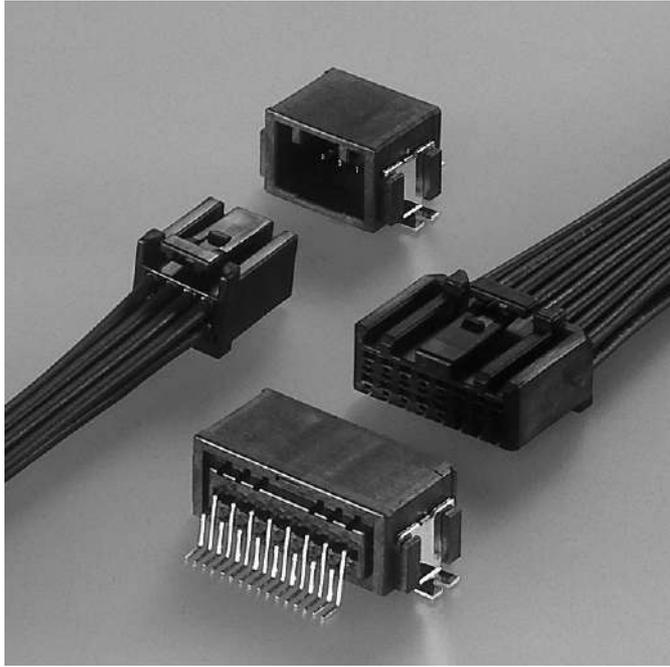


# CPT CONNECTOR

Board-to-wire



Developed in pursuit of miniaturization and low profile as PC board connector for automobile.  
This connector is surface mounting type connector having the spring structure on male terminal disproving the conventional concept.

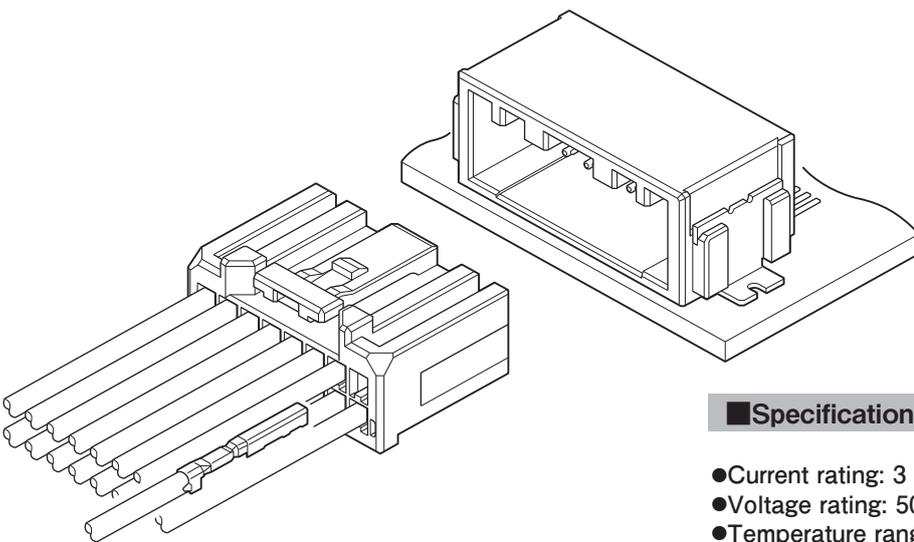
## ■ Features

### ● Compact design

2.0 mm pitch is realized miniaturization and low profile as the connector for automobile.

### ● Terminal construction

Female terminal is designed for simple box structure by having spring structure on male terminal.



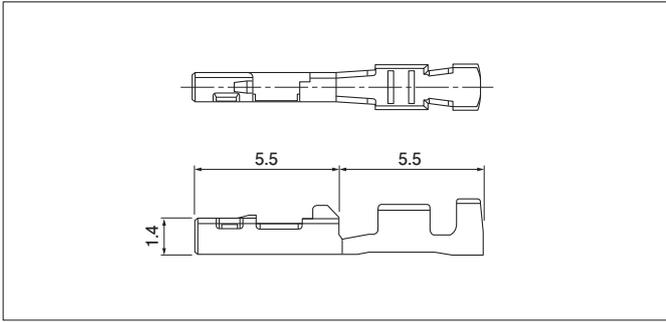
## ■ Specifications

- Current rating: 3 A AC, DC (0.3 mm<sup>2</sup>, Single circuit)
- Voltage rating: 50 V AC, DC
- Temperature range: -40°C to +100°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 8 mΩ max.  
After environmental tests/ 16 mΩ max.
- Insulation resistance: 100 MΩ min.
- Withstanding voltage: 1,000 VAC/minute
- Applicable wire: AESSX-f/ AVSS  
0.3 mm<sup>2</sup>

\* Compliant with ELV/RoHS2.

