

# Panasonic

ideas for life

I/O connectors for portable equipment  
Receptacle  
18, 22, 24 and 26 contacts



50 contacts



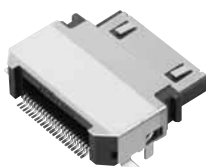
System connector ultra low profile type  
Plug (cable connection type)  
18, 22, 24 and 26 contacts



I/O connectors for portable equipment  
Plug (cable connection type)  
50 contacts



System connector ultra low profile type  
Plug (Board mounting type)  
22, 26 and 50 contacts



Customizable for several contacts.  
Ask about details.

**Compliance with RoHS Directive**

**FOR CELLULAR PHONE;  
ULTRA LOW PROFILE TYPE  
FOR PORTABLE EQUIPMENT  
(0.5mm PITCH)**

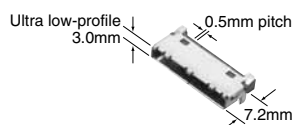
**SYSTEM CONNECTORS ULTRA-LOW  
PROFILE TYPE (AXR3)  
I/O CONNECTORS FOR PORTABLE  
EQUIPMENT (AXR5)**

## FEATURES

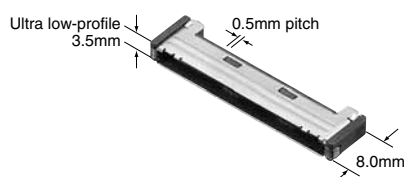
**1. Compact receptacle helps to design lighter, slimmer, smaller devices.**

I/O connector for portable equipment

- 18, 22, 24 and 26 contacts

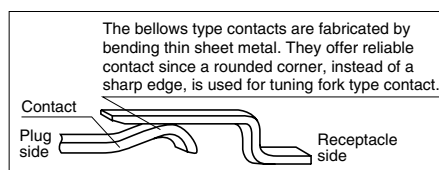


- 50 contacts



### 2. Bellows-type contacts

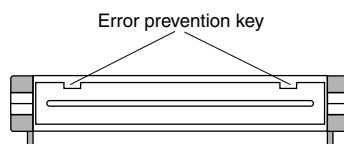
Our bellows-type contacts resist mating stress and offer high contact reliability.



**3. Coaxial portion with switching function (1 Form B configuration) can be applied up to 2GHz.**

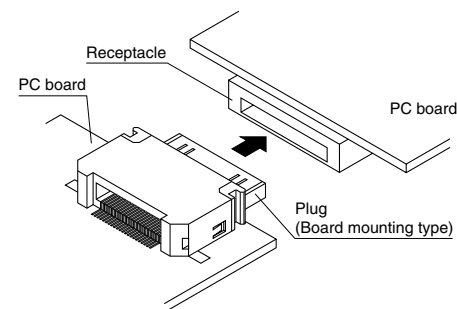
**4. Connection of incorrect pairs is prevented by cross-manufacturer mating error prevention key.**

By changing the location of the mating error prevention key, erroneous insertion of a different connector is prevented. This eliminates the chance of any problems that may be caused by mistaken connections. Please consult us for more information.



The key groove is different for every customer.

**5. Plugs with 22, 26 and 50 contacts are also available in board mounting types. These are ideal for such applications as the connection between PDAs and data-communication cradles.**



## ORDERING INFORMATION

### 1. I/O connectors for portable equipment receptacle

AXR **5** **1**    **P**

5: I/O connectors for portable equipment

<Receptacle>  
1: Receptacle

<No. of signal wire>  
18: SIL 18 contacts  
22: SIL 22 contacts  
24: SIL 24 contacts  
26: SIL 26 contacts  
50: SIL 50 contacts

<Function>

|   | A type/B type | On board/<br>board cutting/<br>board mounting | Positioning<br>boss |
|---|---------------|-----------------------------------------------|---------------------|
| 4 | B type        | On board                                      | Not available       |
| 8 | A type        |                                               |                     |

<Packing>  
P: Embossed tape and paper reel × 2

### 2. System connectors ultra-low profile type plug

AXR **3** **0**  **4**

3: System connectors ultra-low profile type

<Plug>  
0: Plug

<No. of signal wire>  
2: SIL 18 contacts  
3: SIL 22 contacts  
4: SIL 24 contacts  
5: SIL 26 contacts  
6: SIL 50 contacts

<Applicable receptacle>

|   | On board/board cutting | No. of coaxial pin |
|---|------------------------|--------------------|
| 4 | On board               | Without            |

<Function>

|   | Cable connection type/<br>Board mounting type | A type/B type | Shield        |
|---|-----------------------------------------------|---------------|---------------|
| 0 | Cable connection type                         | A type        | Available     |
| 1 |                                               | B type        |               |
| 3 |                                               | A type        | Not available |
| 4 |                                               | B type        |               |
| 5 | Board mounting type                           | A type        | Available     |
| A |                                               | B type        |               |

<Packing>  
Nil: Embossed tape and paper reel × 2  
\* Board mounting type only.

### 3. I/O connectors for portable equipment plug

AXR **5** **2** **5**

5: I/O connectors for portable equipment

<Plug, A type/B type>  
2: Plug A type

<No. of signal wire>  
5: SIL 50 contacts

<Applicable cable dia.>  
6: 5.5mm dia.  
7: 6.2mm dia.

<Shield>  
S: With shield

Note) Applicable for cable connection type 50 contacts

## RECEPTACLE AND PLUG COMPATIBILITY TABLE

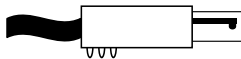
### 1. Signal terminals 18 to 50 contacts

#### 1) Plug (Cable connection type)

##### • Plug



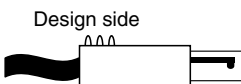
A type



Design side

- Corresponds to on board mounting type receptacle 50 contacts

B type

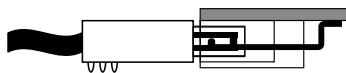


Design side

- Corresponds to on board mounting type receptacle 18, 22, 24 and 26 contacts

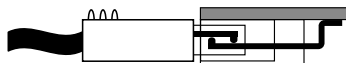
##### • Combination table

Plug (A type)-Receptacle (A type) are mated



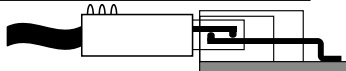
| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug)      | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|----------------------|-----------------------|
| 50 contacts             | On board mounting type | Signal terminals only         | AXR5256S<br>AXR5257S | AXR51508P             |

Plug (B type)-Receptacle (A type) are mated



| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug)      | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|----------------------|-----------------------|
| 18 contacts             | On board mounting type | Signal terminals only         | AXR30244             | AXR51188P             |
| 22 contacts             |                        | Signal terminals only         | AXR30341<br>AXR30344 | AXR51228P             |
| 24 contacts             |                        | Signal terminals only         | AXR30444             | AXR51248P             |
| 26 contacts             |                        | Signal terminals only         | AXR30541             | AXR51268P             |

Plug (B type)-Receptacle (B type) are mated



| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug)      | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|----------------------|-----------------------|
| 22 contacts             | On board mounting type | Signal terminals only         | AXR30341<br>AXR30344 | AXR51224P             |

