

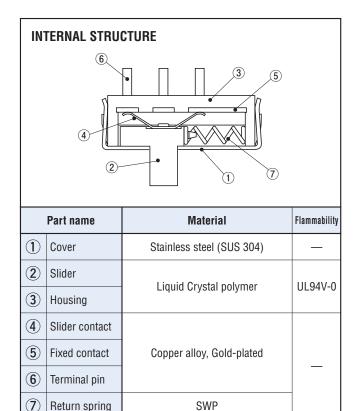


## **■ FEATURES**

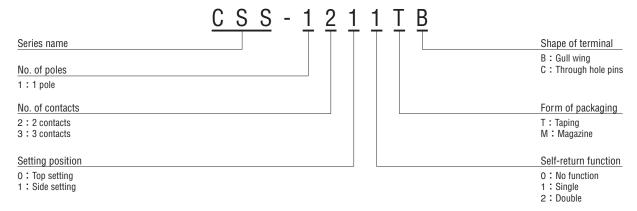
- Low-profile of 2 mm
- Self-return type available
- RoHS compliant

## APPLICATIONS

■ Mobile stereo · LCD TV · Camcorder



### **PART NUMBER DESIGNATION**



## **■ LIST OF PART NUMBERS**

No. of contacts	Setting position	Self-return function	Shape of terminal	Form of packaging	Part number	Pieces in package
2	Side setting	No function	B (Gull wing)	Taping	CSS-1210TB	1,900 pcs./reel
			C (Through hole pins)	Magazine	CSS-1210MC	53 pcs./stick
		Single	B (Gull wing)	Taping	CSS-1211TB	1,900 pcs./reel
			C (Through hole pins)	Magazine	CSS-1211MC	53 pcs./stick
3	Side setting	No function	B (Gull wing)	Taping	CSS-1310TB	1,900 pcs./reel
			C (Through hole pins)	Magazine	CSS-1310MC	38 pcs./stick
		ng Single	B (Gull wing)	Taping	CSS-1311TB	1,900 pcs./reel
			C (Through hole pins)	Magazine	CSS-1311MC	38 pcs./stick
		Double	B (Gull wing)	Taping	CSS-1312TB	1,900 pcs./reel
			C (Through hole pins)	Magazine	CSS-1312MC	38 pcs./stick
	Top setting	No function	C (Through hole pins)	Magazine	CSS-1300MC	38 pcs./stick
		Double	C (Through hole pins)	Magazine	CSS-1302MC	38 pcs./stick

## **STANDARD SPECIFICATIONS**

Operating temp. range	− 20 ~ 70 °C	
Storage temp. range	— 40 ∼ 85 °C	
Sealing	Non- Washable	
Net weight	Approx. 0.11 g (CSS-12), Approx. 0.15 g (CSS-13)	

## **■ MECHANICAL CHARACTERISTICS**

No. of positions	2, 3	
Stroke	2 mm	
Operating force	1 ~ 3.5 N {0.1 ~ 0.36 kgf}	
Stop strength	10 N {1.02 kgf} 15 s(操作方向)	
Solderability	245 ± 3 °C 2 ~ 3 s Sn-3Aq-0.5Cu	
Soldering heat	Reflow: 250 ~ 255 °C (Peak temperature) (Please refer to the profile below)	
Soluering heat	Manual soldering : 350 $\pm$ 10 °C, 3 ~ 4 s	
Shear (Adhesion)	5 N {0.5 kgf} 10 s	
Substrate bending	Width 90 mm, bend 3 mm, 5 s, 1 time	
Pull-off strength	5 N {0.5 kgf} 10 s	

 $\{\ \}$ : Reference only

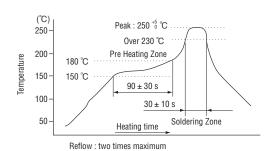
## **■ ELECTRICAL CHARACTERISTICS**

Contact rating	Non-switching : DC50 V 100 mA Switching : DC12 V 100 mA Minimum : DC20 mV 1 µA	
Contact timing	Non-shorting	
Contact resistance	70 m Ω maximum	
Insulation resistance	100 M Ω minimum (DC 500 V)	
Dielectric strength	AC500 V 60 s	

## **ENVIRONMENTAL CHARACTERISTICS**

Vibration	Amplitude 1.5 mm or Acceleration 98 m/s², 10-500-10 Hz, 3 directions for 10 cycles each	
Shock	490 m/s², 11 ms, 6 directions for 3 times each	
Load life	Continuous load 10000 cycles, DC12 $\pm$ 0.5 V, 100 $\pm$ 10 mA	
Humidity	40 °C, Relative humidity 90 ~ 95 %, 240 h, No load	
High temp. exposure	85 °C, 96 h, No load	
Low temp. exposure	— 40 °C, 96 h, No load	
Thermal shock	— 40 (0.5 h) ~ 85 °C (0.5 h), 5 cycles	

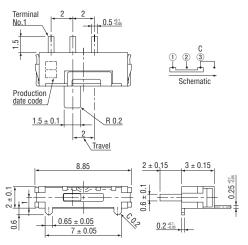
### ⟨Reflow profile for soldering heat evaluation⟩