\* Contact JST for details.

## Female terminal



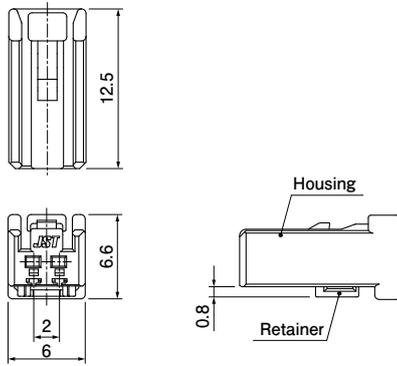
Model No.	Applicable wire range		Q'ty/reel
	Conductor (mm <sup>2</sup> )	Insulation O.D. (mm)	
SCPT-A021GF-0.5	0.3	1.4	15,000

Material and Finish
Brass, nickel-undercoated, Contact area; gold-plated Barrel area; tin-plated

## Female connector

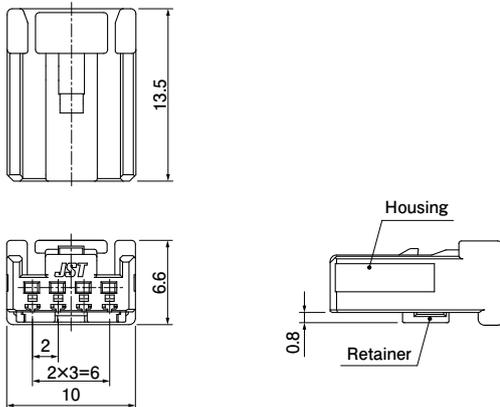
### Single row

#### ●2 circuits

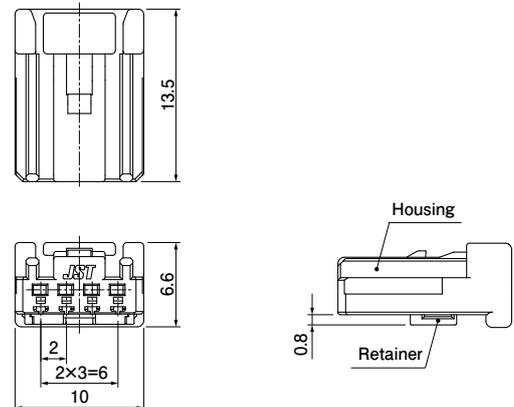


#### ●4 circuits

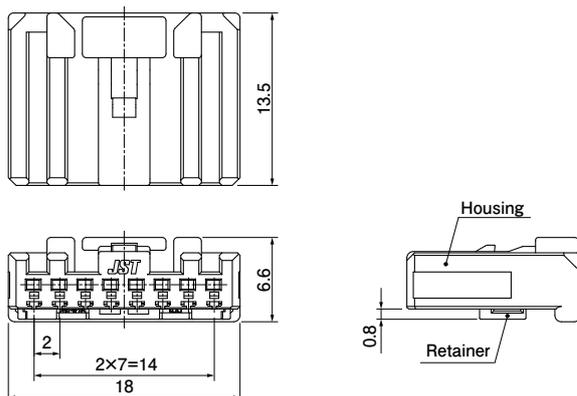
##### 04CPT-B1-2A



##### 04CPT-B1-2B



#### ●8 circuits



Circuits	Model No.	Q'ty/box
2	02CPT-B-2A	500
4	04CPT-B1-2A	600
	04CPT-B1-2B	
8	08CPT-B1-2A	400