##### • Receptacle

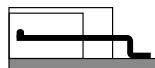


A type



- On board mounting type 18, 24, 26 and 50 contacts

B type



- On board mounting type 22 contacts

#### Plug (Board mounting type)

##### • Plug



A type



- Corresponds to on board mounting type receptacle 22 contacts

B type



- Corresponds to on board mounting type receptacle 22, 26 and 50 contacts

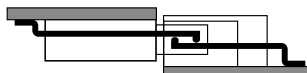
##### • Combination table

Plug (A type)-Receptacle (A type) are mated



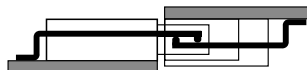
| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug) | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|-----------------|-----------------------|
| 22 contacts             | On board mounting type | Signal terminals only         | AXR3034A        | AXR51228P             |

Plug (A type)-Receptacle (B type) are mated



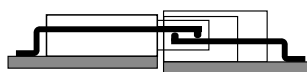
| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug) | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|-----------------|-----------------------|
| 22 contacts             | On board mounting type | Signal terminals only         | AXR3034A        | AXR51224P             |

Plug (B type)-Receptacle (A type) are mated



| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug) | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|-----------------|-----------------------|
| 26 contacts             | On board mounting type | Signal terminals only         | AXR30545        | AXR51268P             |
| 50 contacts             |                        |                               | AXR30645        | AXR51508P             |

Plug (B type)-Receptacle (B type) are mated

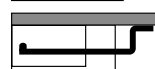


| No. of signal terminals | On board/board cutting | Receptacle composite function | Part No. (Plug) | Part No. (Receptacle) |
|-------------------------|------------------------|-------------------------------|-----------------|-----------------------|
| 22 contacts             | On board mounting type | Signal terminals only         | AXR30345        | AXR51224P             |

##### • Receptacle



A type



- On board mounting type 22, 26 and 50 contacts

B type



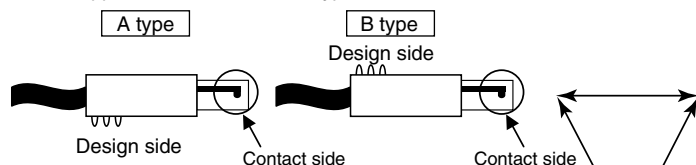
- On board mounting type 22 contacts

### 3. Information about A and B types

#### • Plug

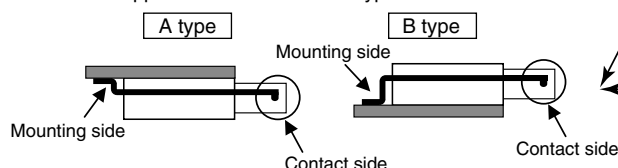
##### 1) Cable connection type

- When the contact side and design side,
- face in the same direction it is A Type
  - face in opposite directions it is B Type



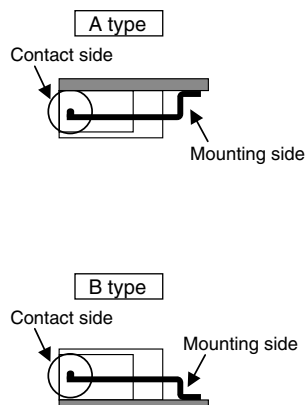
##### 2) Board mounting type

- When the contact side and mounting side,
- face in the same direction it is A Type
  - face in opposite directions it is B Type



#### • Receptacle

- When the contact side and mounting side,
- face face in opposite directions it is A Type
  - face the in the same direction it is B Type



## PRODUCT TYPES

### 1. Receptacle

| No. of signal terminals | Type                            | No. of coaxial | No. of battery terminal | Part No.  | Packing quantity      |              |
|-------------------------|---------------------------------|----------------|-------------------------|-----------|-----------------------|--------------|
|                         |                                 |                |                         |           | Inner carton (1 reel) | Outer carton |
| 18 contacts             | On board mounting type (A type) | None           | None                    | AXR51188P | 1,000 pcs.            | 2,000 pcs.   |
| 22 contacts             | On board mounting type (A type) | None           | None                    | AXR51228P | 1,000 pcs.            | 2,000 pcs.   |
|                         | On board mounting type (B type) | None           | None                    | AXR51224P | 1,000 pcs.            | 2,000 pcs.   |
| 24 contacts             | On board mounting type (A type) | None           | None                    | AXR51248P | 1,000 pcs.            | 2,000 pcs.   |
| 26 contacts             | On board mounting type (A type) | None           | None                    | AXR51268P | 1,000 pcs.            | 2,000 pcs.   |
| 50 contacts             | On board mounting type (A type) | None           | None                    | AXR51508P | 750 pcs.              | 1,500 pcs.   |

Note) For cellular phones and other applications where problems of insertion into the wrong device is possible, the location of the key will be changed for each order. An order number will be set for each separate order.

### 2. Plug (Cable connection type)

| No. of signal terminals | Applicable receptacle  | Type   | EMI immunity  | Part No.                      | Packing quantity |              |
|-------------------------|------------------------|--------|---------------|-------------------------------|------------------|--------------|
|                         |                        |        |               |                               | Inner carton     | Outer carton |
| 18 contacts             | On board mounting type | B type | Not available | AXR30244                      | —                | 600 pcs.     |
| 22 contacts             | On board mounting type | B type | Available     | AXR30341                      | —                | 600 pcs.     |
|                         |                        |        | Not available | AXR30344                      | —                | 600 pcs.     |
| 24 contacts             | On board mounting type | B type | Not available | AXR30444                      | —                | 600 pcs.     |
| 26 contacts             | On board mounting type | B type | Available     | AXR30541                      | —                | 600 pcs.     |
| 50 contacts             | On board mounting type | A type | Available     | AXR5256S (for 5.5 dia. cable) | —                | 200 pcs.     |
|                         | On board mounting type | A type | Available     | AXR5257S (for 6.2 dia. cable) | —                | 200 pcs.     |

Note) For cellular phones and other applications where problems of insertion into the wrong device is possible, the location of the key will be changed for each order. An order number will be set for each separate order.

