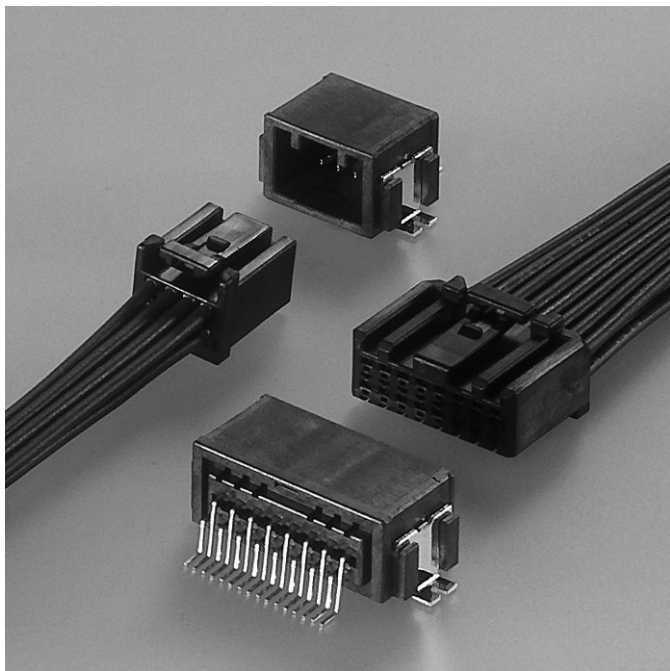


# CPT CONNECTOR

*Board-to-wire*



## Features

### ● Compact design

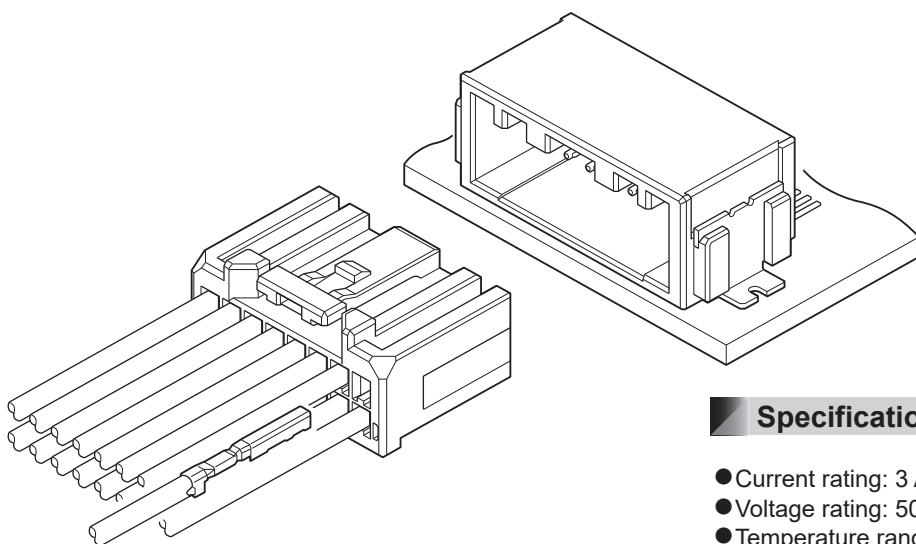
2.0 mm pitch is realized miniaturization and low profile as the connector for automobile.

### ● Terminal construction

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

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.



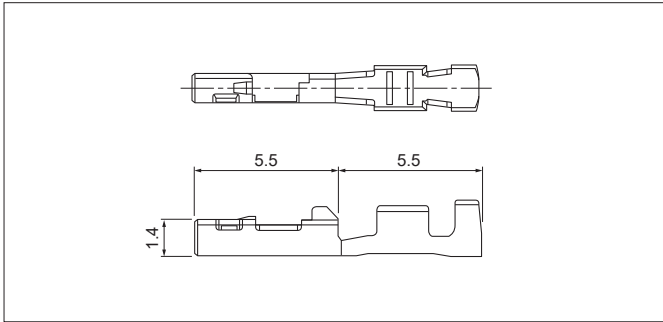
## Specifications

- 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: AESX-f/ AVSS  
0.3 mm<sup>2</sup>

\* Compliant with ELV/RoHS2.

