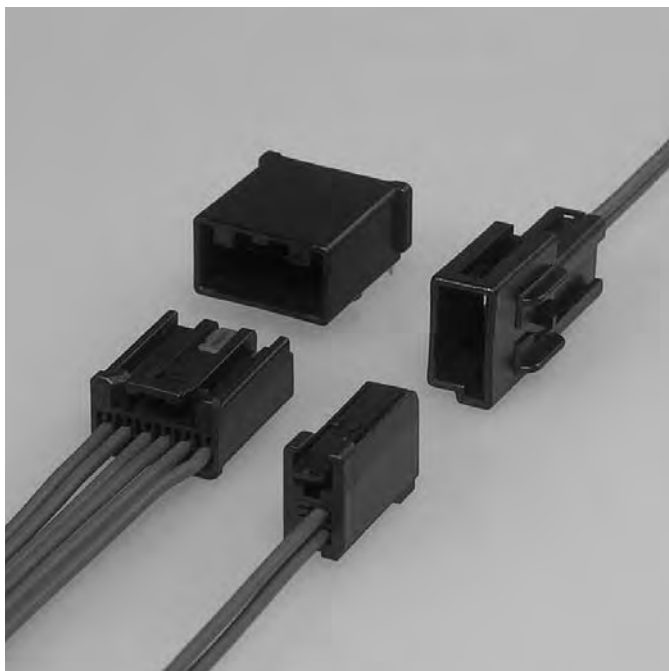


# AIT-II CONNECTOR

0.64 terminal

**Board-to-wire/Wire-to-wire**



0.64 unsealed low-profile connector series for use in a wide range of automotive applications.

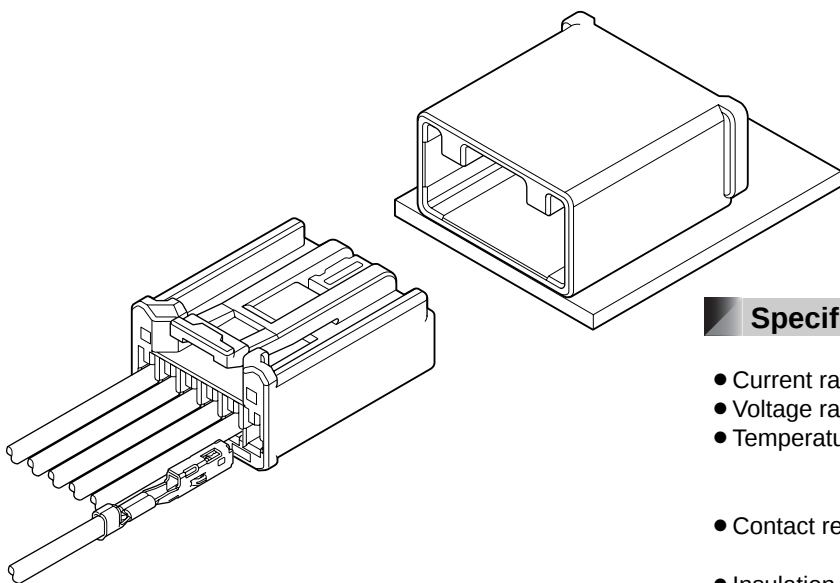
## Features

### ● Ultra Low Profile Connector

Over 30% Height Reduction as compared to the Standard USCAR Footprints.

### ● Variations

There are multiple varieties of AIT-II Connectors which can satisfy your needs.

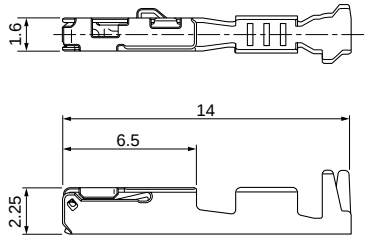


## Specifications

- Current rating: 5 A DC max.
- Voltage rating: 14 V DC
- Temperature range: -40°C to +105°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 15 mΩ max.  
After environmental tests/ 15 mΩ max.
- Insulation resistance: 100 MΩ min.
- Applicable wire: SAE/ AVSS/ CAVS/ FLRY  
0.3 mm<sup>2</sup> to 0.85 mm<sup>2</sup>

- \* Compliant with ELV/RoHS.
- \* Contact JST for details.

## Female terminal



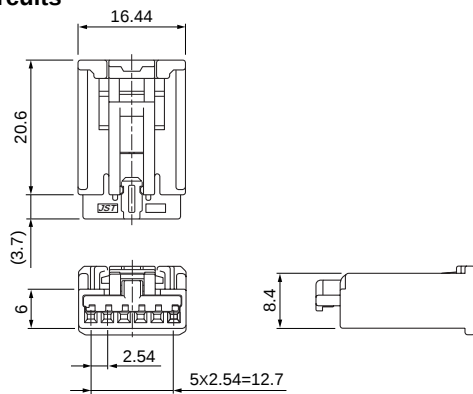
| Model No.        | Applicable wire range        |                      | Q'ty/reel |
|------------------|------------------------------|----------------------|-----------|
|                  | Conductor (mm <sup>2</sup> ) | Insulation O.D. (mm) |           |
| ①SAIT-A03T-M064  | 0.3 to 0.5                   | ≤1.9                 | 6,500     |
| ①SAIT-A02T-M064  | 0.75 to 0.85                 | ≤1.9                 | 6,500     |
| ②SAIT-A03GF-M064 | 0.3 to 0.5                   | ≤1.9                 | 6,500     |
| ②SAIT-A02GF-M064 | 0.75 to 0.85                 | ≤1.9                 | 6,500     |