### 3. Plug (PC board mounting type)

| No. of signal terminals | Type                            | EMI countermeasure | Part No. | Packing quantity |              |
|-------------------------|---------------------------------|--------------------|----------|------------------|--------------|
|                         |                                 |                    |          | Inner carton     | Outer carton |
| 22 contacts             | On board mounting type (A type) | Available          | AXR3034A | 500 pcs.         | 1,000 pcs.   |
|                         | On board mounting type (B type) | Available          | AXR3034S | 500 pcs.         | 1,000 pcs.   |
| 26 contacts             | On board mounting type (B type) | Available          | AXR3054S | 500 pcs.         | 1,000 pcs.   |
| 50 contacts             | On board mounting type (B type) | Available          | AXR3064S | 500 pcs.         | 1,000 pcs.   |

## SPECIFICATIONS

### 1. Characteristics

#### 1) Receptacle–Plug (cable connection type)

| Item                          |                                                   |                 | Specifications                                                                                                 |             |                                                                                                                 | Condition                                                                                                                             |
|-------------------------------|---------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|                               |                                                   |                 | 18 , 22, 24 contacts                                                                                           | 26 contacts | 50 contacts                                                                                                     |                                                                                                                                       |
| Electrical characteristics    | Rated Current                                     | Signal contact  | 0.5 A (1 A can be passed through two terminals connected in series)<br>(Total for all terminals is max. 10 A.) |             |                                                                                                                 | —                                                                                                                                     |
|                               |                                                   | Battery contact | 2 A                                                                                                            |             | —                                                                                                               | Characteristic of receptacle alone.                                                                                                   |
|                               | Contact resistance                                | Signal contact  | Max. 110mΩ (Initial)                                                                                           |             |                                                                                                                 | Measured based on the milliohmmeter measurement method of JIS C 5402, except for the resistance of the cord on the plug side.         |
|                               |                                                   | Battery contact | Max. 50mΩ (Initial)                                                                                            |             | —                                                                                                               | Measured based on the milliohmmeter measurement method of JIS C 5402, except for the resistance of the terminals on the battery side. |
|                               | Insulation resistance                             |                 | Min. 1,000MΩ (Initial)                                                                                         |             |                                                                                                                 | Using 500V DC megger (applied for 1 min.)                                                                                             |
|                               | Breakdown voltage                                 |                 | 150V AC for 1 min.                                                                                             |             |                                                                                                                 | Rated voltage is applied for one minute and check for short circuit or damage with a detection current of 1 mA.                       |
| Mechanical characteristics    | Lever lock strength                               |                 | Min. 49N {5kgf}                                                                                                |             |                                                                                                                 | The plug is pulled off with the connectors mated.                                                                                     |
| Lifetime characteristics      | Insertion and removal life of plug and receptacle |                 | Mechanical life: 10,000 times<br>Contact resistance after testing: Max. 110mΩ                                  |             | Mechanical life: 5,000 times (mechanical insertion and removal)<br>Contact resistance after testing: Max. 110mΩ | The connectors are connected and disconnected at a rate of 200 times/hour or less.                                                    |
| Environmental characteristics | Ambient temperature                               |                 | −35°C to +65°C                                                                                                 |             |                                                                                                                 | No freezing or condensation in low temperatures                                                                                       |
|                               | Storage temperature                               |                 | −40°C to +70°C (The allowable storage temperature is −40°C to +50°C if unopened from original packaging)       |             |                                                                                                                 | No freezing or condensation in low temperatures                                                                                       |
|                               | Resistance to soldering heat                      | Receptacle      | Reflow soldering: peak temperature 245°C or less                                                               |             |                                                                                                                 | Surface temperature (shell) from infrared reflow soldering machine                                                                    |
|                               |                                                   | Plug            | Hand soldering: Soldering iron temperature 300°C, 5 sec. or less                                               |             |                                                                                                                 | —                                                                                                                                     |
| Unit weight                   |                                                   |                 | Receptacle (AXR35371P) 22 contacts: 0.86 g<br>Plug (AXR30341) 22 contacts: 6.18 g                              |             | Receptacle (AXR51508P) 50 contacts: 1.42 g<br>Plug (AXR5256S) 50 contacts: 11.1 g                               | —                                                                                                                                     |

#### 2) Receptacle–Plug (Board mounting type)

| Item                          |                                                   |                | Specifications                                                                                                                                                                       | Condition                                                                                                       |
|-------------------------------|---------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|                               |                                                   |                | 22, 26, 50 contacts                                                                                                                                                                  |                                                                                                                 |
| Electrical characteristics    | Rated current                                     | Signal contact | 0.5 A (7 A can be passed through all terminals connected)<br>(The total for 50 terminals is max. 10 A.)                                                                              | —                                                                                                               |
|                               | Contact resistance                                | Signal contact | 22 contacts (A type) Max. 110 mΩ (Initial)<br>22 contacts (B type) Max. 140 mΩ (Initial)<br>26 contacts (B type) Max. 110 mΩ (Initial)<br>50 contacts (B type) Max. 110 mΩ (Initial) | Measured based on the milliohmmeter measurement method of JIS C 5402                                            |
|                               | Insulation resistance                             |                | Min. 1,000MΩ (Initial)                                                                                                                                                               | Using 500V DC megger (applied for 1 min.)                                                                       |
|                               | Breakdown voltage                                 |                | 150 V AC for 1 min.                                                                                                                                                                  | Rated voltage is applied for one minute and check for short circuit or damage with a detection current of 1 mA. |
| Lifetime characteristics      | Insertion and removal life of plug and receptacle |                | Mechanical life: 5,000 times<br>Contact resistance after testing: Max. 110 mΩ<br>(Contact resistance after testing satisfies initial value.)                                         | The connectors are connected and disconnected at a rate of 200 times/hour or less.                              |
| Environmental characteristics | Ambient temperature                               |                | −35°C to +65°C                                                                                                                                                                       | No freezing or condensation in low temperatures                                                                 |
|                               | Storage temperature                               |                | −40°C to +70°C (The allowable storage temperature is −40°C to +50°C if unopened from original packaging)                                                                             | No freezing or condensation in low temperatures                                                                 |
|                               | Resistance to soldering heat                      | Plug           | Reflow soldering: peak temperature 245°C or less                                                                                                                                     | Surface temperature (shell) from infrared reflow soldering machine                                              |
| Unit weight                   |                                                   |                | 22 contacts (A type): 1.43 g, 22 contacts (B type): 1.53 g,<br>26 contacts (B type): 1.48 g, 50 contacts (B type): 2.30 g                                                            | —                                                                                                               |

Note) Refer to above table for the characteristics of the receptacle.