\* Contact JST for details.

## Female terminal



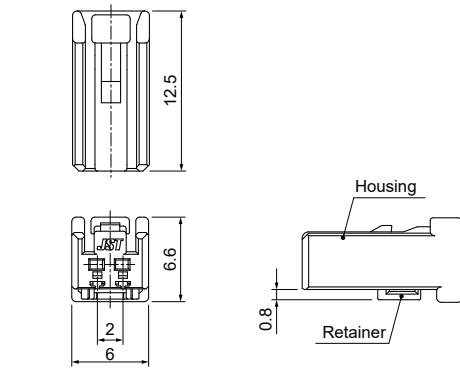
| Model No.              | Applicable wire range        |                      | Q'ty/reel |
|------------------------|------------------------------|----------------------|-----------|
|                        | Conductor (mm <sup>2</sup> ) | Insulation O.D. (mm) |           |
| <b>SCPT-A021GF-0.5</b>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

| Material and Finish   |
|---|
| Brass, nickel-undercoated, Contact area; gold-plated<br>Barrel area; tin-plated |

## Female connector

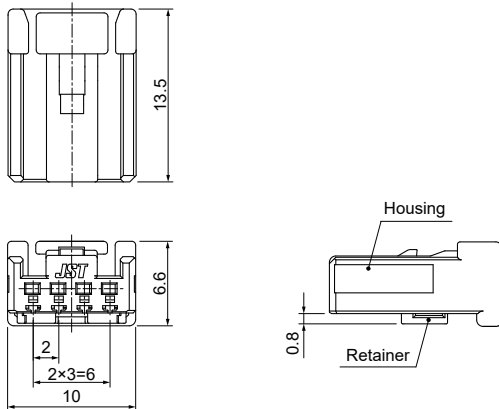
### Single row

#### ● 2 circuits

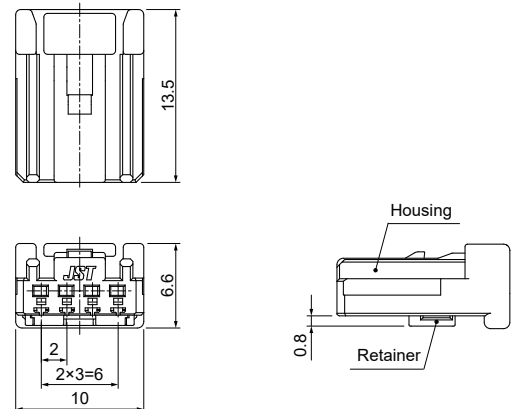


#### ● 4 circuits

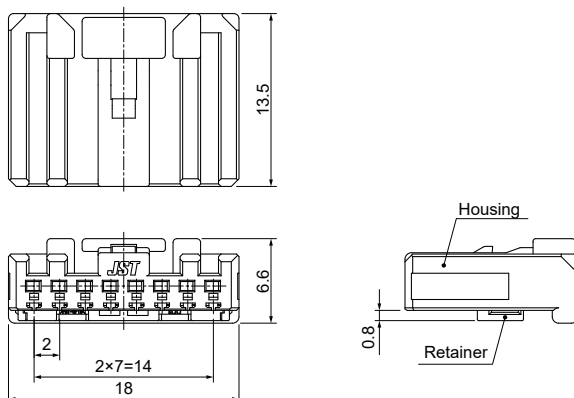
##### 04CPT-B1-2A



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



#### ● 8 circuits



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

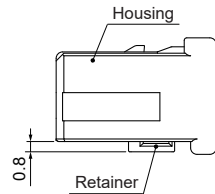
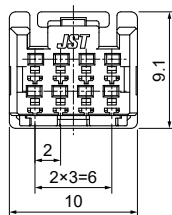
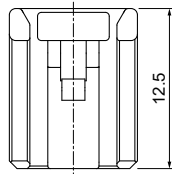
| Material and Finish  |
|--|
| Housing: Glass-filled PBT, Black<br>Retainer: Glass-filled PBT, Blue |

