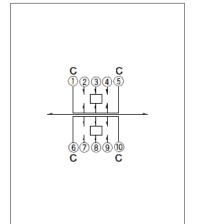
■ Dimensions



■ Mounting Hole Dimensions



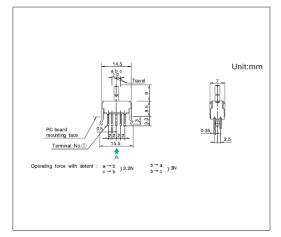
■ Circuit Diagram



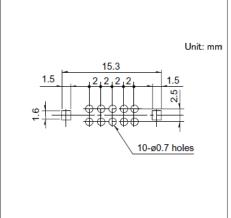
Viewed from direction A in the dimensions.

### Drawing No.7

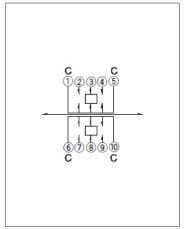
■ Dimensions



■ Mounting Hole Dimensions



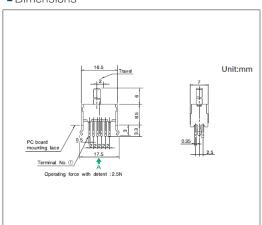
■ Circuit Diagram



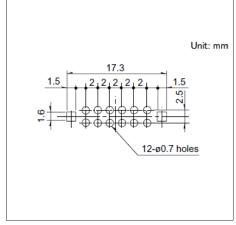
Viewed from direction A in the dimensions.

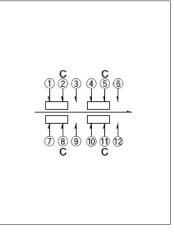
### Drawing No.8

■ Dimensions



■ Mounting Hole Dimensions



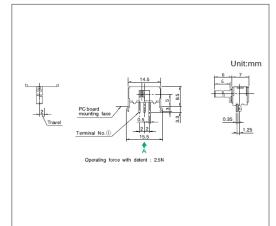


Viewed from direction A in the dimensions.

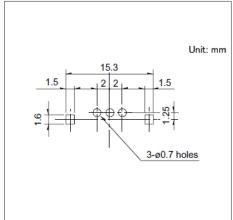
### SSSF Series

### Drawing No.9

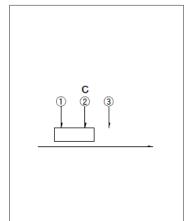
■ Dimensions



■ Mounting Hole Dimensions



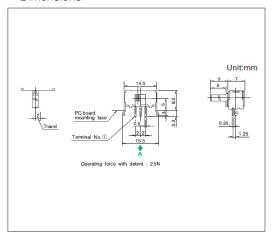
■ Circuit Diagram



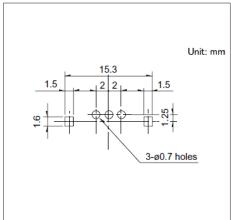
Viewed from direction A in the dimensions.

### Drawing No.10

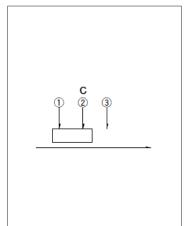
■ Dimensions



■ Mounting Hole Dimensions



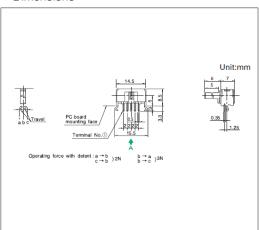
■ Circuit Diagram



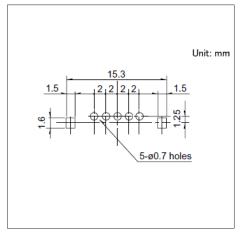
Viewed from direction A in the dimensions.

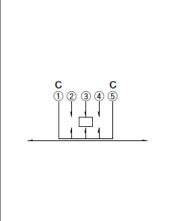
### Drawing No.11

■ Dimensions



■ Mounting Hole Dimensions



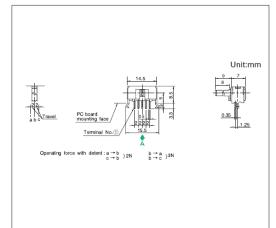


Viewed from direction A in the dimensions.