### Material and Finish

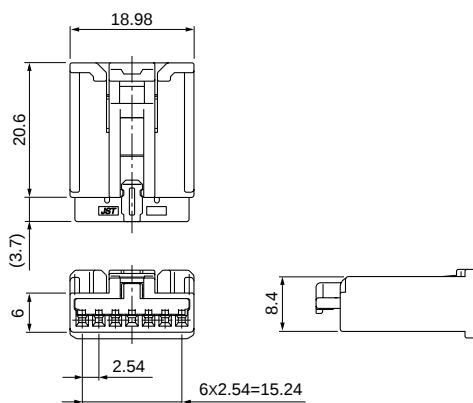
- ①Copper alloy, tin-plated (reflow treatment)
- ②Copper alloy, nickel-undercoated,  
Contact area; gold-plated  
Barrel area; tin-plated

## Female connector (Single row)

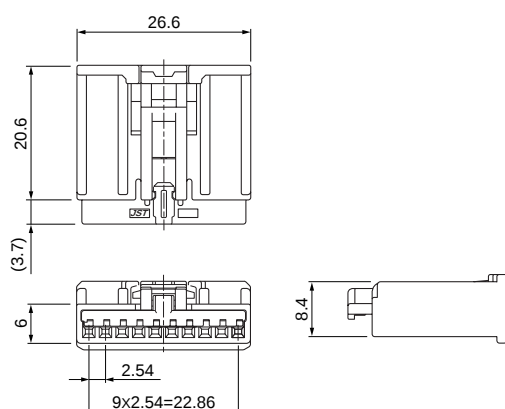
### ● 6 circuits



### ● 7 circuits



### ● 10 circuits



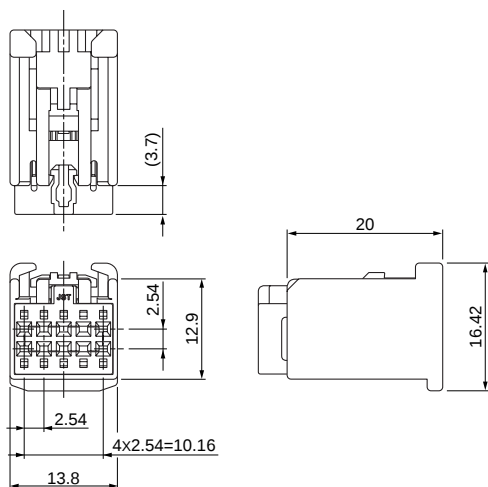
| Circuits | Model No.     | Q'ty/box | Housing Color   |
|----------|---------------|----------|-----------------|
| 6        | AIT2PB-06-1AK | 5,250    | Black           |
|          | AIT2PB-06-1BH | 5,250    | Gray            |
|          | AIT2PB-06-1FS | 5,250    | Natural (White) |
| 7        | AIT2PB-07-1BH | 300      | Gray            |
|          | AIT2PB-07-1FS | 300      | Natural (White) |
| 10       | AIT2PB-10-1AK | 3,000    | Black           |
|          | AIT2PB-10-1BH | 3,000    | Gray            |
|          | AIT2PB-10-1DM | 3,000    | Green           |
|          | AIT2PB-10-1FS | 3,000    | Natural (White) |
|          | AIT2PB-10-1AD | 3,000    | Orange          |

### Material and Finish

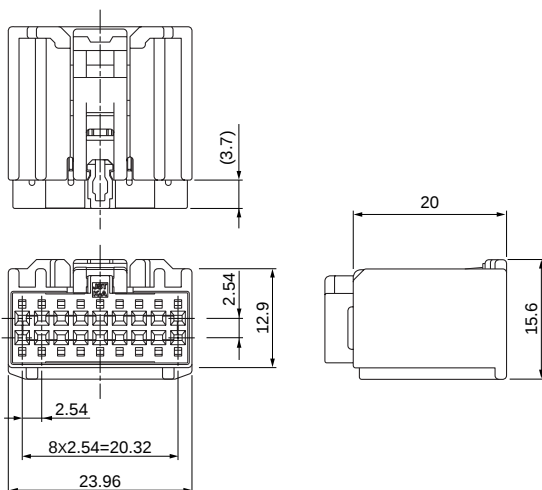
Housing: Glass-filled PBT  
TPA: Glass-filled PBT, Red