# CPT CONNECTOR

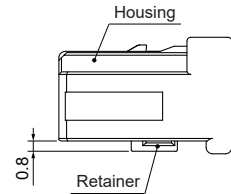
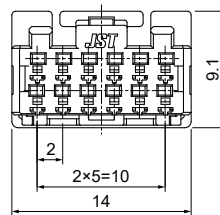
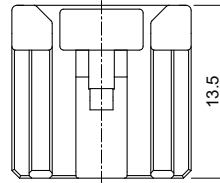
## Female connector

### Dual row

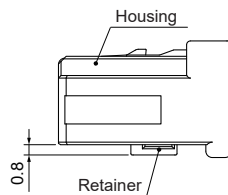
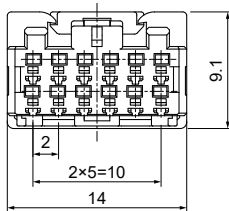
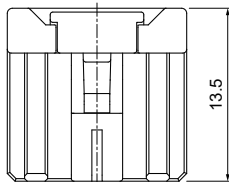
#### ● 8 circuits



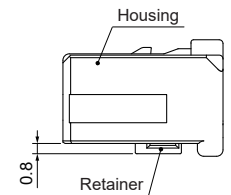
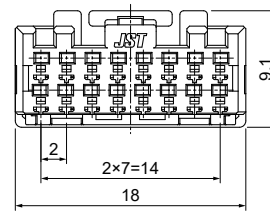
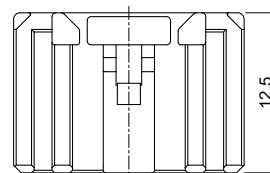
#### ● 12 circuits 12CPT-B-2A



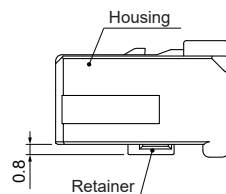
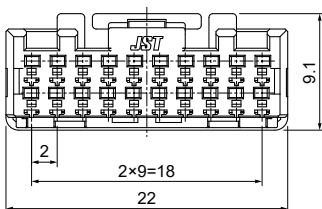
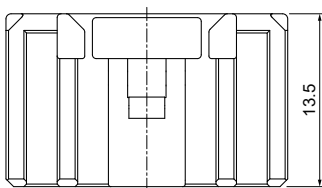
#### ● 12 circuits 12CPT-B-2A-FL



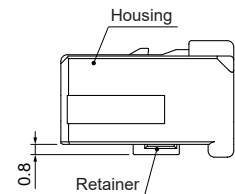
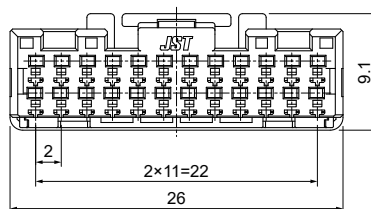
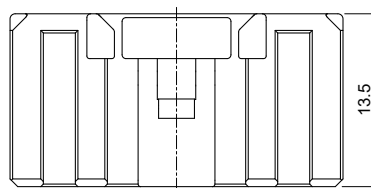
#### ● 16 circuits



#### ● 20 circuits



#### ● 24 circuits



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

#### Material and Finish

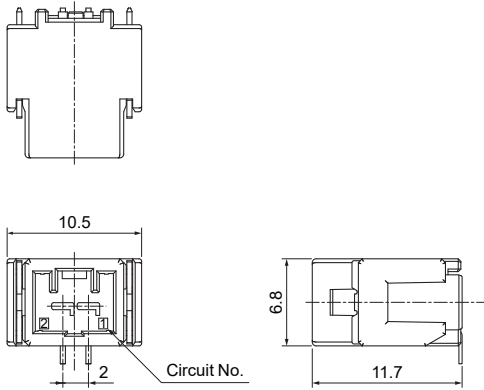
Housing: Glass-filled PBT, Black  
Retainer: Glass-filled PBT, Blue