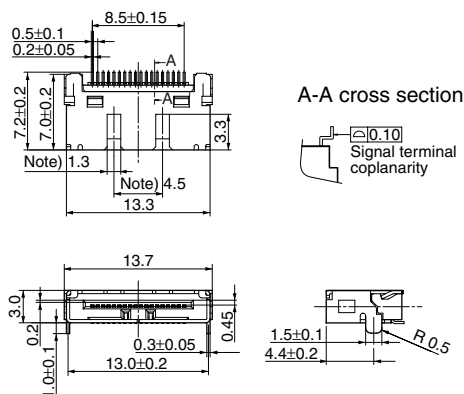


## 2. Material and surface treatment

|                                    | Portion               | Material                                                                      | Surface                                                                                                                                                                    |
|------------------------------------|-----------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Receptacle                         | Resin-molding portion | Heat resistant resin (UL94V-0)                                                | —                                                                                                                                                                          |
|                                    | Shell                 | Stainless steel                                                               | Cu plating base, Sn plating on surface                                                                                                                                     |
|                                    | Post                  | Copper alloy                                                                  | Contact portion: Ni plating on base, PdNi + Au flash plating on surface<br>Terminal portion: Ni plating on base, Au plating on surface<br>(except for end of the terminal) |
|                                    | Battery contact       | Copper alloy                                                                  | Contact portion: Ni plating on base, Au plating on surface<br>Terminal portion: Ni plating on base, Au plating on surface<br>(except for end of the terminal)              |
| Plug<br>(cable connection<br>type) | Resin-molding portion | Heat resistant resin (UL94V-0)<br>Only bushing is polyurethane resin (UL94HB) | —                                                                                                                                                                          |
|                                    | Shell                 | Stainless steel                                                               | —                                                                                                                                                                          |
|                                    | Contact               | Copper alloy                                                                  | Contact portion: Ni plating on base, PdNi + Au flash plating on surface<br>Signal wire soldering portion: Ni plating on base, Au plating on surface                        |
|                                    | Tapping screw         | Carbon steel                                                                  | Rust proofed                                                                                                                                                               |
|                                    | Insulation plate      | Phenolic resin or PBT                                                         | —                                                                                                                                                                          |
| Plug<br>(Board mounting<br>type)   | Resin-molding portion | Heat resistant resin (UL94V-0)                                                | —                                                                                                                                                                          |
|                                    | Shell                 | Stainless steel                                                               | Cu plating base, Sn plating on surface                                                                                                                                     |
|                                    | Contact               | Copper alloy                                                                  | Contact portion: Ni plating on base, PdNi + Au flash plating on surface<br>Terminal portion: Ni plating on base, Au plating on surface<br>(except for end of the terminal) |

The CAD data of the products with a **CAD Data** mark can be downloaded from: <http://panasonic-electric-works.net/ac>

- Receptacle (A type)  
AXR51188P

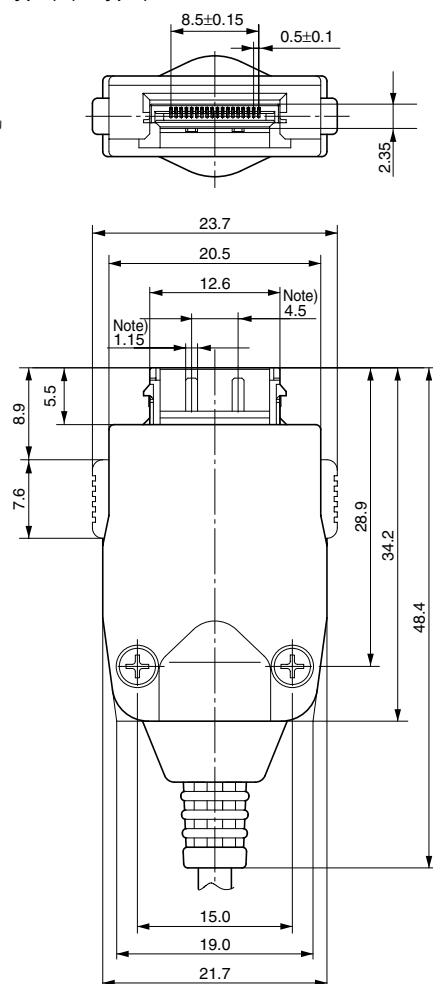


General tolerance:  $\pm 0.3$

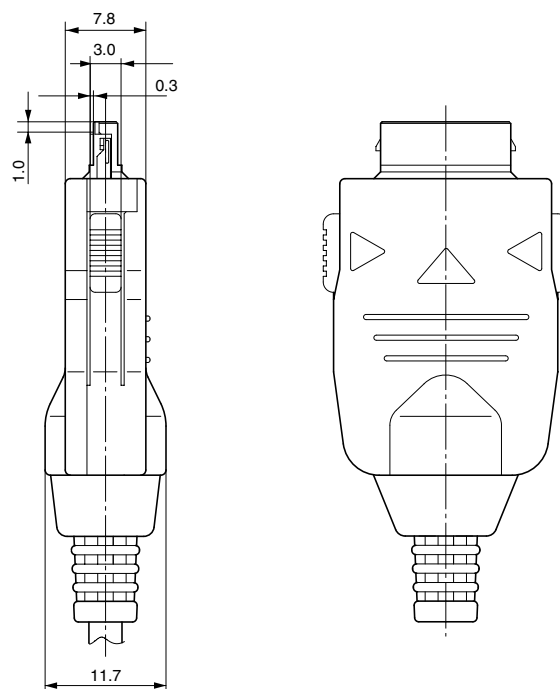
Technical drawing of a PCB with dimensions and annotations:

- Dimensions:  $8.5 \pm 0.05$ ,  $0.5 \pm 0.05$ ,  $0.25 \pm 0.05$ ,  $1.9 \pm 0.05$ ,  $1.5 \pm 0.1$ ,  $1.8 \pm 0.1$ ,  $1.6$ ,  $2.7$ ,  $1.0$ ,  $1.7$ ,  $1.6$ ,  $1.9$ ,  $0.6 \pm 0.05$ ,  $4.4 \pm 0.1$ ,  $13.0 \pm 0.05$ .
- Annotations: "Through hole", "Please make pattern both side of PC board".

- Notes) 1. The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.
2. Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).



Note) The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.



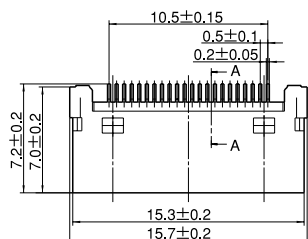
General tolerance:  $\pm 0.3$

## 2. Signal terminals 22 contacts/On board mounting type

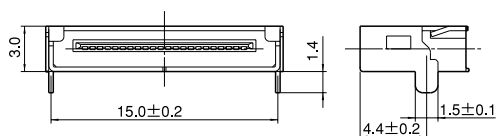
### • Receptacle (A type)

AXR51228P

**CAD Data**

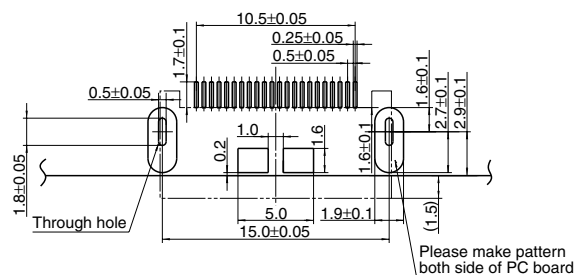


A-A cross section



General tolerance:  $\pm 0.3$

Recommended PC board pattern  
(TOP VIEW)

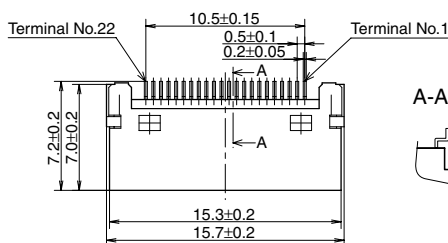


- Notes) 1. The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.  
2. Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).