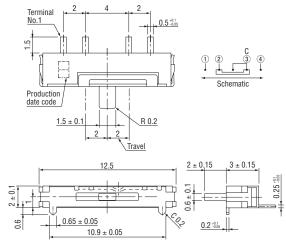
## **COMPACT SLIDE SWITCHES**

## **OUTLINE DIMENSIONS**

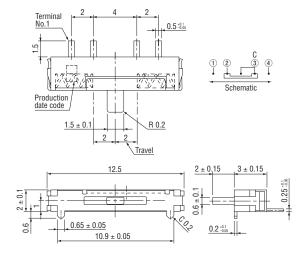
#### • CSS-1210B



#### • CSS-1310B

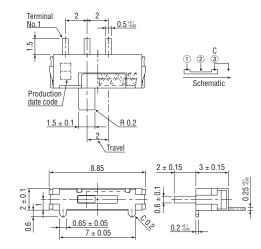


#### • CSS-1312B

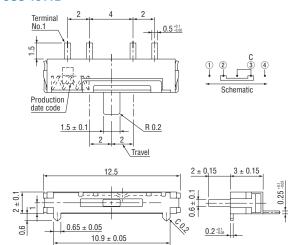


Unless otherwise specified, tolerance :  $\pm$  0.2 (Unit : mm)

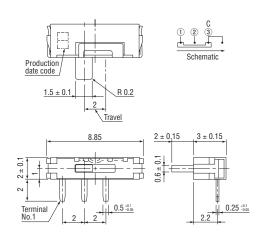
#### • CSS-1211B



#### • CSS-1311B

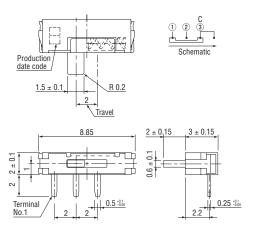


#### • CSS-1210C

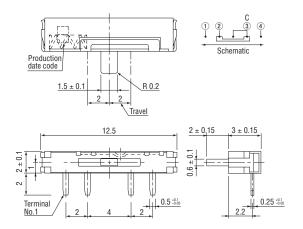


## **OUTLINE DIMENSIONS**

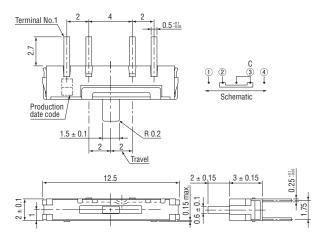
#### • CSS-1211C



#### • CSS-1311C

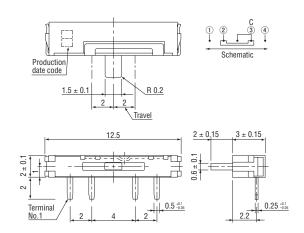


#### • CSS-1300C

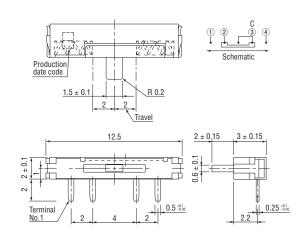


#### Unless otherwise specified, tolerance : $\pm$ 0.2 (Unit : mm)

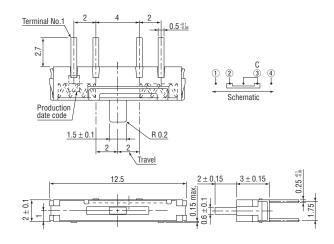
#### ● CSS-1310C



#### • CSS-1312C



#### • CSS-1302C



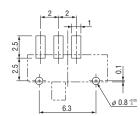
# **CSS COMPACT SLIDE SWITCHES**

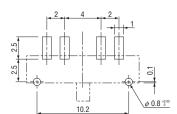
## I RECOMMENDED P.C.B. PAD OUTLINE DIMENSIONS

#### ● CSS-121 □ B

● CSS-131 □ B

(Unit: mm)





## PACKAGING SPECIFICATIONS

Taping version is packaged in 1900 pcs. par reel.

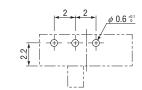
Taping version is boxed with 1 reel (1900 pcs.).

Maximum number of consecutive missing pieces = 2.

Leader length and reel dimension are shown in the diagrams below.

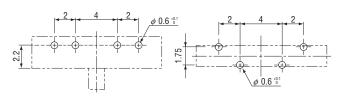
## SIZE OF P.C.B. PROCESSING

#### ● CSS-121 □ C

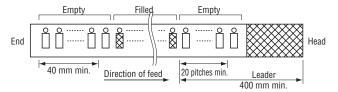


#### ● CSS-131 □ C

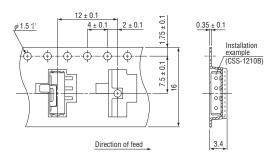
#### ● CSS-130 □ C



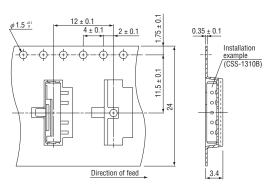
#### **Embossed tape dimensions**



#### ● CSS-121 □ TB

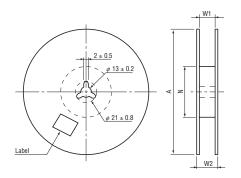


### ● CSS-131 □ TB



#### Reel dimensions

(Unit: mm)



3.7	5.8
Top setting	Side setting
Magazine length	: 500 2 mm long

Packing quantity of magazine

Part number	А	<b>W</b> 1	W2	N
121 □ TB	φ 330 ± 2	17.4 ± 1	21.4 ± 1	φ 80 ± 1
131 🗆 TB	φ 330 ± 2	25.4 ± 1	29.4 ± 1	φ 80 ± 1

Part number	Quantity / Stick
12 🗆	53
13 🗆	38

## **Mouser Electronics**

**Authorized Distributor** 

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

## Nidec:

<u>CSS-1210MC</u> <u>CSS-1310TB</u> <u>CSS-1210TB</u> <u>CSS-1300MC</u> <u>CSS-1211MC</u> <u>CSS-1211TB</u> <u>CSS-1302MC</u> <u>CSS-1310MC</u> CSS-1311MC CSS-1312MC CSS-1312TB