## Male connector

### Top entry type

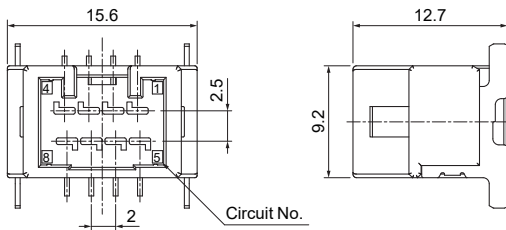
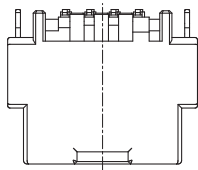
#### Single row

●2 circuits

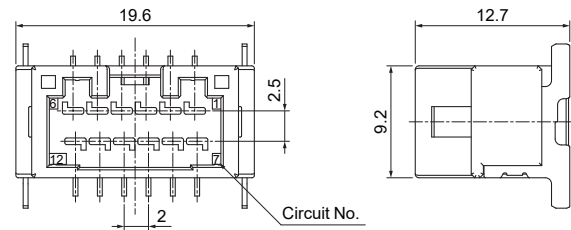
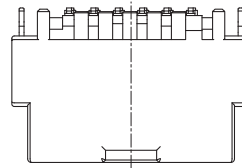


#### Dual row

●8 circuits



●12 circuits



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

#### 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)

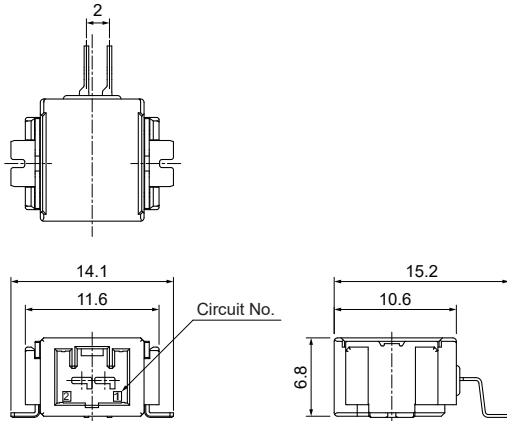
# CPT CONNECTOR

## Male connector

### Side entry type

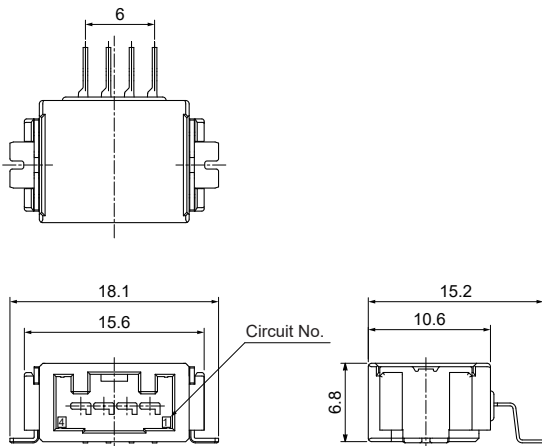
#### Single row

#### ● 2circuits

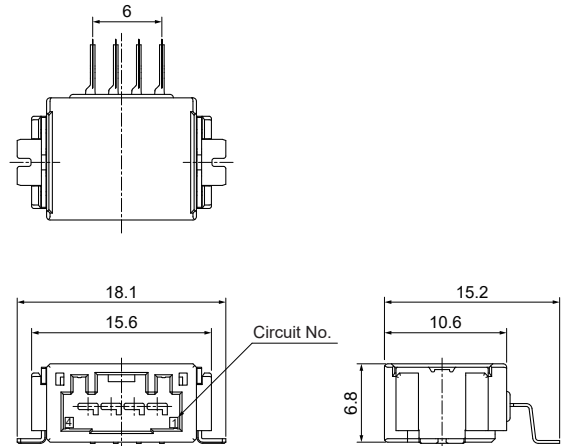