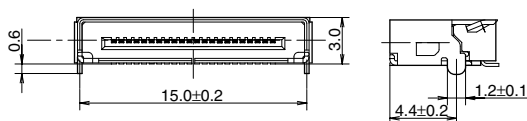
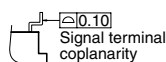
### • Receptacle (B type)

AXR51224P

**CAD Data**

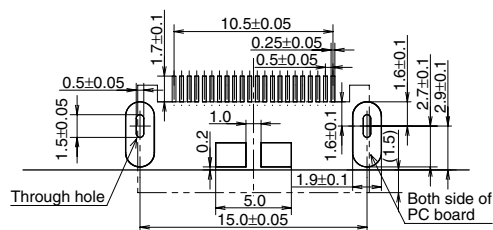


A-A cross section



General tolerance:  $\pm 0.3$

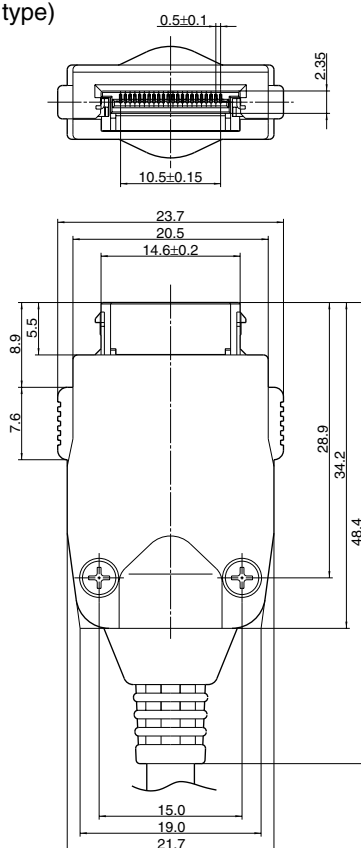
Recommended PC board pattern  
(TOP VIEW)



- Notes) 1. The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.  
2. Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).

- Plug (cable connection type) (B type)  
(assembled condition)  
AXR30341  
AXR30343

**CAD Data**

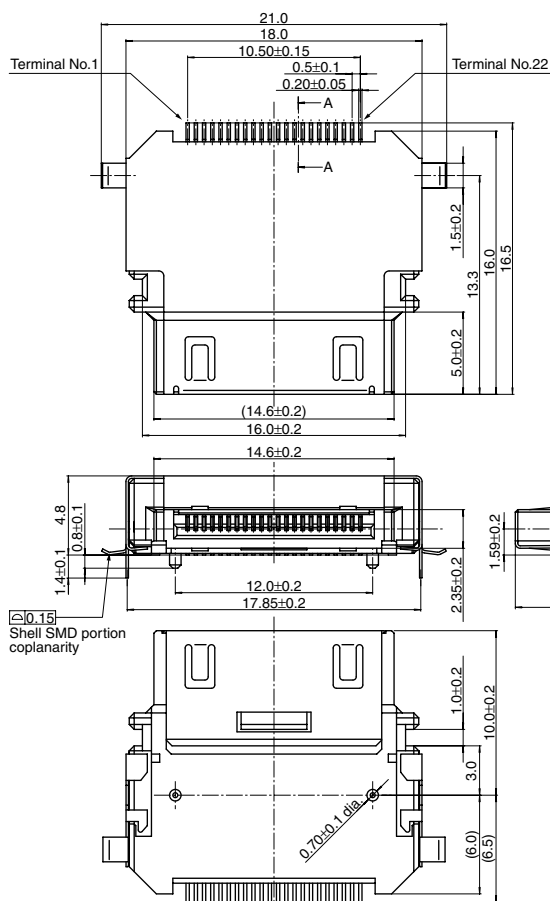


- Notes
1. The drawing shows AXR30344. (External dimensions are the same also for AXR30341.)
  2. The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.

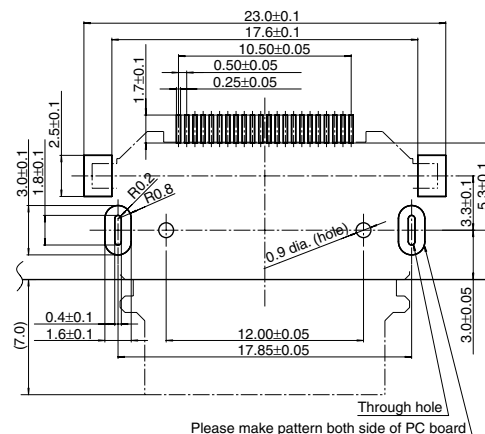
General tolerance: ±0.3

- Plug (Board mounting type) (B type)  
AXR30345

**CAD Data**

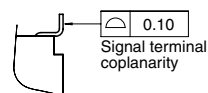


**Recommended PC board pattern  
(TOP VIEW)**



Note) This product is not compatible with mismatch prevention keys.

**A-A cross section**



General tolerance: ±0.3

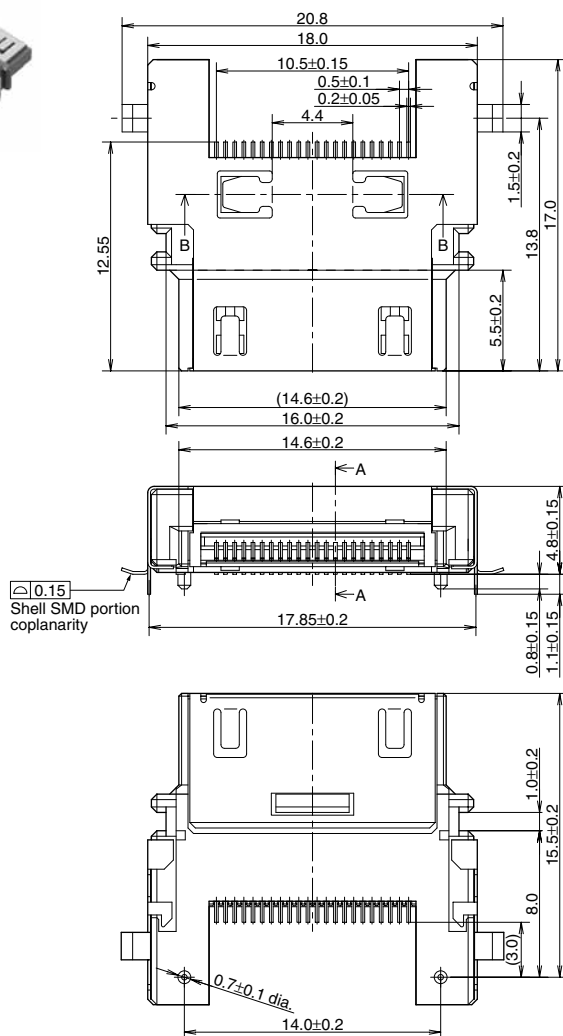
# AXR(3/5)