## Female connector (Dual row)

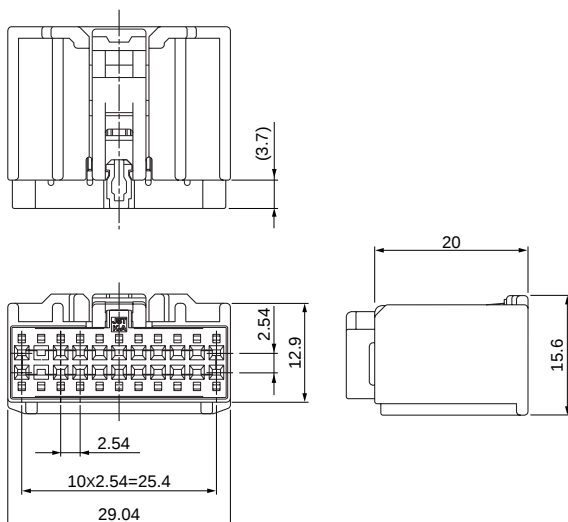
### ● 10 circuits



### ● 18 circuits



### ● 22 circuits



| Circuits | Model No.      | Q'ty/box | Housing Color   | TPA Color       |
|----------|----------------|----------|-----------------|-----------------|
| 10       | AIT2PB-10P-2AK | 200      | Black           | Natural (White) |
|          | AIT2PB-10P-2BH | 200      | Gray            | Natural (White) |
| 18       | AIT2PB-18-2AD  | 120      | Orange          | Black           |
|          | AIT2PB-18-2BD  | 120      | Orange          | Natural (White) |
|          | AIT2PB-18-2AK  | 120      | Black           | Natural (White) |
|          | AIT2PB-18-2BH  | 120      | Gray            | Natural (White) |
|          | AIT2PB-18-2DM  | 120      | Green           | Natural (White) |
|          | AIT2PB-18-2FS  | 120      | Natural (White) | Black           |
| 22       | AIT2PB-22-2AK  | 100      | Black           | Natural (White) |
|          | AIT2PB-22-2BH  | 100      | Gray            | Natural (White) |
|          | AIT2PB-22-2CN  | 100      | Brown           | Natural (White) |
|          | AIT2PB-22-2FS  | 100      | Natural (White) | Black           |

#### Material and Finish

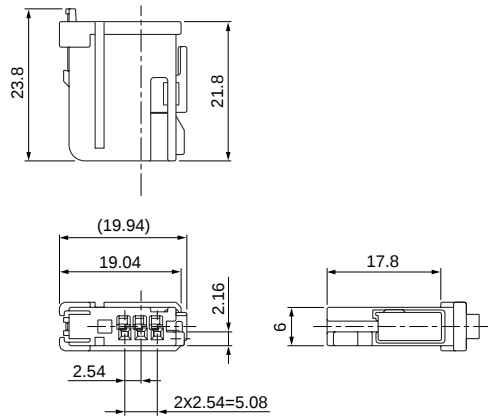
Housing: Glass-filled PBT

TPA: Glass-filled PBT

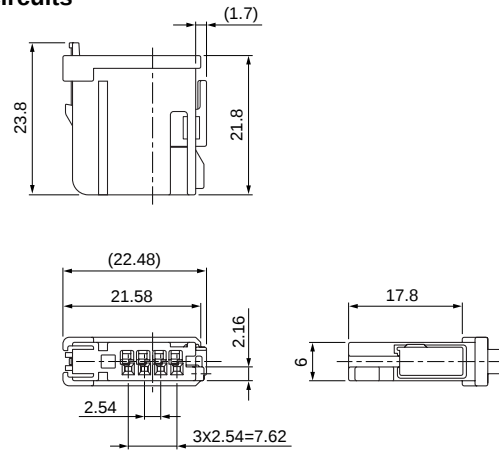
## Female connector (Side Lock)

