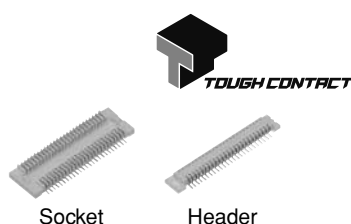
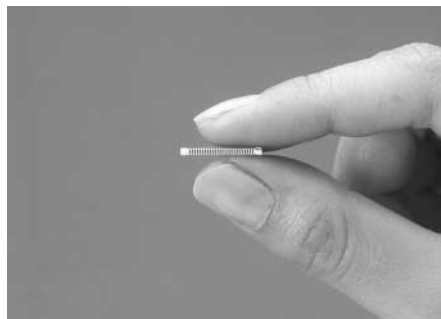


**Panasonic**  
ideas for life

## NARROW-PITCH CONNECTORS FOR BOARD-TO-BOARD CONNECTION

# NARROW PITCH (0.5mm) CONNECTORS P5 SERIES — P5KF —

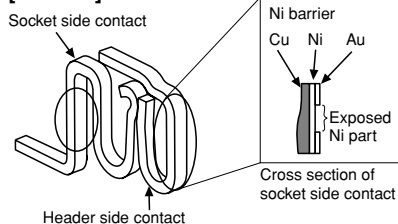


3) Use of Ni barrier construction is standard. Highly effective against solder creeping. (Available from Oct. 2005)

### ● What is Ni barrier construction?

By providing an exposed nickel part on the gold (Au) plated contact, solder creeping is prevented despite the ultra low profile.

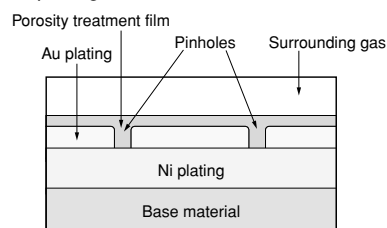
#### [Contact]



4) Porosity treatment applied for improved resistance against corrosion.

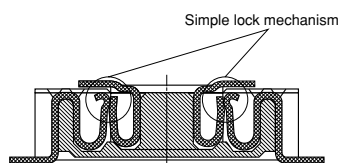
### What is porosity treatment?

This treatment consists of coating the surface with a very thin film to seal pinholes in the gold plating. This porosity treatment technology ensures the same contact reliability for thin gold plating as that of thick gold plating.



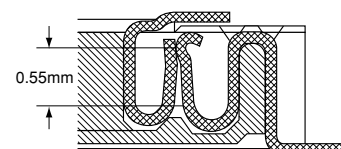
- Improvement in insertion/removal durability
- Improvement in resistance to corrosion
- Improvement in contact reliability for digital signals

3. Simple locking structure  
Superior mating operation with click feel to indicate that mating is complete.



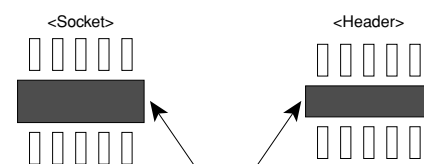
### 4. Mating length 0.55mm

While achieving a low profile of 1.5mm between PCBs, the effective mating length has been extended to ensure that there is some latitude in the mating.



5. The lower connector bottom surface construction prevents contact and shorts between the PCB and metal terminals.

This enables freedom in pattern wiring, helping to make PCB's smaller.



Connector bottom: Create any thru-hole and pattern wiring.

6. Automatic mounting inspection is facilitated by the gull-wing terminal shape which makes mounting verification easy.

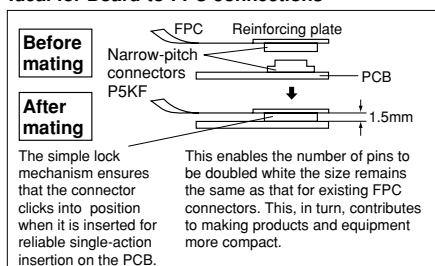
7. Compliance with RoHS' Directive  
Environmentally friendly, the connectors' comply with Europe's RoHS' Directive. Cadmium, lead, mercury, hexavalent, chromium, PBB and PBDE are not used.

8. Connectors for inspection available  
Connectors for inspection are available that are ideal for modular unit inspection and inspection in device assembly processes.

## APPLICATIONS

- Cellular phones
- PHS
- Portable data terminals
- Digital cameras
- Compact portable devices

### Ideal for Board-to-FPC connections



The simple lock mechanism ensures that the connector clicks into position when it is inserted for reliable single-action insertion on the PCB.

This enables the number of pins to be doubled while the size remains the same as that for existing FPC connectors. This, in turn, contributes to making products and equipment more compact.