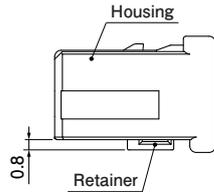
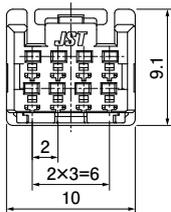
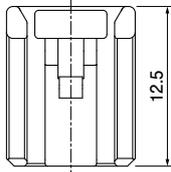
Material and Finish
Housing: Glass-filled PBT, Black Retainer: Glass-filled PBT, Blue

# CPT CONNECTOR

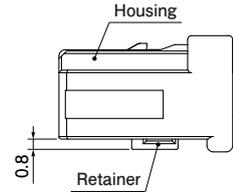
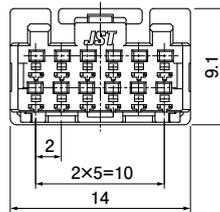
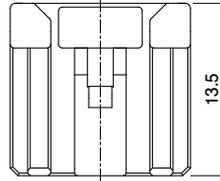
## Female connector

### Dual row

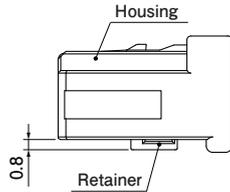
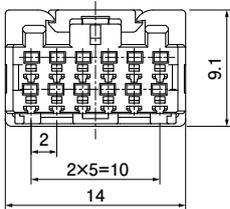
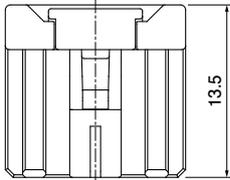
#### ●8 circuits



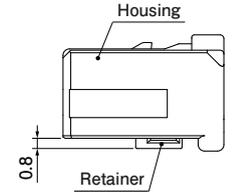
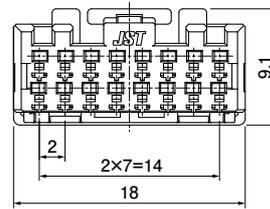
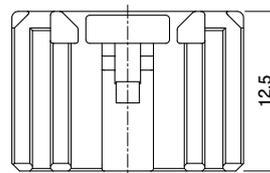
#### ●12 circuits 12CPT-B-2A



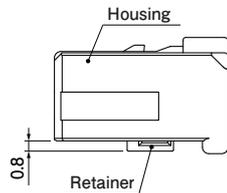
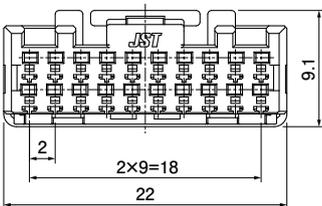
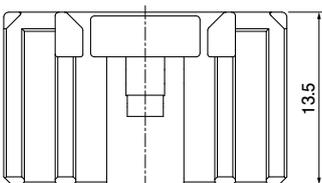
#### ●12 circuits 12CPT-B-2A-FL



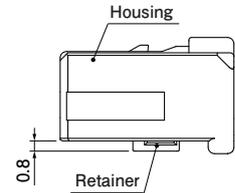
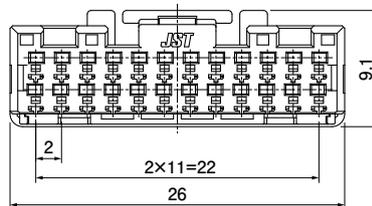
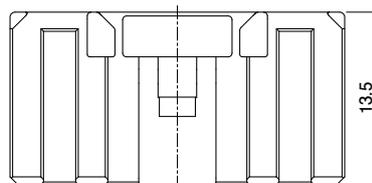
#### ●16 circuits



#### ●20 circuits



#### ●24 circuits



Circuits	Model No.	Q'ty/box
8	08CPT-B-2A	500
12	12CPT-B-2A	300
	12CPT-B-2A-FL	
16	16CPT-B-2A	250
20	20CPT-B-2A	250
24	24CPT-B-2A	200

#### Material and Finish

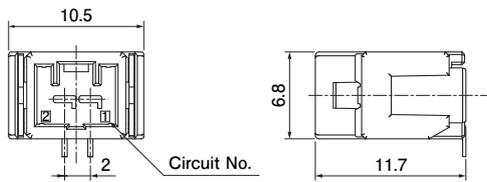
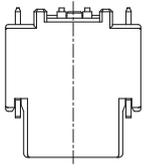
Housing: Glass-filled PBT, Black  
Retainer: Glass-filled PBT, Blue