### Side-Load TPA

#### • 3 circuits

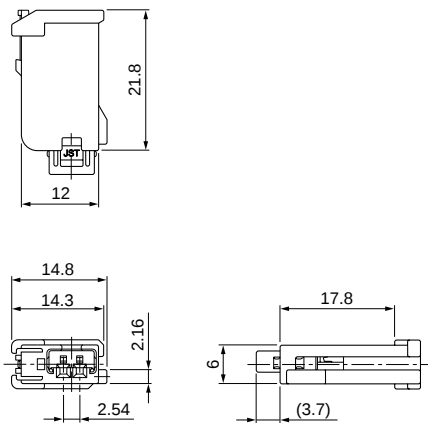


#### • 4 circuits

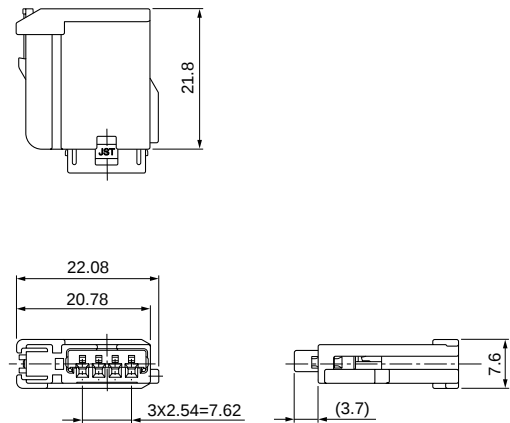


### Front-Load TPA

#### • 2 circuits



#### • 4 circuits



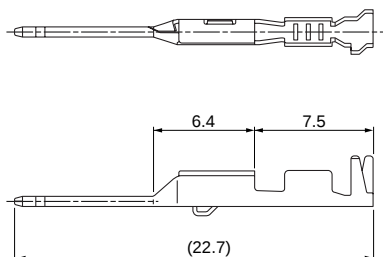
| Circuits | TPA Location | Model No.      | Q'ty/box | Housing Color   |
|----------|--------------|----------------|----------|-----------------|
| 2        | Front-Load   | AIT2PB-02G-1AK | 8,400    | Black           |
|          |              | AIT2PB-02A-1FS | 8,400    | Natural (White) |
| 3        | Side-Load    | AIT2PB-03B-1AK | 6,000    | Black           |
| 4        | Front-Load   | AIT2PB-04G-1AK | 5,500    | Black           |
|          | Side-Load    | AIT2PB-04B-1AK | 400      | Black           |

#### Material and Finish

Housing: Glass-filled PBT  
TPA: Glass-filled PBT, Red

# AIT-II CONNECTOR

## Male terminal



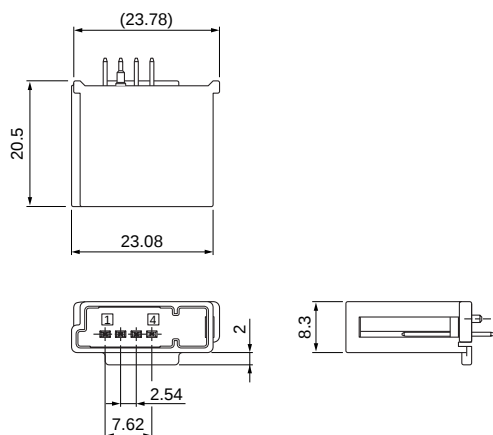
| Model No.        | Applicable wire range        |                      | Q'ty/reel |
|------------------|------------------------------|----------------------|-----------|
|                  | Conductor (mm <sup>2</sup> ) | Insulation O.D. (mm) |           |
| ①SAITW-A03T-064  | 0.3 to 0.5                   | ≤1.9                 | 9,000     |
| ①SAITW-A02T-064  | 0.75 to 0.85                 | ≤1.9                 | 7,000     |
| ②SAITW-A03GF-064 | 0.3 to 0.5                   | ≤1.9                 | 9,000     |
| ②SAITW-A02GF-064 | 0.75 to 0.85                 | ≤1.9                 | 7,000     |

### Material and Finish

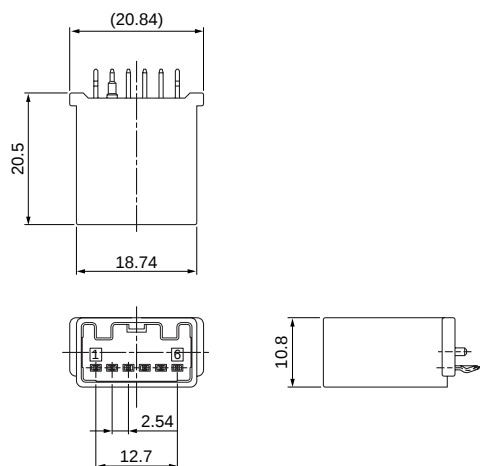
- ①Brass, tin-plated (reflow treatment)
- ②Brass, nickel-undercoated, Contact area: gold-plated  
Barrel area: tin-plated

## Male connector (Top entry type)

### ● 4 circuits



### ● 6 circuits



| Circuits | Model No.         | Q'ty/box | Housing Color |
|----------|-------------------|----------|---------------|
| 4        | ①B04BA-AIT2-1AK   | 108      | Black         |
| 6        | ②B06BA-AIT2-1AK-K | 120      | Black         |

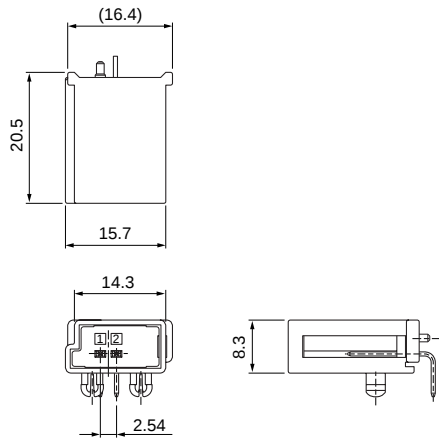
### Material and Finish

- Housing: ①Glass-filled nylon
- ②Glass-filled PBT
- Pin: Brass, tin-plated

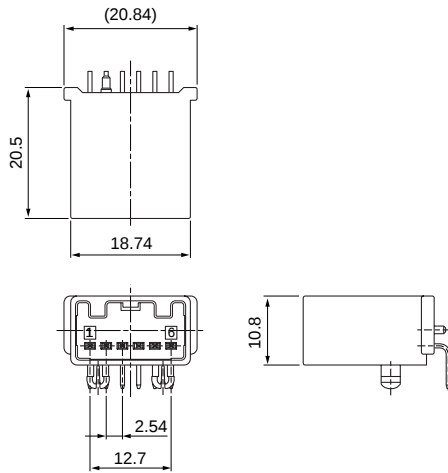
## Male connector (Side entry type)