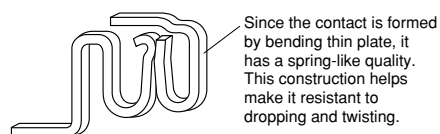
## FEATURES

1. The connector is a two-piece structure and 0.5mm pitch.

The product lineup consists of the mated height of 1.5mm, 2.0mm and 2.5mm.

2. Strong resistance to adverse environments! Utilizes **TOUGH CONTACT** construction for high contact reliability.

1) The socket and header has the same dropping shock and torsion resistant construction as the bellows-type contact.



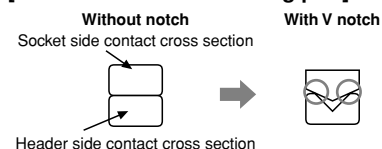
Since the contact is formed by bending thin plate, it has a spring-like quality. This construction helps make it resistant to dropping and twisting.

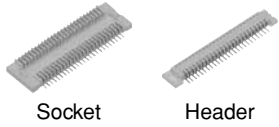
2) V notch construction used for excellent resistance against foreign matters.

### ● What is V notch construction?

By using the edge for the contacting part and increasing contact pressure per unit area, the effectiveness in removing flux and contaminants is increased compared to its predecessor. This is also effective in preventing the trapping of contaminants.

#### [Cross section of contacting part]





Socket

Header

| Product name       |       | P5KF  |       |   |
|--------------------|-------|-------|-------|---|
| Mated height       |       |       |       |   |
|                    | 1.5mm | 2.0mm | 2.5mm |   |
| Number of contacts | 10    | ☆     | ☆     | ☆ |
|                    | 12    | ☆     | ☆     | ☆ |
|                    | 14    | ☆     | ☆     | ☆ |
|                    | 16    | ☆     | ☆     | ☆ |
|                    | 18    | ☆     | ☆     | ☆ |
|                    | 20    | ☆     | ☆     | ☆ |
|                    | 22    | ☆     | ☆     | ☆ |
|                    | 24    | ☆     | ☆     | ☆ |
|                    | 26    | ☆     | ☆     |   |
|                    | 30    | ☆     | ☆     | ☆ |
|                    | 32    | ☆     |       |   |
|                    | 34    | ☆     | ☆     | ☆ |
|                    | 36    |       |       | ☆ |
|                    | 40    | ☆     | ☆     | ☆ |
|                    | 44    |       |       | ☆ |
|                    | 50    | ☆     | ☆     | ☆ |
|                    | 60    | ☆     | ☆     | ☆ |
| 70                 | ☆     | ☆     | ☆     |   |
| 80                 | ☆     | ☆     | ☆     |   |
| 100                |       | ☆     | ☆     |   |

Notes: 1. The standard type comes without positioning bosses.  
Connectors with positioning boss are available for on-demand production.  
2. Please consult us for products which have no ☆ mark.

## ORDERING INFORMATION

AXK

5F: Narrow Pitch Connector P5KF (0.5 mm pitch) Socket  
6F: Narrow Pitch Connector P5KF (0.5 mm pitch) Header

Number of contacts (2 digits)

Mated height

<Socket>

3: For mated height 1.5 mm  
5: For mated height 2.0 mm and 2.5 mm

<Header>

3: For mated height 1.5 mm and 2.0 mm  
5: For mated height 2.5 mm

Functions

3: With positioning bosses  
4: Without positioning bosses

Surface treatment (Contact portion / Terminal portion)

<Socket>

5: Ni plating on base, Au plating on surface/Ni plating on base, Au plating on surface  
7: Ni plating on base, Au plating on surface/Ni plating on base, Au plating on surface  
(for Ni barrier product available from Oct. 2005)

Contact portion

<Socket>

Y: V notch type product (chamfered on both sides)

<Header>

Y: V notch type product

Packing

G: 2,000 pieces embossed tape and plastic reel × 2 (from Oct. 2005)  
J: 2,000 pieces embossed tape and paper reel × 2