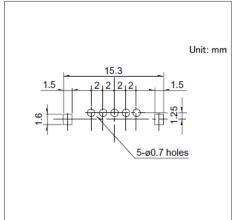
### SSSF Series

### Drawing No.12

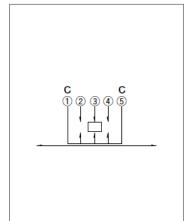
■ Dimensions



■ Mounting Hole Dimensions



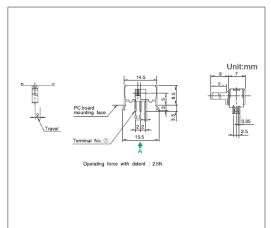
■ Circuit Diagram



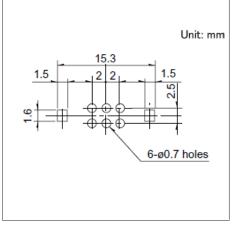
Viewed from direction A in the dimensions.

### Drawing No.13

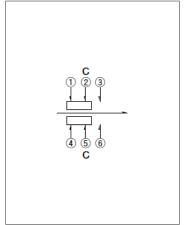
■ Dimensions



■ Mounting Hole Dimensions



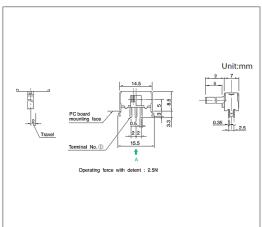
■ Circuit Diagram



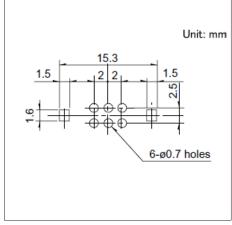
Viewed from direction A in the dimensions.

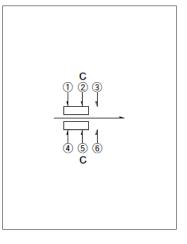
### Drawing No.14

■ Dimensions



■ Mounting Hole Dimensions



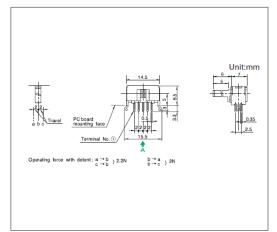


Viewed from direction A in the dimensions.

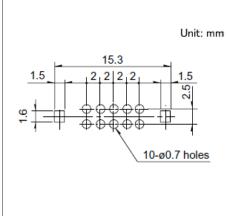
### SSSF Series

### Drawing No.15

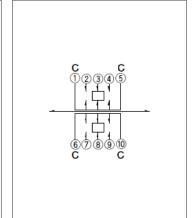
■ Dimensions



■ Mounting Hole Dimensions



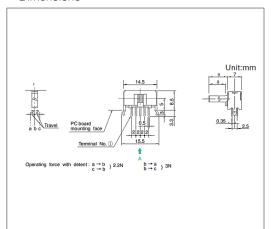
■ Circuit Diagram



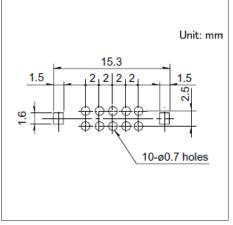
Viewed from direction A in the dimensions.

### Drawing No.16

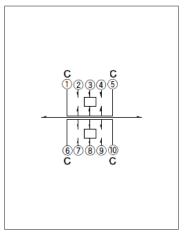
■ Dimensions



■ Mounting Hole Dimensions



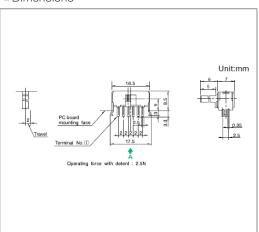
■ Circuit Diagram



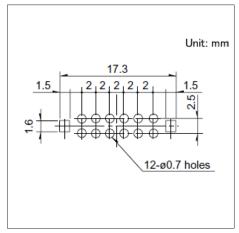
Viewed from direction A in the dimensions.

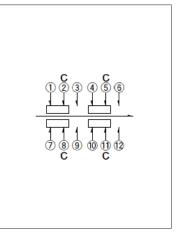
### Drawing No.17

■ Dimensions



■ Mounting Hole Dimensions



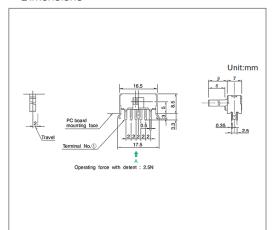


Viewed from direction A in the dimensions.