### Single row

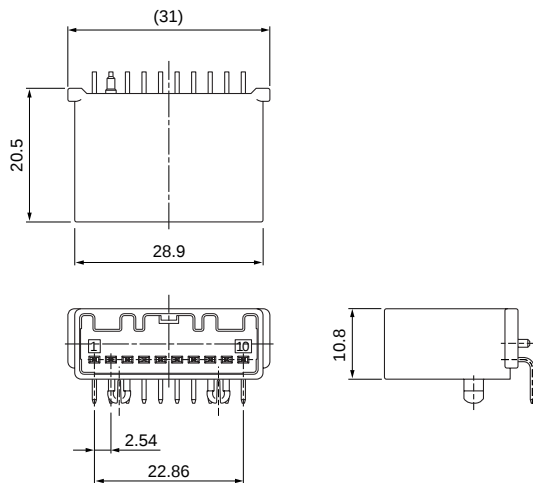
#### ● 2 circuits



#### ● 6 circuits



#### ● 10 circuits



| Circuits | Model No.         | Q'ty/box | Housing Color   |
|----------|-------------------|----------|-----------------|
| 2        | ① S02BA-AIT2-1AK  | 96       | Black           |
|          | ① S02BA-AIT2-1FS  |          | Natural (White) |
| 6        | ① S06B-AIT2-1AK   | 80       | Black           |
|          | ① S06B-AIT2-1FS   |          | Natural (White) |
|          | ① S06B1-AIT2-1FS  |          | Natural (White) |
|          | ② S06B1-AIT2G-1AK |          | Black           |
| 10       | ② S10B-AIT2G-1AK  | 72       | Black           |
|          | ② S10B-AIT2G-1AD  |          | Orange          |

#### Material and Finish

Housing: Glass-filled PBT

Pin: ① Brass, tin-plated

② Brass, tin-plated, nickel-undercoated,

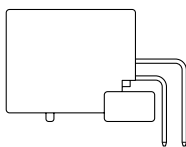
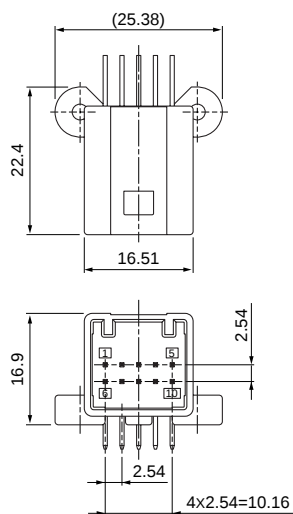
Contact area: gold-plated

# AIT-II CONNECTOR

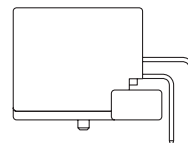
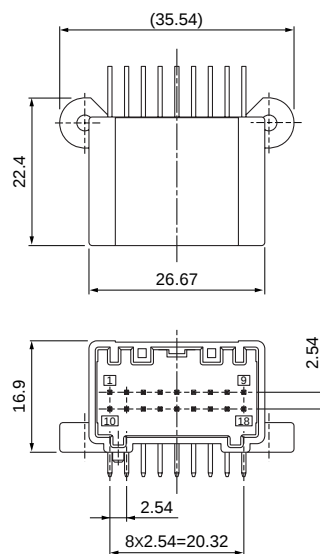
## Male connector (Side entry type)

### Dual row

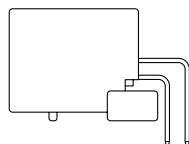
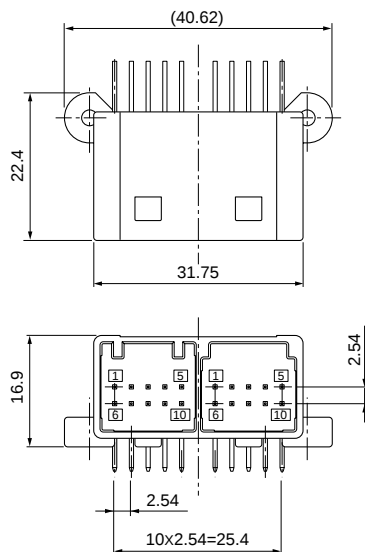
#### • 10 circuits