#### ● 4 circuits

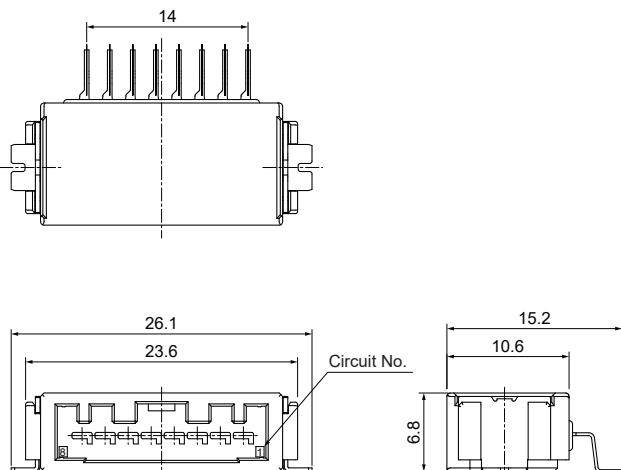
#### SM04B1-CPTK-1A-TB



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



#### ● 8 circuits



| Type | Circuits   | Model No. | Q'ty/reel |
|------|------------|-----------|-----------|
| Side | Single row | 2         | 500       |
|      |            | 4         |           |
|      |            | 8         |           |

#### Material and Finish

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

Housing: Glass-filled LCP, Black

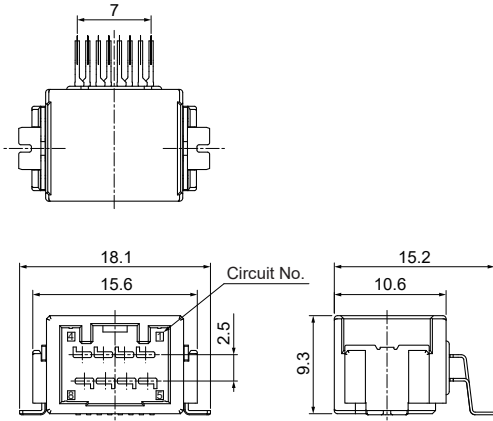
Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