## PRODUCT TYPES

| Mated height | No. of contacts | Part No.                                       |  |  |  | Packing               |              |
|--------------|-----------------|--|--|--|--|-----------------------|--------------|
|              |                 | Socket   |  | Header   |  | Inner carton (1-reel) | Outer carton |
|              |                 | Ni barrier product: Not available (Paper reel) | <b>TOUGH CONTACT</b> (Plastic reel) (Recommendation) | Ni barrier product: Not available (Paper reel) | <b>TOUGH CONTACT</b> (Plastic reel) (Recommendation) |                       |              |
| 1.5 mm       | 10              | AXK5F10345YJ                                   | AXK5F10347YG (From Oct. 2005)                        | AXK6F10345YJ                                   | AXK6F10347YG (From Oct. 2005)                        | 2,000 pieces          | 4,000 pieces |
|              | 12              | AXK5F12345YJ                                   | AXK5F12347YG (From Oct. 2005)                        | AXK6F12345YJ                                   | AXK6F12347YG (From Oct. 2005)                        |                       |              |
|              | 14              | AXK5F14345YJ                                   | AXK5F14347YG (From Oct. 2005)                        | AXK6F14345YJ                                   | AXK6F14347YG (From Oct. 2005)                        |                       |              |
|              | 16              | AXK5F16345YJ                                   | AXK5F16347YG (From Oct. 2005)                        | AXK6F16345YJ                                   | AXK6F16347YG (From Oct. 2005)                        |                       |              |
|              | 18              | AXK5F18345YJ                                   | AXK5F18347YG (From Oct. 2005)                        | AXK6F18345YJ                                   | AXK6F18347YG (From Oct. 2005)                        |                       |              |
|              | 20              | AXK5F20345YJ                                   | AXK5F20347YG (From Oct. 2005)                        | AXK6F20345YJ                                   | AXK6F20347YG (From Oct. 2005)                        |                       |              |
|              | 22              | AXK5F22345YJ                                   | AXK5F22347YG (From Oct. 2005)                        | AXK6F22345YJ                                   | AXK6F22347YG (From Oct. 2005)                        |                       |              |
|              | 24              | AXK5F24345YJ                                   | AXK5F24347YG (From Oct. 2005)                        | AXK6F24345YJ                                   | AXK6F24347YG (From Oct. 2005)                        |                       |              |
|              | 26              | AXK5F26345YJ                                   | AXK5F26347YG (From Oct. 2005)                        | AXK6F26345YJ                                   | AXK6F26347YG (From Oct. 2005)                        |                       |              |
|              | 30              | AXK5F30345YJ                                   | AXK5F30347YG (From Oct. 2005)                        | AXK6F30345YJ                                   | AXK6F30347YG (From Oct. 2005)                        |                       |              |
|              | 32              | AXK5F32345YJ                                   | AXK5F32347YG (From Oct. 2005)                        | AXK6F32345YJ                                   | AXK6F32347YG (From Oct. 2005)                        |                       |              |
|              | 34              | AXK5F34345YJ                                   | AXK5F34347YG (From Oct. 2005)                        | AXK6F34345YJ                                   | AXK6F34347YG (From Oct. 2005)                        |                       |              |
|              | 40              | AXK5F40345YJ                                   | AXK5F40347YG (From Oct. 2005)                        | AXK6F40345YJ                                   | AXK6F40347YG (From Oct. 2005)                        |                       |              |
|              | 50              | AXK5F50345YJ                                   | AXK5F50347YG (From Oct. 2005)                        | AXK6F50345YJ                                   | AXK6F50347YG (From Oct. 2005)                        |                       |              |
|              | 60              | AXK5F60345YJ                                   | AXK5F60347YG (From Oct. 2005)                        | AXK6F60345YJ                                   | AXK6F60347YG (From Oct. 2005)                        |                       |              |
|              | 70              | AXK5F70345YJ                                   | AXK5F70347YG (From Oct. 2005)                        | AXK6F70345YJ                                   | AXK6F70347YG (From Oct. 2005)                        |                       |              |
| 80           | AXK5F80345YJ    | AXK5F80347YG (From Oct. 2005)                  | AXK6F80345YJ   | AXK6F80347YG (From Oct. 2005)                  |  |                       |              |
| 2.0 mm       | 10              | AXK5F10545YJ                                   | AXK5F10547YG (From Oct. 2005)                        | AXK6F10345YJ                                   | AXK6F10347YG (From Oct. 2005)                        | 2,000 pieces          | 4,000 pieces |
|              | 12              | AXK5F12545YJ                                   | AXK5F12547YG (From Oct. 2005)                        | AXK6F12345YJ                                   | AXK6F12347YG (From Oct. 2005)                        |                       |              |
|              | 14              | AXK5F14545YJ                                   | AXK5F14547YG (From Oct. 2005)                        | AXK6F14345YJ                                   | AXK6F14347YG (From Oct. 2005)                        |                       |              |