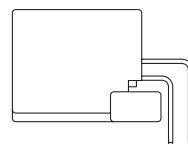
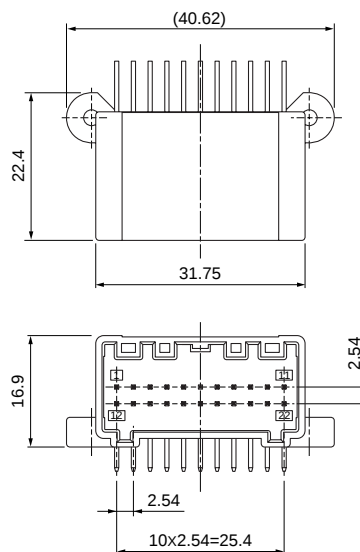
#### • 18 circuits



#### • 20 circuits



#### • 22 circuits



| Circuits | Model No.                | Q'ty/box | Housing Color   |
|----------|--------------------------|----------|-----------------|
| 10       | ① S10B-AIT2-2AK (LF)(SN) | 224      | Black           |
|          | ② S10B-AIT2G-2AK         |          |                 |
| 18       | ② S18B-AIT2G-2AK         | 160      | Black           |
|          | ② S18B-AIT2G-2BH         |          | Gray            |
|          | ② S18B-AIT2G-2DM         |          | Green           |
|          | ② S18B-AIT2G-2FS         |          | Natural (White) |
|          | ② S18B-AIT2G-2AD         |          | Orange          |
|          | ② S18B-AIT2G-2BD         |          | Orange          |
| 20       | ② S20B-AIT2G-2A2BK       | 128      | Black           |
| 22       | ② S22B-AIT2G-2AK         | 128      | Black           |
|          | ② S22B-AIT2G-2BH         |          | Gray            |
|          | ② S22B-AIT2G-2CN         |          | Brown           |
|          | ② S22B-AIT2G-2FS         |          | Natural (White) |

#### Material and Finish

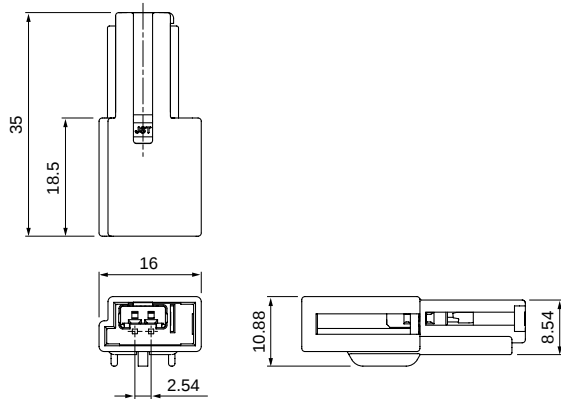
Housing: Glass-filled PBT

Pin: ① Brass, tin-plated

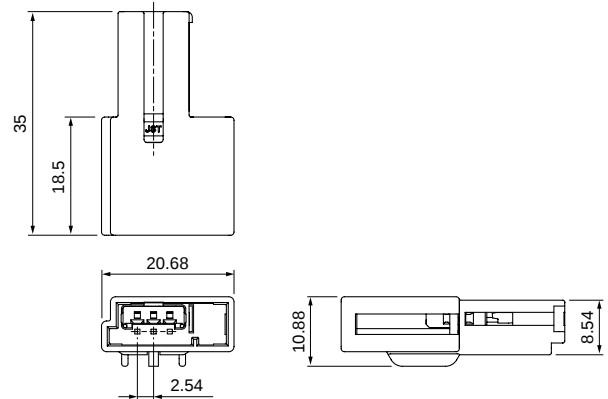
② Brass, tin-plated, Contact area: gold-plated