## Male connector

### Top entry type

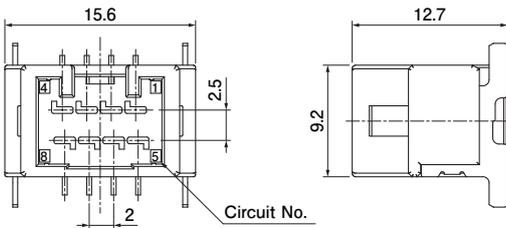
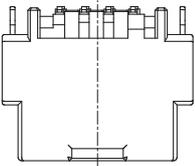
#### Single row

#### ●2 circuits

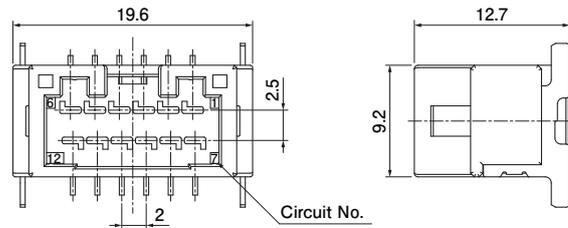
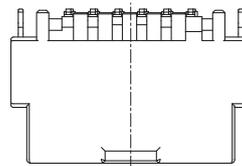


#### Dual row

#### ●8 circuits



#### ●12 circuits



Type	Circuits	Model No.	Q'ty/reel	
Top	Single row	2	BM02B-CPTK-1A-TB	370
	Dual row	8	BM08B-CPTK-1A-TB	240
		12	BM12B-CPTK-1A-TB	

#### Material and Finish

Terminal: Copper alloy, nickel-undercoated,  
 Contact area; gold-plated  
 Solder tail; tin-plated (reflow treatment)  
 Housing: Glass-filled LCP, Black  
 Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