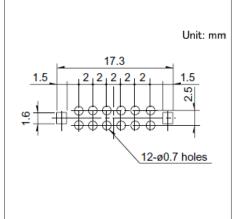
## 8.5 (H) mm, 2.0mm-travel **SSSF Series**

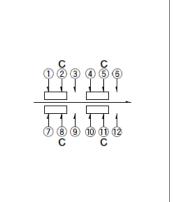
### Drawing No.18

Dimensions



■ Mounting Hole Dimensions





Viewed from direction A in the dimensions.

# 8.5 (H) mm, 3.0mm-travel SSSU Series

### Large general-purpose type with a wide variety of knob options.



- Rating (max.)/(min.) (Resistive load): 0.1A 30V DC/50µA 3V DC
- Contact resistance (Initial performance/After lifetime):

 $25m\Omega$  max./ $65m\Omega$  max.

- Operating life without load: 10,000 cycles 45mΩ max.
- Operating life with load (at max. rated load): 10,000 cycles 65mΩ max.

Applications: Audio\_TV: Audio

### ■ Product List

	Actuator	Travel			Operating	Changeover		Dimensions		Drawing
Products No.	directions	(mm)	Poles	Positions	force	timing	Soldering	(W×D×H) (mm)	Automotive	No.
SSSU011700	Vertical	3.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	1
SSSU012200	Vertical	3.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	2
SSSU014800	Vertical	3.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	3
SSSU015100	Vertical	3.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	4
SSSU022400	Vertical	3.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	5
SSSU022800	Vertical	3.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	6
SSSU025800	Vertical	3.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	7
SSSU026300	Vertical	3.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	8
SSSU041700	Vertical	3.0	4	2	Refer to the dimensions.	Non shorting	Manual, Dip	21.5×7.0×8.5	_	9
SSSU042100	Vertical	3.0	4	2	Refer to the dimensions.	Non shorting	Manual, Dip	21.5×7.0×8.5	_	10
SSSU111400	Horizontal	3.0	1	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	11
SSSU113200	Horizontal	3.0	1	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	12
SSSU121700	Horizontal	3.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	13
SSSU122200	Horizontal	3.0	2	2	Refer to the dimensions.	Non shorting	Manual, Dip	18.5×7.0×8.5	_	14
SSSU124900	Horizontal	3.0	2	3	Refer to the dimensions.	Non shorting	Manual, Dip	24.5×7.0×8.5	_	15

### Note

- 1. This catalog shows only outline specifications. When using the products, please obtain formal specifications for supply.
- 2. Please place purchase orders per minimum order unit (integer).

## 8.5 (H) mm, 3.0mm-travel SSSU Series

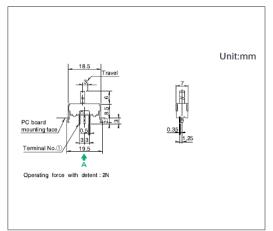
### ■ Packing Specifications

Bulk

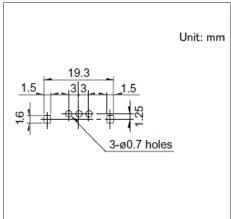
Products No.	Number of pa	ockages(pcs.)	Export package measurements (mm)	
Products No.	1 case / Japan	1 case / export packing		
SSSU011700 SSSU012200 SSSU022400 SSSU022800 SSSU124900	400	2,000	400 x 270 x 290	
SSSU014800 SSSU015100 SSSU025800 SSSU026300 SSSU041700 SSSU042100 SSSU113200	500	2,500	400 x 270 x 290	
SSSU111400 SSSU121700 SSSU122200	700	3,500	400 x 270 x 290	

### Drawing No.1

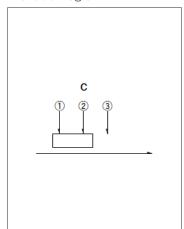
■ Dimensions



■ Mounting Hole Dimensions



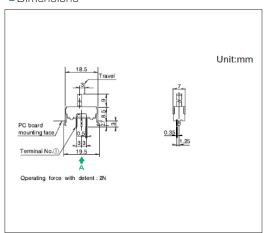
■ Circuit Diagram



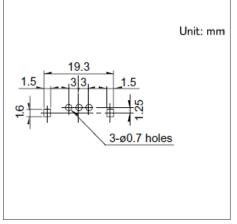
Viewed from direction A in the dimensions.