## Male connector (Wire-to-wire)

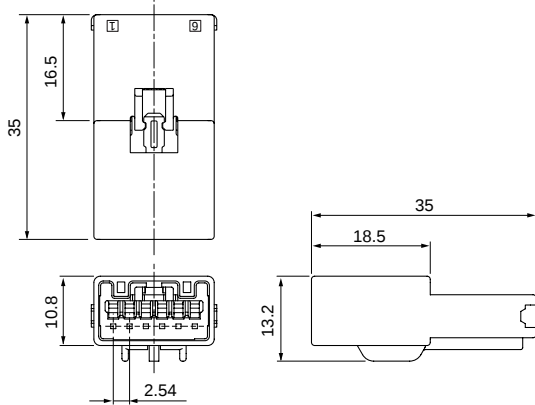
### ● 2 circuits



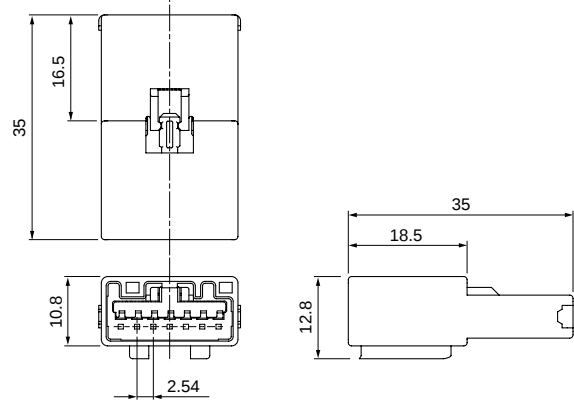
### ● 3 circuits



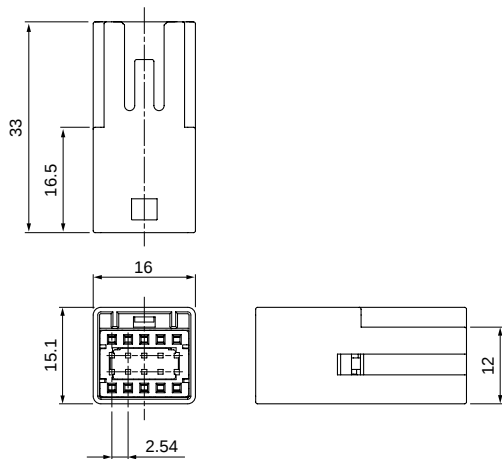
### ● 6 circuits



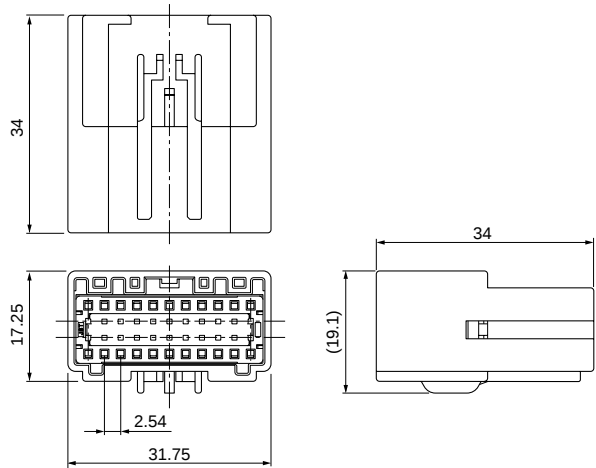
### ● 7 circuits



### ● 10 circuits (Dual row)



### ● 22 circuits (Dual row)



| Circuits | Model No.       | Q'ty/box | Housing Color   | TPA Color       |
|----------|-----------------|----------|-----------------|-----------------|
| 2        | AIT2WSB-02A-1AK | 300      | Black           | Red             |
| 3        | AIT2WSB-03A-1AK | 200      | Black           | Red             |
| 6        | AIT2WSB-06-1AK  | 150      | Black           | Red             |
|          | AIT2WSB-06-1FS  | 150      | Natural (White) | Red             |
| 7        | AIT2WSB-07-1FS  | 150      | Natural (White) | Red             |
|          | AIT2WSB-07-1FK  | 150      | Black           | Red             |
| 10       | AIT2WSB-10A-2AK | 150      | Black           | Natural (White) |
|          | AIT2WSB-10A-2BH | 150      | Gray            | Natural (White) |
| 22       | AIT2WSB-22-2AK  | 60       | Black           | Natural         |