## Male connector

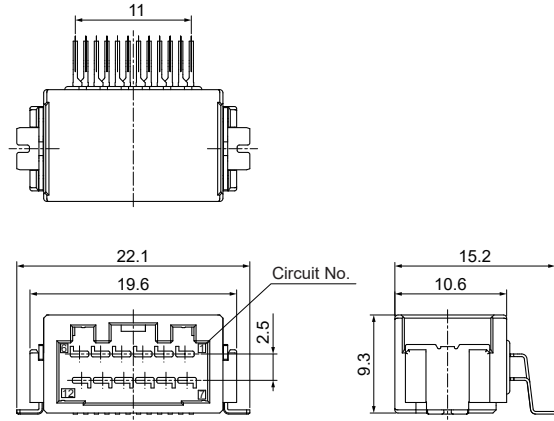
### Side entry type

#### Dual row

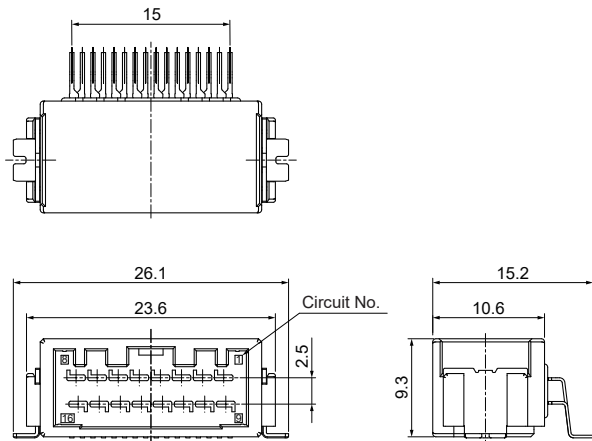
#### ● 8 circuits



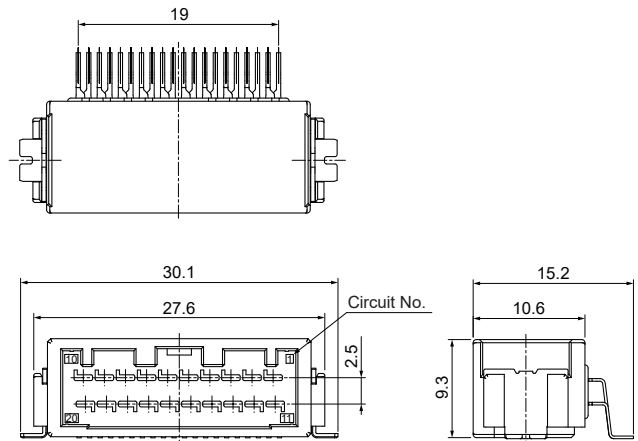
#### ● 12 circuits



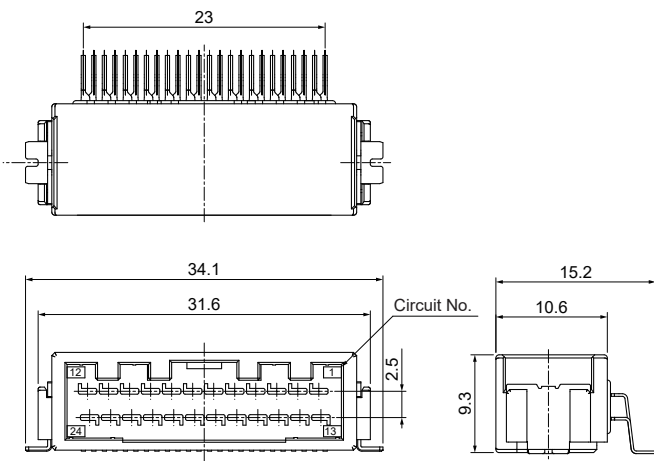
#### ● 16 circuits



#### ● 20 circuits



#### ● 24 circuits



| Type | Circuits | Model No. | Q'ty/reel |
|------|----------|-----------|-----------|
| Side | Dual row | 8         | 390       |
|      |          | 12        |           |
|      |          | 16        |           |
|      |          | 20        |           |
|      |          | 24        |           |

#### Material and Finish

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

Housing: Glass-filled LCP, Black

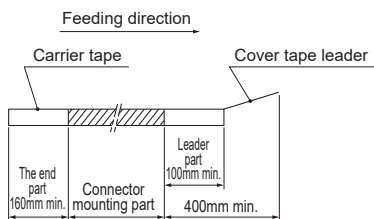
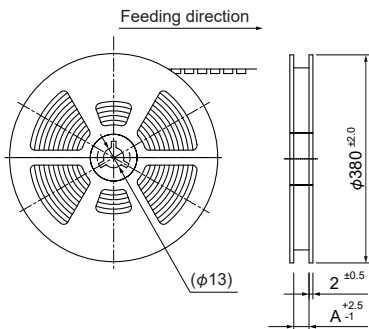
Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