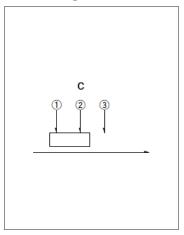
### Drawing No.2

■ Dimensions



■ Mounting Hole Dimensions



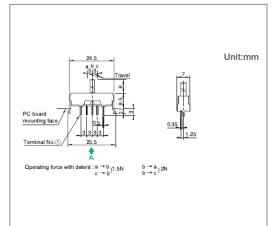


Viewed from direction A in the dimensions.

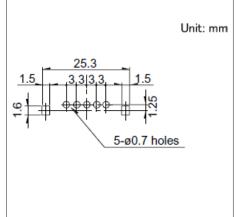
### SSSU Series

### Drawing No.3

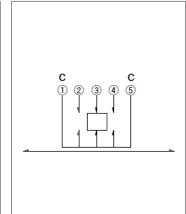
■ Dimensions



■ Mounting Hole Dimensions



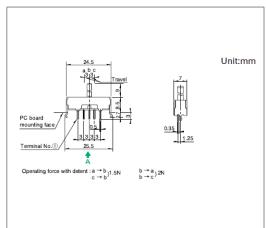
■ Circuit Diagram



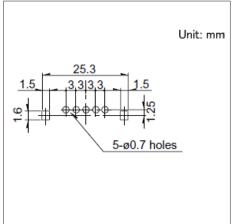
Viewed from direction A in the dimensions.

### Drawing No.4

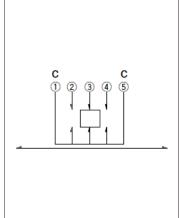
■ Dimensions



■ Mounting Hole Dimensions



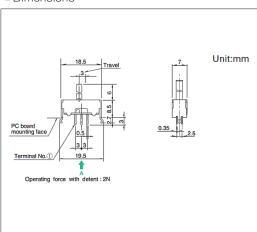
■ Circuit Diagram



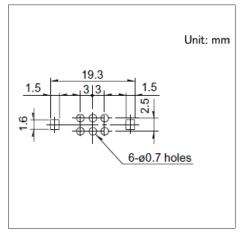
Viewed from direction A in the dimensions.

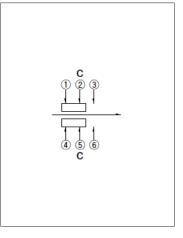
### Drawing No.5

■ Dimensions



■ Mounting Hole Dimensions



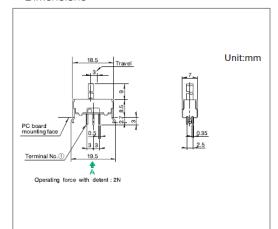


Viewed from direction A in the dimensions.

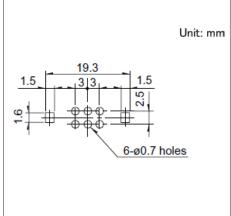
### SSSU Series

### **Drawing No.6**

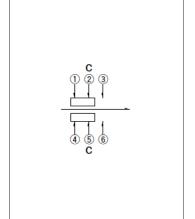
■ Dimensions



■ Mounting Hole Dimensions



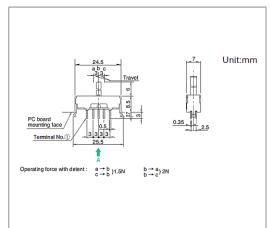
■ Circuit Diagram



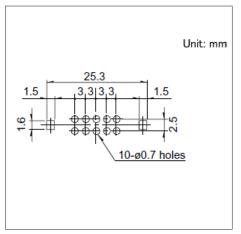
Viewed from direction A in the dimensions.

### Drawing No.7

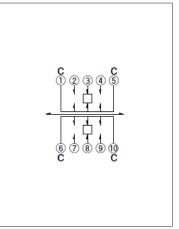
■ Dimensions



■ Mounting Hole Dimensions



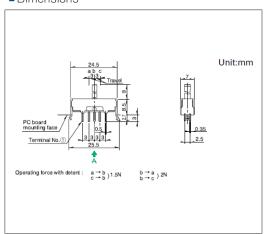
■ Circuit Diagram



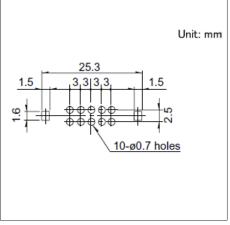
Viewed from direction A in the dimensions.