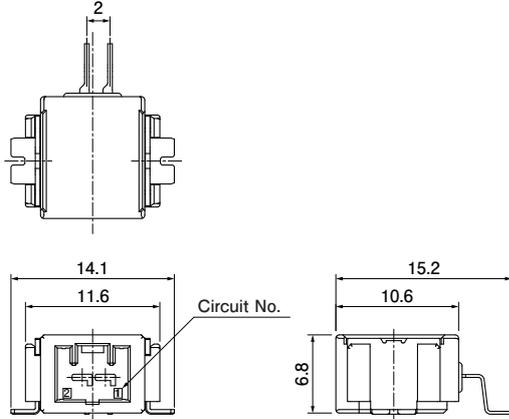
# CPT CONNECTOR

## Male connector

### Side entry type

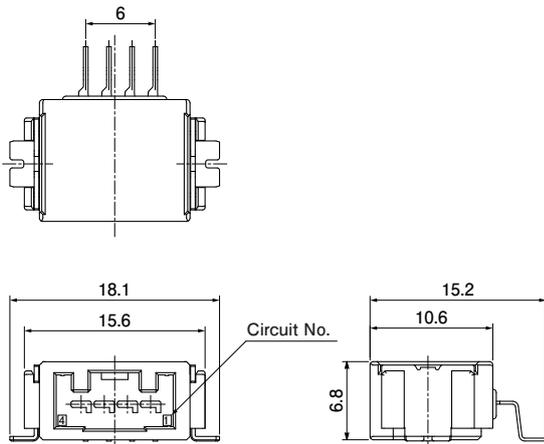
#### Single row

#### ●2circuits

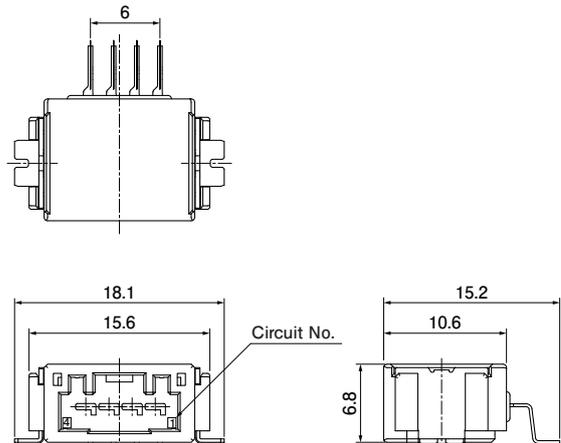


#### ●4 circuits

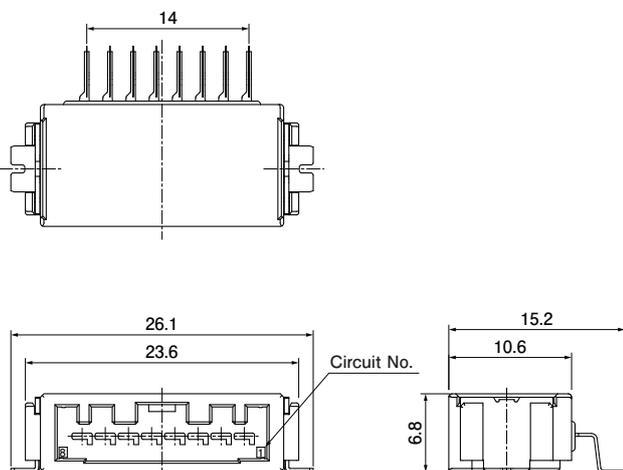
#### SM04B1-CPTK-1A-TB



#### SM04B1-CPTK-1B-TB



#### ●8 circuits



Type	Circuits	Model No.	Q'ty/reel
Side	Single row	2	SM02B-CPTK-1A-TB
		4	SM04B1-CPTK-1A-TB
		8	SM08B1-CPTK-1A-TB
			500

#### Material and Finish

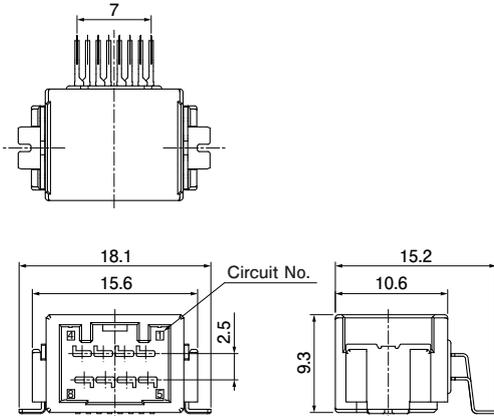
Terminal: Copper alloy, nickel-undercoated,  
 Contact area; gold-plated  
 Solder tail; tin-plated (reflow treatment)  
 Housing: Glass-filled LCP, Black  
 Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