**STOP** Order Discontinued as of September 30, 2009

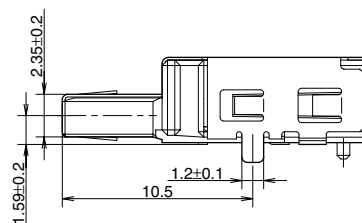
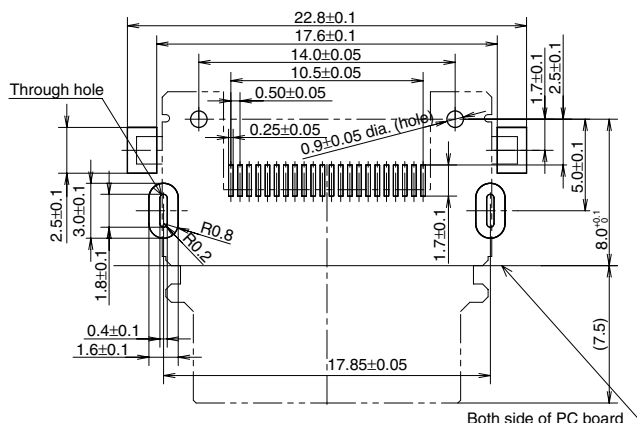
- Plug (Board mounting type) (A type)  
AXR3034A

mm General tolerance:  $\pm 0.3$

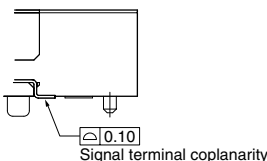
## CAD Data



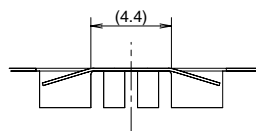
## Recommended PC board pattern (TOP VIEW)



## A-A cross section



## B-B cross section

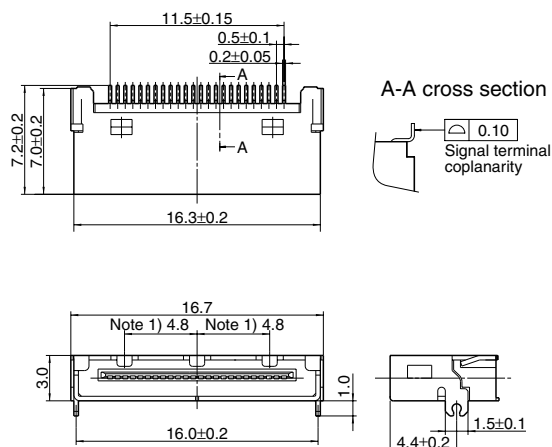


## 3. Signal terminals 24 contacts/On board mounting type

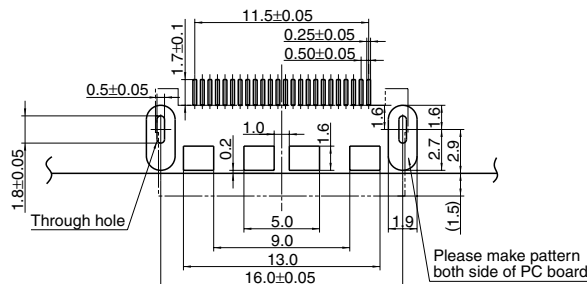
mm General tolerance:  $\pm 0.3$

- Receptacle (A type)  
AXR51248P

## CAD Data



## Recommended PC board pattern (TOP VIEW)



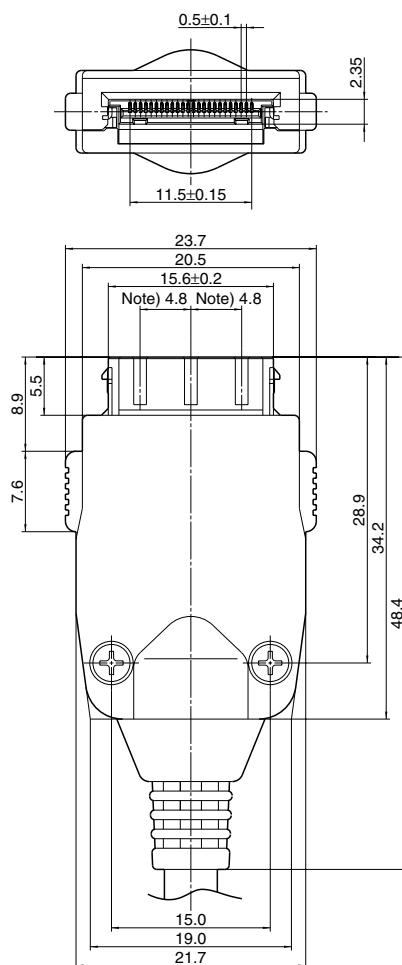
- Notes) 1. The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.  
2. Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).

(#) The dimensions for the improper connection prevention key are set by the customer.

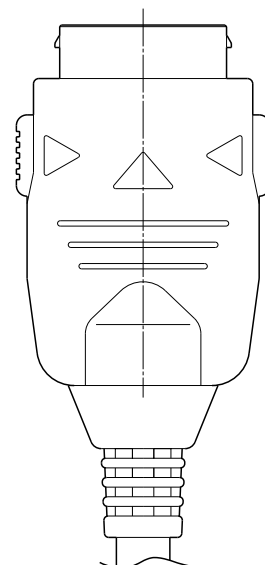
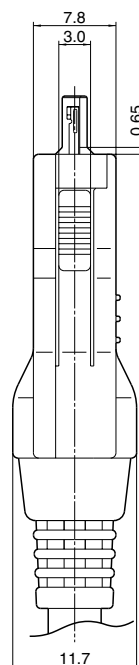
- Plug (cable connection type) (B type)  
(assembled condition)  
AXR30444

mm General tolerance:  $\pm 0.3$

**CAD Data**



Note) The position of the cross-manufacturer mating error prevention key, if requested, can be set for each user when the detailed specifications are being decided.



# AXR(3/5)

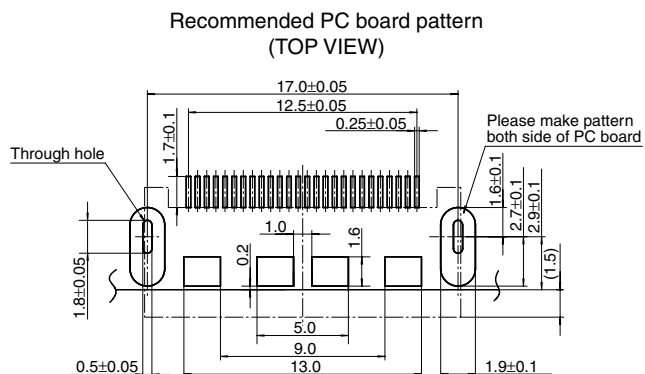
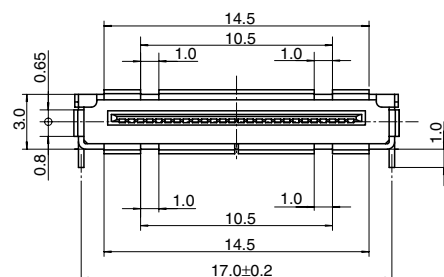
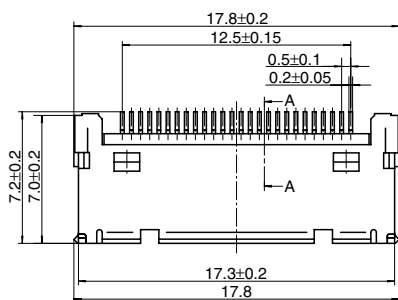
**STOP** Order Discontinued as of September 30, 2009

## 4. Signal terminals 26 contacts/On board mounting type

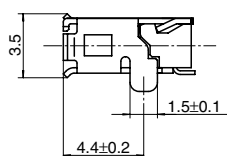
mm General tolerance:  $\pm 0.3$

- Receptacle (A type)  
AXR51268P

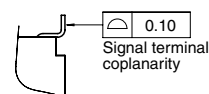
### CAD Data



Note) Since product bottom is a metal shell, do not make pattern circuits (to prevent shorting).