# CPT CONNECTOR

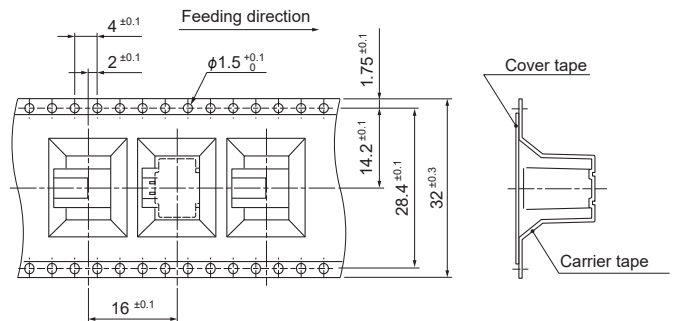
## Taping Specifications

### Top entry type

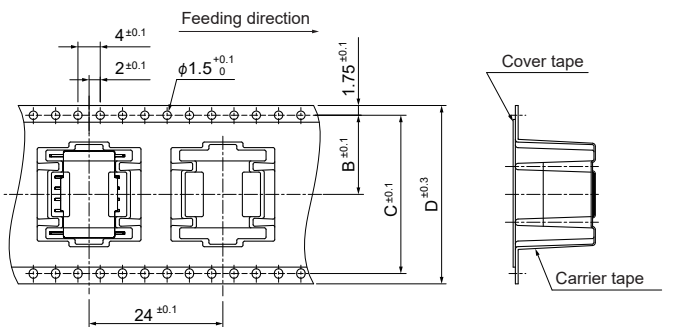
● 2, 8, 12 circuits



● 2 circuits



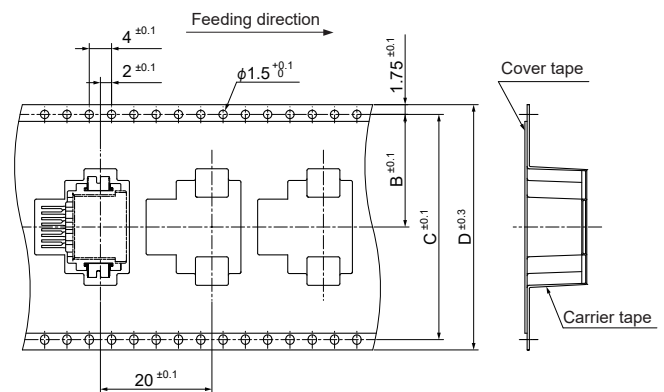
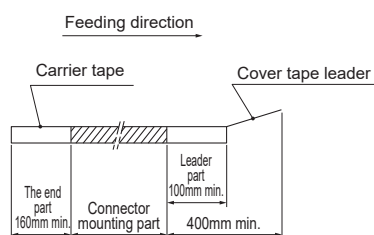
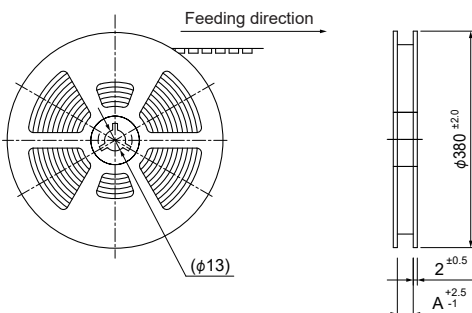
● 8, 12 circuits



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

### Side entry type

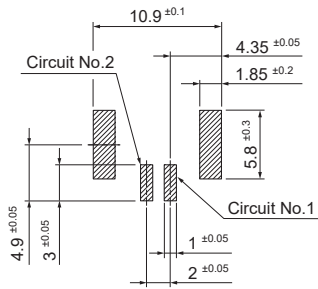
● 2, 4, 8, 12, 16, 20, 24 circuits



| 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 |

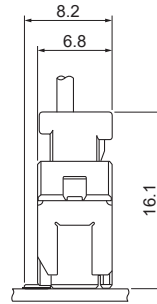
## PC board layout, Assembly layout

Top entry type  
 PC board layout  
 Single row  
 ●2 circuits

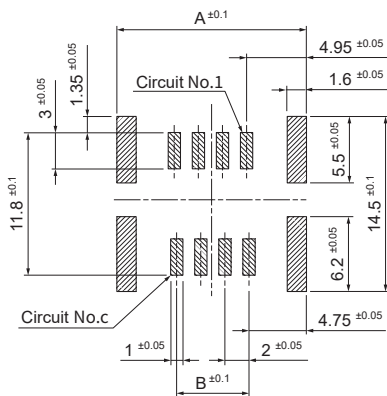


Assembly layout

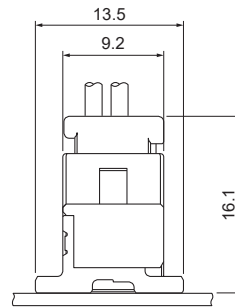
●2 circuits



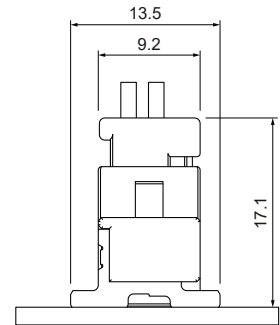
Dual row  
 ●8, 12 circuits



●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.