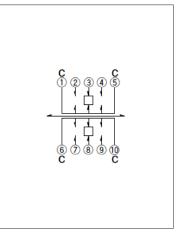
### Drawing No.8

■ Dimensions



■ Mounting Hole Dimensions



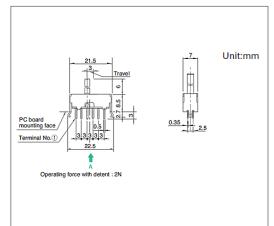


Viewed from direction A in the dimensions.

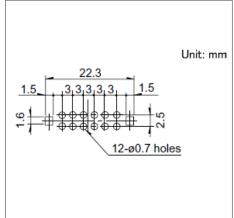
### SSSU Series

### Drawing No.9

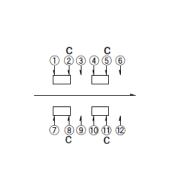
■ Dimensions



■ Mounting Hole Dimensions



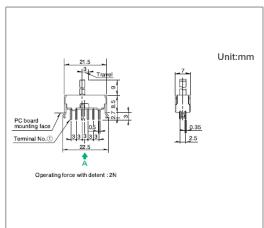
■ Circuit Diagram



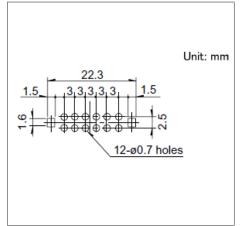
Viewed from direction A in the dimensions.

### Drawing No.10

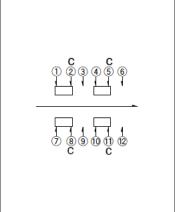
■ Dimensions



■ Mounting Hole Dimensions



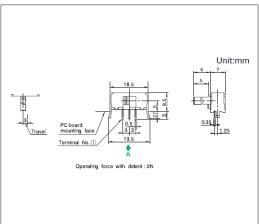
■ Circuit Diagram



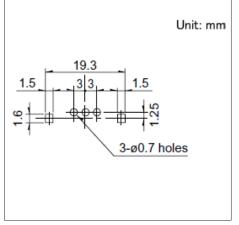
Viewed from direction A in the dimensions.

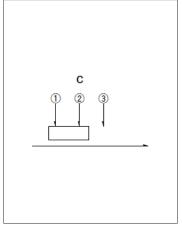
### Drawing No.11

■ Dimensions



■ Mounting Hole Dimensions



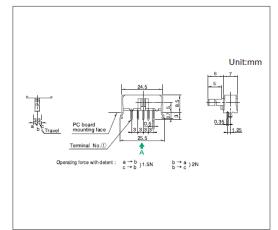


Viewed from direction A in the dimensions.

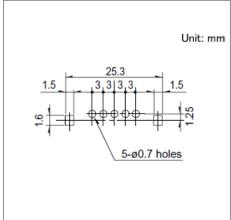
### SSSU Series

### Drawing No.12

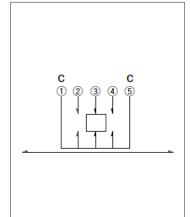
■ Dimensions



■ Mounting Hole Dimensions



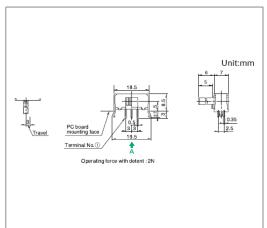
■ Circuit Diagram



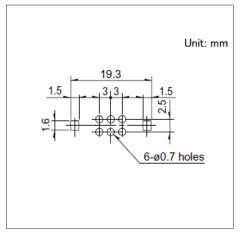
Viewed from direction A in the dimensions.

### Drawing No.13

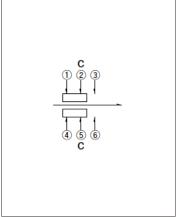
■ Dimensions



■ Mounting Hole Dimensions



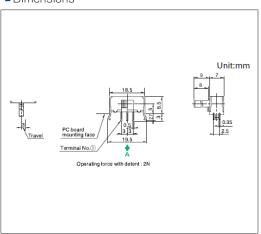
■ Circuit Diagram



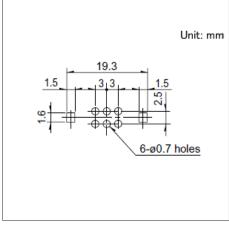
Viewed from direction A in the dimensions.