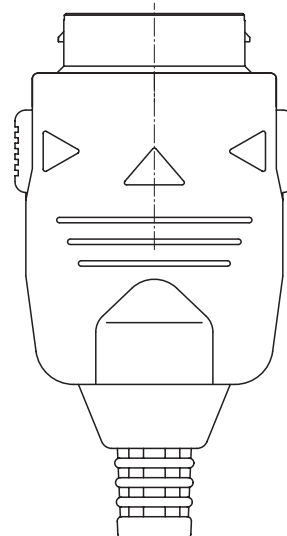
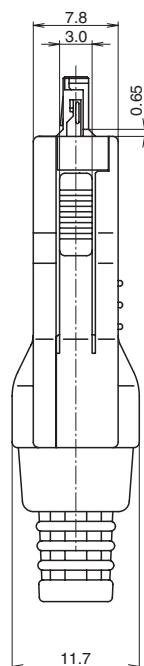
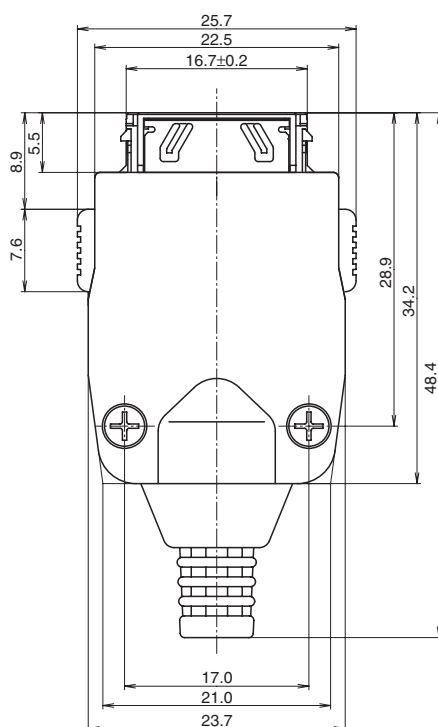
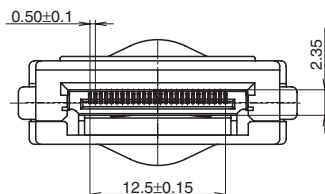
### A-A cross section



- Plug (cable connection type) (B type)  
(assembled condition)  
AXR30541

mm General tolerance:  $\pm 0.3$

### CAD Data

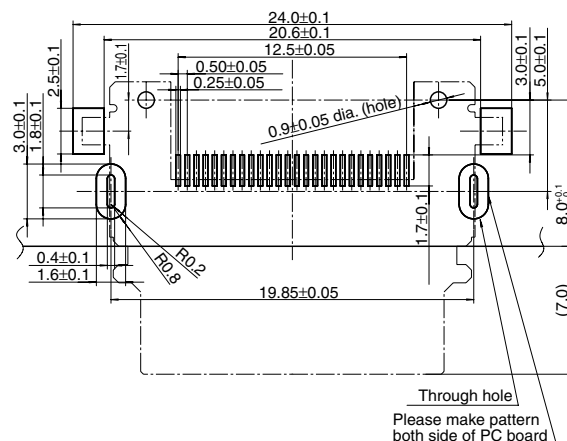
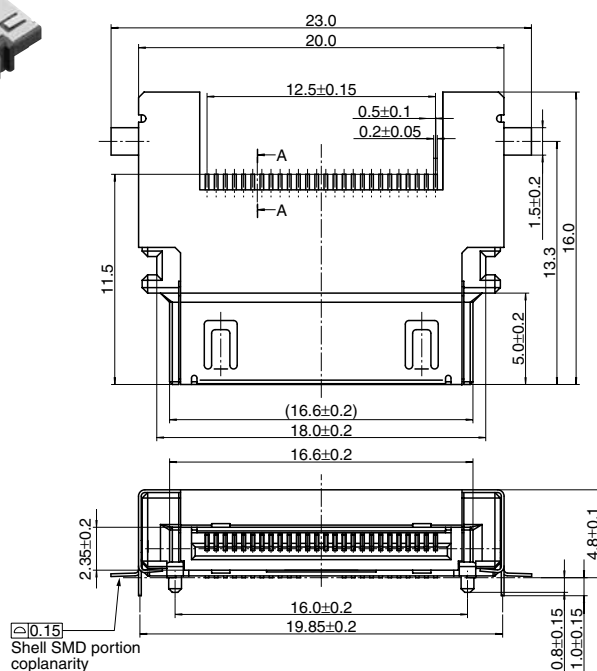
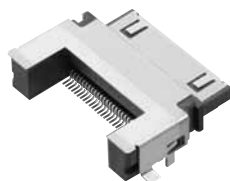


Note) This product is not compatible with mismatch prevention keys.

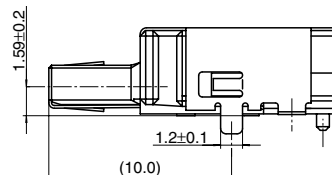
- Plug (Board mounting type) (B type)  
AXR30545

mm General tolerance:  $\pm 0.3$

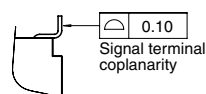
**CAD Data**



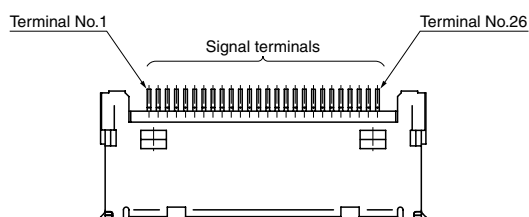
Note) This product is not compatible with mismatch prevention keys.



**A-A cross section**



**No. of signal terminal (A type)**



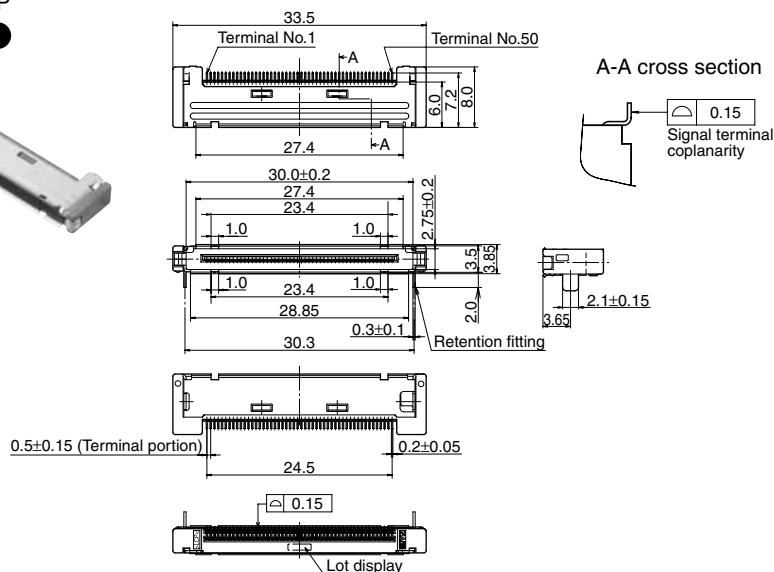
## 5. Signal terminals 50 contacts/On board mounting type

mm General tolerance:  $\pm 0.3$

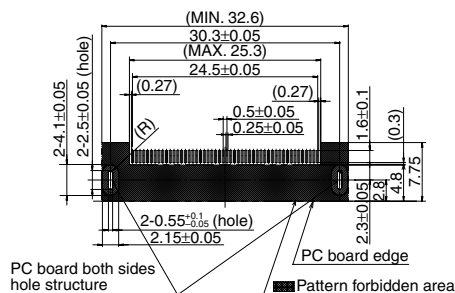
- Receptacle (A type)