#### Material

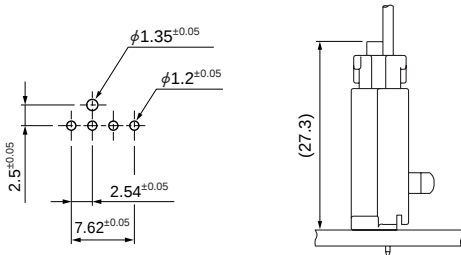
Housing: Glass-filled PBT

TPA: Glass-filled PBT

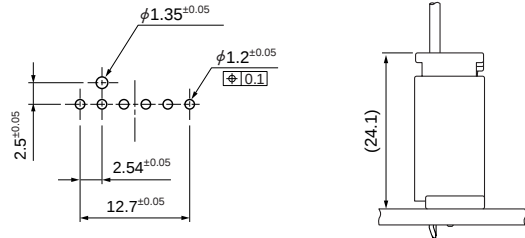
## PC board layout, Assembly layout

### Top entry type

#### • 4 circuits



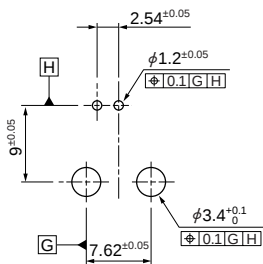
#### • 6 circuits



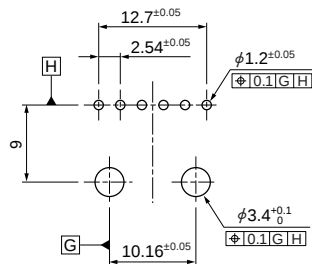
### Side entry type

#### Single row

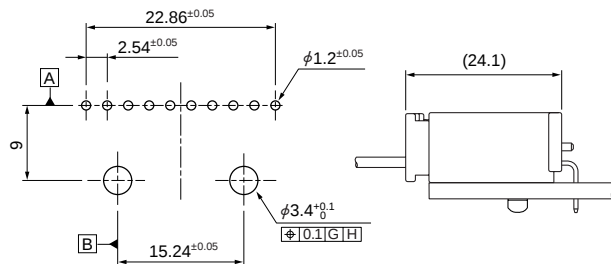
#### • 2 circuits



#### • 6 circuits

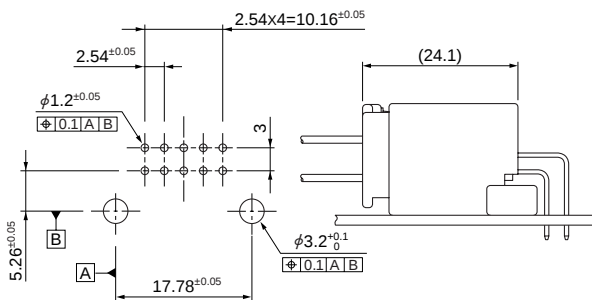


#### • 10 circuits

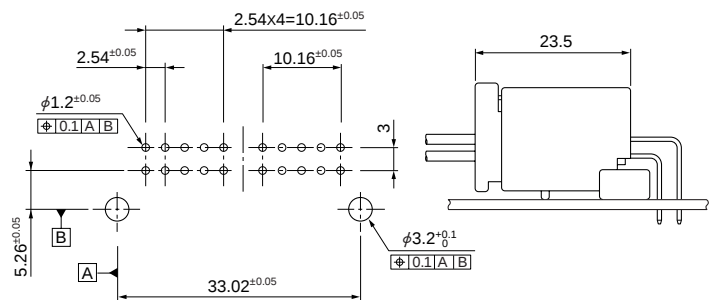


#### Dual row

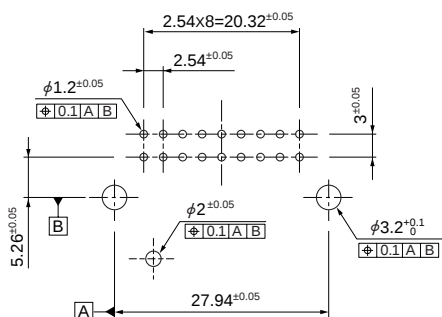
#### • 10 circuits



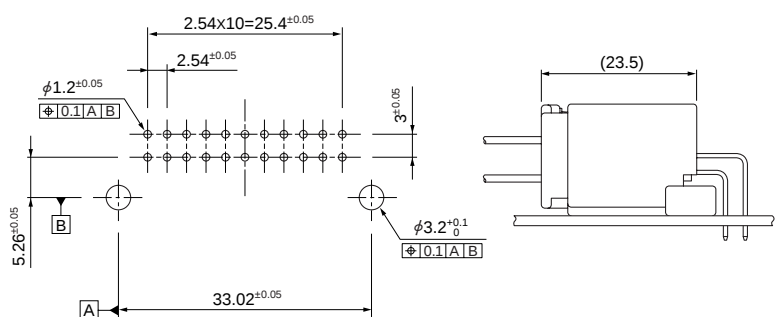
#### • 20 circuits



#### • 18 circuits



#### • 22 circuits



Note: 1. Tolerances are non-cumulative.

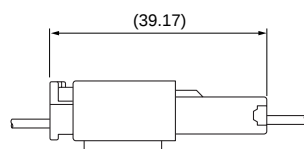
2. Hole dimensions differ according to the type of PC board and piercing method.  
The dimensions above should serve as guideline. Contact JST for details.

## Assembly layout

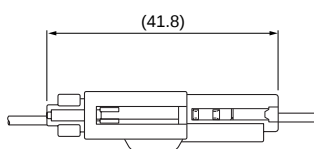
### Wire-to-wire type

#### • Single row

AIT2WSB-( )-1( )

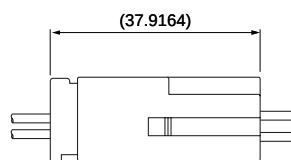


AIT2WSB-( )A-1( )

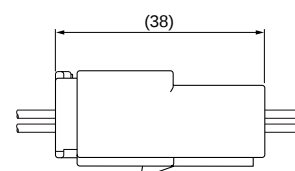


#### • Dual row

AIT2WSB-( )A-2( )



AIT2WSB-22-2AK



## Crimping machine, Applicator

| Strip terminal   | Crimping machine | Crimp applicator MKS-L |                            |
|------------------|------------------|------------------------|----------------------------|
|                  |                  | Dies                   | Crimp applicator with dies |
| SAIT-A03( )-M064 | AP-K2N           | MK/SAIT-A03-064        | APLMK SAIT-A03-064         |
| SAIT-A02( )-M064 |                  | MK/SAIT-A02-064        | APLMK SAIT-A02-064         |
| SAITW-A03( )-064 |                  | MK/SAITW-A03-064       | APLMK SAITW-A03-064        |
| SAITW-A02( )-064 |                  | MK/SAITW-A02-064       | APLMK SAITW-A02-064        |

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

# Mouser Electronics

Authorized Distributor

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

JST:

[S22B-AIT2G-2AK](#)