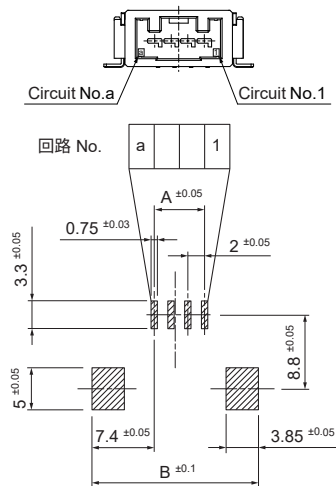


# CPT CONNECTOR

## PC board layout, Assembly layout

### Side entry type PC board layout Single row

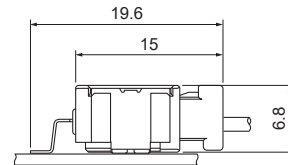
#### ●2, 4, 8 (Single) circuits



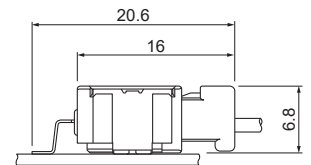
| Circuits   | A  | B    |
|------------|----|------|
| 2          | 2  | 15.8 |
| 4          | 6  | 19.8 |
| 8 (Single) | 14 | 27.8 |

### Assembly layout

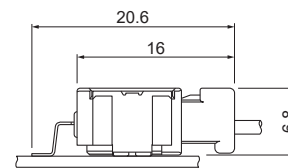
#### ●2 circuits



#### ●4 circuits

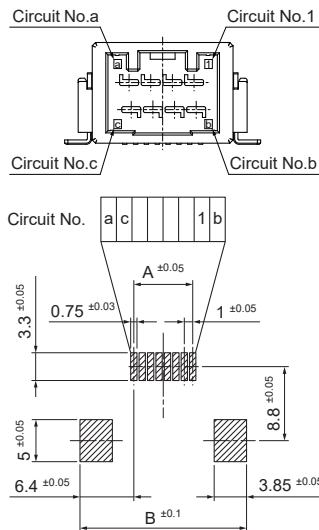


#### ●8 (Single) circuits



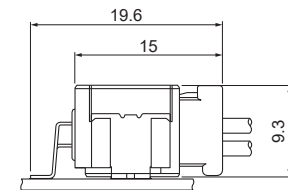
### Dual row

#### ●8 (Dual), 12, 16, 20, 24 circuits

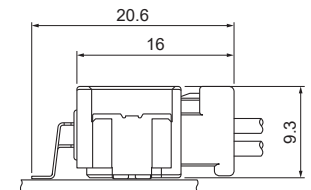


| Circuits | A  | B    |
|----------|----|------|
| 8 (Dual) | 7  | 19.8 |
| 12       | 11 | 23.8 |
| 16       | 15 | 27.8 |
| 20       | 19 | 31.8 |
| 24       | 23 | 35.8 |

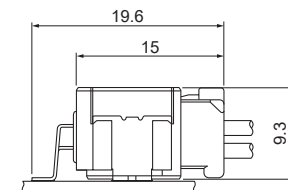
#### ●8 (Dual) circuits



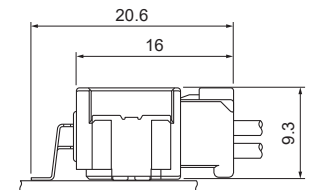
#### ●12 circuits



#### ●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.