AXR51508P

### CAD Data



### Recommended PC board pattern (TOP VIEW)



### Notes)

1. The values in parenthesis are reference dimensions.
2. To reinforce the shell portion of the receptacle, have the shell guided by the casing in some way. The gap between the device casing and receptacle should be constructed to be very small, for example, under 0.1 mm.
3. The dimensions of the cross-manufacturer mating error prevention key, if requested, can be set for each user.

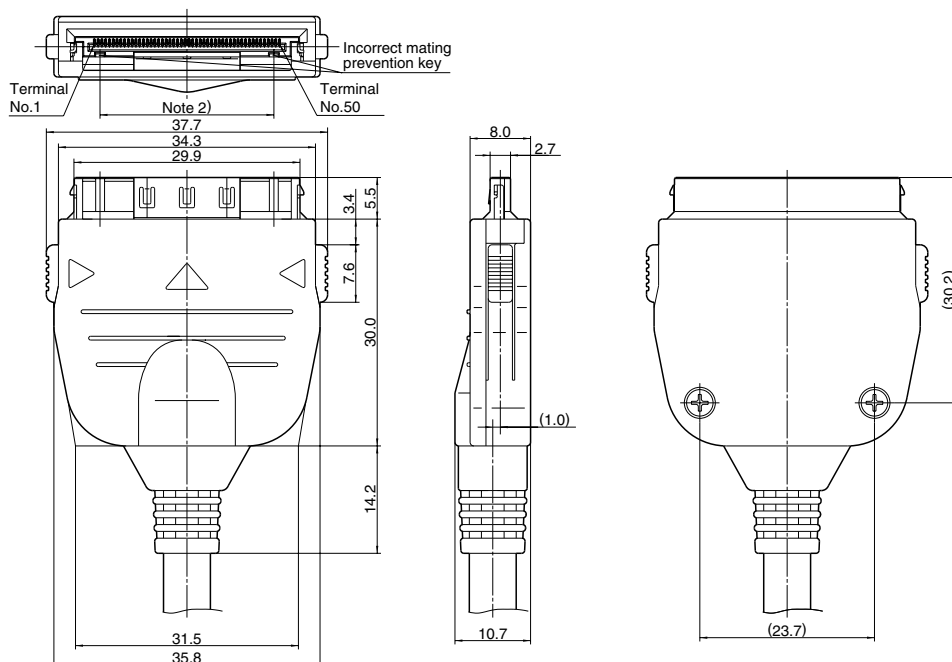
- Plug (cable connection type) (A type)

(assembled condition)

AXR5256S

AXR5257S

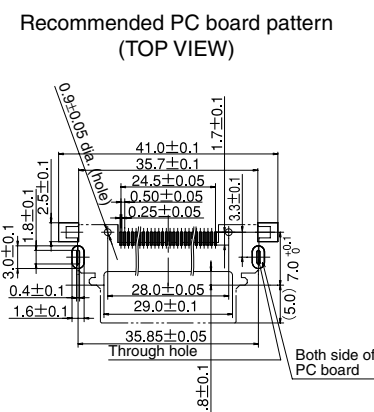
### CAD Data



### Notes)

1. The values in parenthesis are reference dimensions.
2. The dimensions of the cross-manufacturer mating error prevention key, if requested, can be set for each user.

- mm General tolerance:  $\pm 0.3$



Notes)

1. The values in parenthesis are reference dimensions.
2. To reinforce the shell portion of the receptacle, have the shell guided by the casing in some way. The gap between the device casing and receptacle should be constructed to be very small, for example, under 0.1 mm.
3. The dimensions of the cross-manufacturer mating error prevention key, if requested, can be set for each user.

## APPLICATIONS

Products can be made to match your applications, so please contact us if necessary.

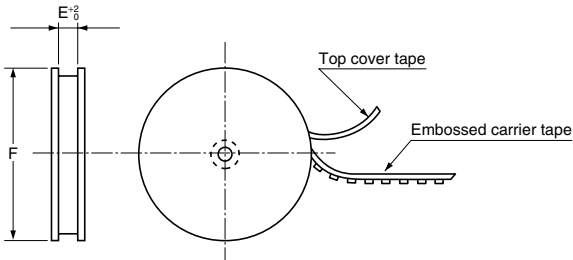
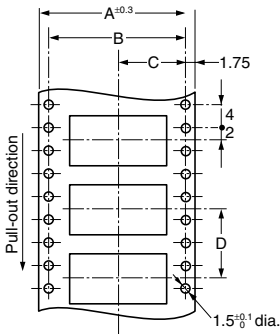
A type products (18, 22 and 26 contacts)

B type products (50 contacts)



**EMBOSSSED TAPE DIMENSIONS** (unit: mm)

- Tape dimensions (Conforming to JIS C 0806, 1995.  
However, some tapes have mounting hole pitches that do not comply with the standard.)
- Reel dimensions (Conforming to JIS C 0806, 1995)



1. Receptacle

|                                                                    | A    | B    | C    | D    | E    | F        | Quantity per reel |
|--------------------------------------------------------------------|------|------|------|------|------|----------|-------------------|
| I/O connector for portable equipment<br>18, 22, 24 and 26 contacts | 32.0 | 28.4 | 14.2 | 16.0 | 32.4 | 370 dia. | 1,000             |
| I/O connector for portable equipment<br>50 contacts                | 44.0 | 40.4 | 20.2 | 16.0 | 44.4 | 370 dia. | 750               |

2. Plug (PC board mounting type)

|                    | A    | B    | C    | D    | E    | F        | Quantity per reel |
|--------------------|------|------|------|------|------|----------|-------------------|
| 22 and 26 contacts | 44.0 | 40.4 | 20.2 | 24.0 | 44.4 | 370 dia. | 500               |
| 50 contacts        | 56.0 | 52.4 | 26.2 | 24.0 | 56.4 | 370 dia. | 500               |

- Connector orientation with respect to direction of progress of embossed tape

| Direction of<br>tape progress | Type | I/O connector for portable equipment Receptacle | Plug<br>(Board mounting type) |
|-------------------------------|------|-------------------------------------------------|-------------------------------|
|                               |      |                                                 |                               |

For other details, please verify with the product specification sheets.