## Male connector

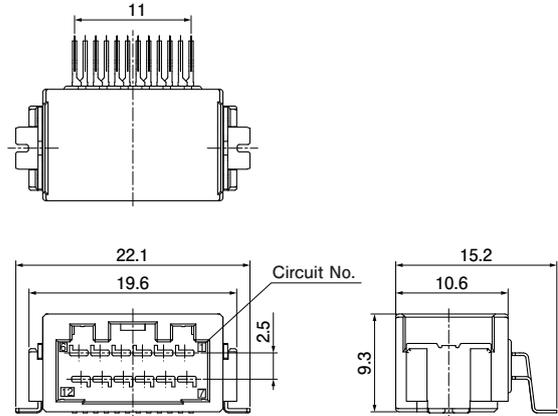
### Side entry type

Dual row

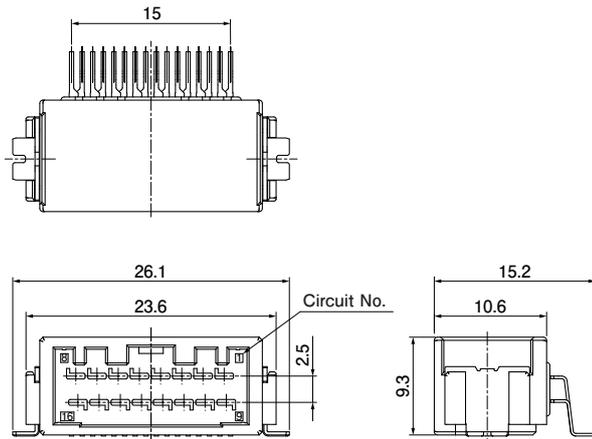
●8 circuits



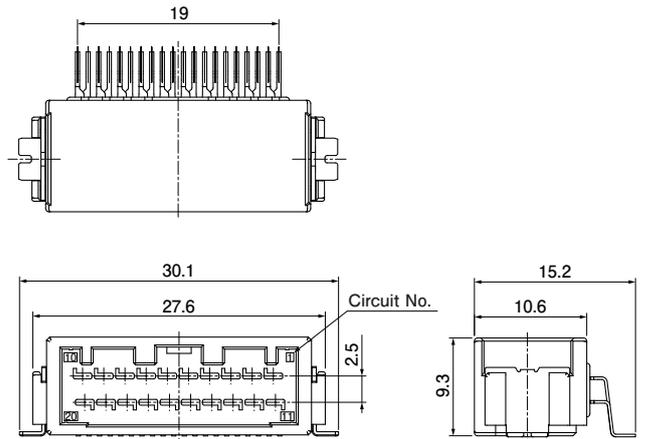
●12 circuits



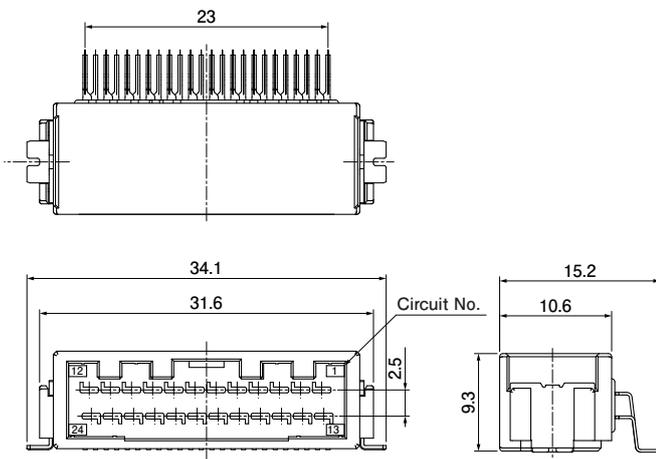
●16 circuits



●20 circuits



●24 circuits



Type	Circuits	Model No.	Q'ty/reel
Side	Dual row	8	SM08B-CPTK-1A-TB
		12	SM12B-CPTK-1A-TB
		16	SM16B-CPTK-1A-TB
		20	SM20B-CPTK-1A-TB
		24	SM24B-CPTK-1A-TB
			390

#### Material and Finish

Terminal: Copper alloy, nickel-undercoated,  
Contact area; gold-plated  
Solder tail; tin-plated (reflow treatment)

Housing: Glass-filled LCP, Black

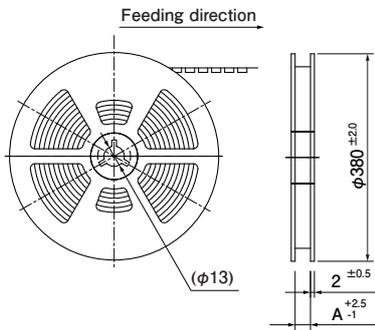
Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

# CPT CONNECTOR

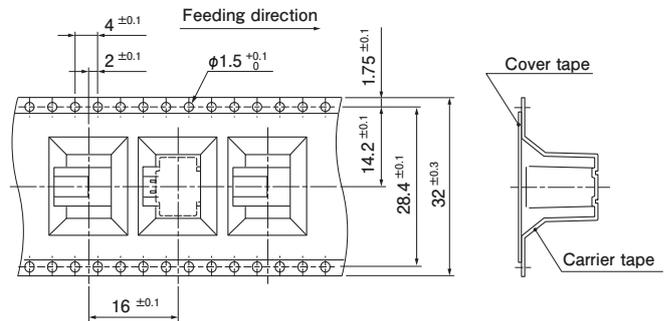
## Taping Specifications

### Top entry type

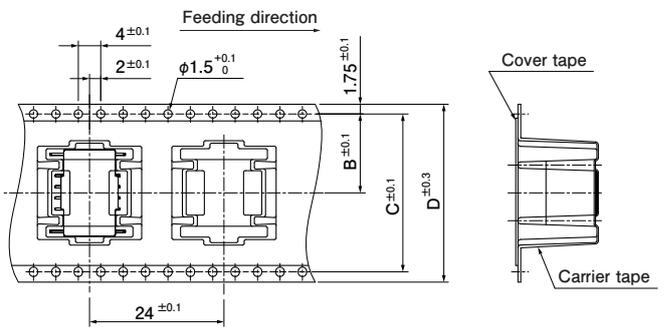
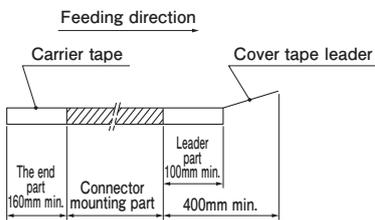
●2, 8, 12 circuits