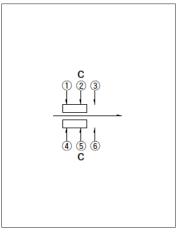
### Drawing No.14

■ Dimensions



■ Mounting Hole Dimensions



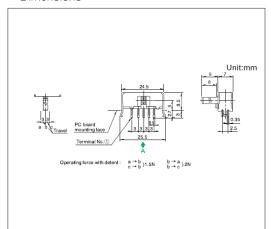


Viewed from direction A in the dimensions.

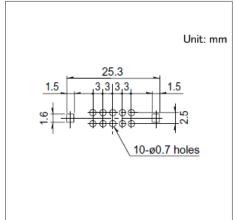
## 8.5 (H) mm, 3.0mm-travel **SSSU Series**

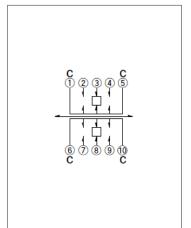
### Drawing No.15

Dimensions



■ Mounting Hole Dimensions



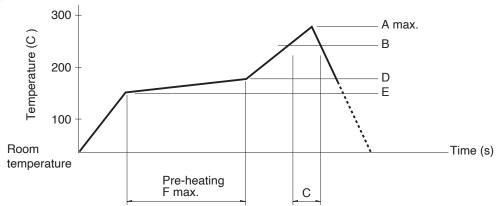


Viewed from direction A in the dimensions.

### Slide Switches / Soldering Conditions

### ■ 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.
- 3. Temperature profile



Series (Reflow type)		A (°C) 3s max.	B (℃)	C (s)	D (°C)	E (°C)	F (s)	
	Vertical	1-pole, 3-position	260	230	40	180	150	120
SSSS2 Horizontal Vertical	Horizontal	1-pole, 2-position 1-pole, 3-position 2-pole, 3-position						
	Vertical	1-pole, 2-position	250					
SSAG, SSAJ, SSSS8, SSS7		260						

### ⚠Note

- 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°C	3+1/0s	
SSSS2	350±10℃	4s max.	
SSSS9	350±10℃	3s max.	
SSAG, SSAJ	350±5℃	3s max.	
SSSS8	330±5°C	3s max.	
SSSS7	320±5°C	3s max.	

### ■ Reference for Dip Soldering

(For PC board terminal types)

Series	Ite	ms	Dip soldering		
Series	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	

### Slide Switches / Cautions

- 1. Appling load to terminals during soldering under certain conditions may cause deformation and electrical property degradation.
- 2. Avoid use of water-soluble soldering flux, since it may corrode the switches.
- 3. Check and conform to soldering requirements under actual mass production conditions.
- 4. When soldering twice, wait until the first soldered portion cools to normal temperature. Continuous heating will deform the external portions, loosen or dislodge terminals, or may deteriorate their electrical characteristics.
- 5. Flux from around and above the PC board should not adhere to the switches.
- 6. After mounting the switches, if you intend to put the board into an oven in order to harden adhesive for other parts, please consult with us.
- 7. If you use a through-hole PC board or a PC board thinner or thicker than the recommendation, here may be greater heat stress. Verify the soldering conditions thoroughly before use.
- 8. Solder the switches with detent at the detent position. Soldering switches fixed at the center of the detent may deform the detent mechanisms.
- 9. No cleaning.
- 10. Protect small and thin switches from external forces in the set mounting process.
- 11. Tighten the mounting screws by applying the specified torque. Tightening with larger torque than the specified one will result in malfunction or breakage of screws.
- 12. Insert these switches to the specified mounting surface and mount them horizontally. If not mounted horizontally, these switches will malfunction.
- 13. The products are designed and manufactured for direct current resistance. Contact us for use of other resistances such as inductive (L) or capacitive (C).
- 14. The switch will be break if you apply a greater stress than that specified. Take great care not to let the switch be subject to greater stress than specified.
- 15. Use of the switches in a dusty environment may lead the dusts entering through the openings and cause imperfect contact or malfunction. Take this into account for set design.
- 16. Corrosive gas if generated by peripheral parts of a set, malfunction such as imperfect contact may occur. Thorough investigation shall be required beforehand.
- 17. Storage

Store the products as delivered at normal temperature and humidity, out of direct sunlight and away from corrosive gases. Use them as soon as possible and no later than six months after delivery.

Once the seal is broken, use them as soon as possible.