●2 circuits



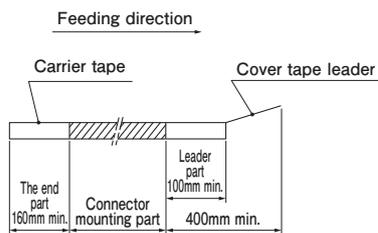
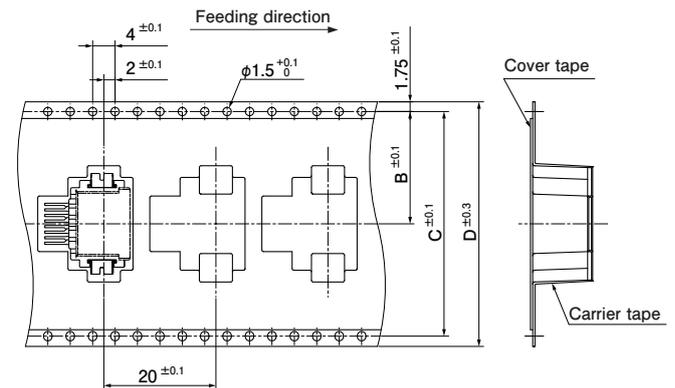
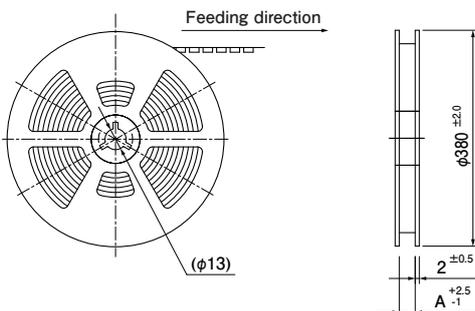
●8, 12 circuits



Type	Circuits	A	B	C	D
Single row	2	33.5	—	—	—
	8	33.5	14.2	28.4	32
Dual row	12	45.5	20.2	40.4	44

### Side entry type

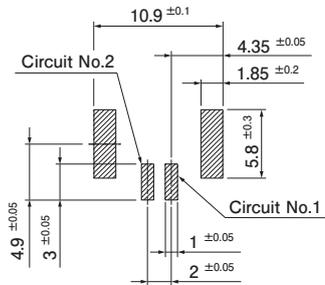
●2, 4, 8, 12, 16, 20, 24 circuits



Type	Circuits	A	B	C	D
Single row	2	33.5	14.2	28.4	32
	4	33.5	14.2	28.4	32
	8	45.5	20.2	40.4	44
Dual row	8	45.5	20.2	40.4	44
	12	45.5	20.2	40.4	44
	16	45.5	20.2	40.4	44
	20	45.5	20.2	40.4	44
	24	57.5	26.2	52.4	56

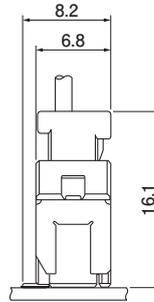
## PC board layout, Assembly layout

Top entry type  
PC board layout  
Single row  
●2 circuits

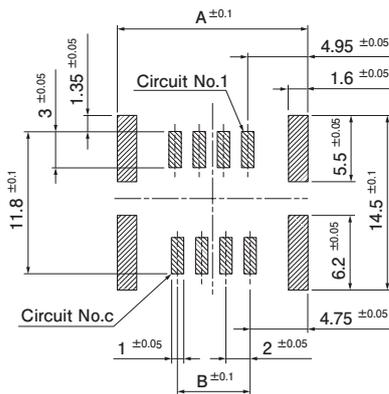


Assembly layout

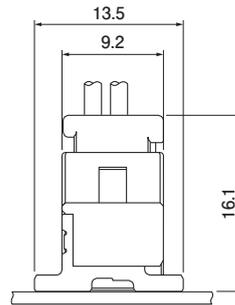
●2 circuits



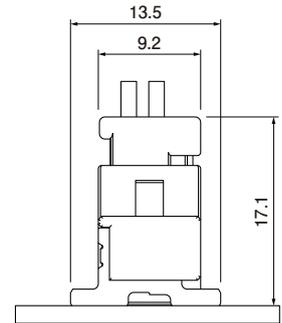
Dual row  
●8,12 circuits



●8 circuits



●12 circuits



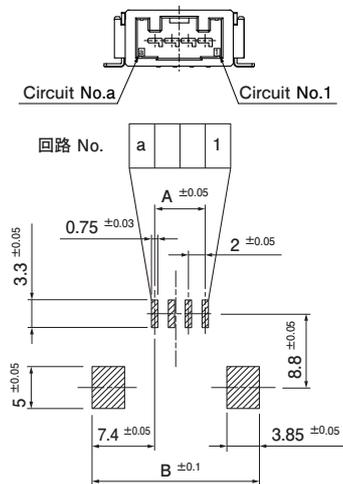
Circuits	A	B
8	15.7	6
12	19.7	10

Note: 1. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.  
2. The dimensions above should serve as guideline. Contact JST for details.

## PC board layout, Assembly layout

### Side entry type PC board layout Single row

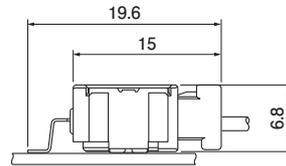
●2, 4, 8 (Single) circuits



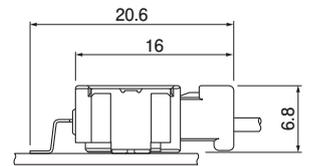
Circuits	A	B
2	2	15.8
4	6	19.8
8 (Single)	14	27.8

### Assembly layout

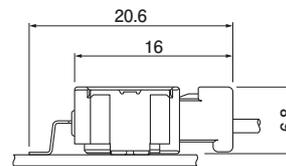
●2 circuits



●4 circuits

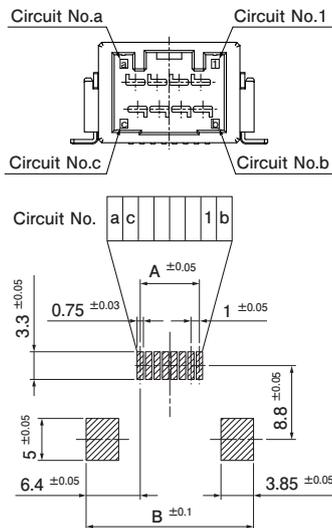


●8 (Single) circuits



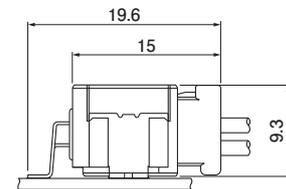
### Dual row

●8 (Dual), 12, 16, 20, 24 circuits

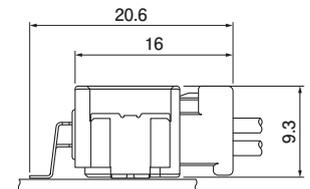


Circuits	A	B
8 (Dual)	7	19.8
12	11	23.8
16	15	27.8
20	19	31.8
24	23	35.8

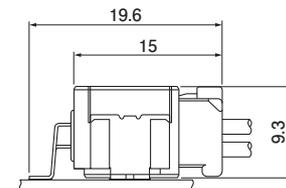
●8 (Dual) circuits



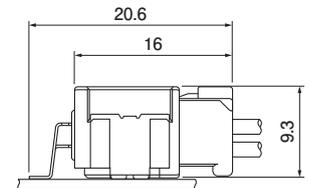
●12 circuits



●16 circuits



●20, 24 circuits



Note: 1. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.  
2. The dimensions above should serve as guideline. Contact JST for details.

## Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SCPT-A021GF-0.5	AP-K2N	MK/SCPT-A021-05	APLMK SCPT-A021-05

Note: When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.