|              | 16              | AXK5F16545YJ                                   | AXK5F16547YG (From Oct. 2005)                        | AXK6F16345YJ                                   | AXK6F16347YG (From Oct. 2005)                        |                       |              |
|              | 18              | AXK5F18545YJ                                   | AXK5F18547YG (From Oct. 2005)                        | AXK6F18345YJ                                   | AXK6F18347YG (From Oct. 2005)                        |                       |              |
|              | 20              | AXK5F20545YJ                                   | AXK5F20547YG (From Oct. 2005)                        | AXK6F20345YJ                                   | AXK6F20347YG (From Oct. 2005)                        |                       |              |
|              | 22              | AXK5F22545YJ                                   | AXK5F22547YG (From Oct. 2005)                        | AXK6F22345YJ                                   | AXK6F22347YG (From Oct. 2005)                        |                       |              |
|              | 24              | AXK5F24545YJ                                   | AXK5F24547YG (From Oct. 2005)                        | AXK6F24345YJ                                   | AXK6F24347YG (From Oct. 2005)                        |                       |              |
|              | 26              | AXK5F26545YJ                                   | AXK5F26547YG (From Oct. 2005)                        | AXK6F26345YJ                                   | AXK6F26347YG (From Oct. 2005)                        |                       |              |
|              | 30              | AXK5F30545YJ                                   | AXK5F30547YG (From Oct. 2005)                        | AXK6F30345YJ                                   | AXK6F30347YG (From Oct. 2005)                        |                       |              |
|              | 34              | AXK5F34545YJ                                   | AXK5F34547YG (From Oct. 2005)                        | AXK6F34345YJ                                   | AXK6F34347YG (From Oct. 2005)                        |                       |              |
|              | 40              | AXK5F40545YJ                                   | AXK5F40547YG (From Oct. 2005)                        | AXK6F40345YJ                                   | AXK6F40347YG (From Oct. 2005)                        |                       |              |
|              | 50              | AXK5F50545YJ                                   | AXK5F50547YG (From Oct. 2005)                        | AXK6F50345YJ                                   | AXK6F50347YG (From Oct. 2005)                        |                       |              |
|              | 60              | AXK5F60545YJ                                   | AXK5F60547YG (From Oct. 2005)                        | AXK6F60345YJ                                   | AXK6F60347YG (From Oct. 2005)                        |                       |              |
|              | 70              | AXK5F70545YJ                                   | AXK5F70547YG (From Oct. 2005)                        | AXK6F70345YJ                                   | AXK6F70347YG (From Oct. 2005)                        |                       |              |
|              | 80              | AXK5F80545YJ                                   | AXK5F80547YG (From Oct. 2005)                        | AXK6F80345YJ                                   | AXK6F80347YG (From Oct. 2005)                        |                       |              |
| 100          | AXK5F00545YJ    | AXK5F00547YG (From Oct. 2005)                  | AXK6F00345YJ   | AXK6F00347YG (From Oct. 2005)                  |  |                       |              |
| 2.5 mm       | 10              | AXK5F10545YJ                                   | AXK5F10547YG (From Oct. 2005)                        | AXK6F10545YJ                                   | AXK6F10547YG (From Oct. 2005)                        | 2,000 pieces          | 4,000 pieces |
|              | 12              | AXK5F12545YJ                                   | AXK5F12547YG (From Oct. 2005)                        | AXK6F12545YJ                                   | AXK6F12547YG (From Oct. 2005)                        |                       |              |
|              | 14              | AXK5F14545YJ                                   | AXK5F14547YG (From Oct. 2005)                        | AXK6F14545YJ                                   | AXK6F14547YG (From Oct. 2005)                        |                       |              |
|              | 16              | AXK5F16545YJ                                   | AXK5F16547YG (From Oct. 2005)                        | AXK6F16545YJ                                   | AXK6F16547YG (From Oct. 2005)                        |                       |              |
|              | 20              | AXK5F20545YJ                                   | AXK5F20547YG (From Oct. 2005)                        | AXK6F20545YJ                                   | AXK6F20547YG (From Oct. 2005)                        |                       |              |
|              | 22              | AXK5F22545YJ                                   | AXK5F22547YG (From Oct. 2005)                        | AXK6F22545YJ                                   | AXK6F22547YG (From Oct. 2005)                        |                       |              |
|              | 24              | AXK5F24545YJ                                   | AXK5F24547YG (From Oct. 2005)                        | AXK6F24545YJ                                   | AXK6F24547YG (From Oct. 2005)                        |                       |              |
|              | 30              | AXK5F30545YJ                                   | AXK5F30547YG (From Oct. 2005)                        | AXK6F30545YJ                                   | AXK6F30547YG (From Oct. 2005)                        |                       |              |
|              | 34              | AXK5F34545YJ                                   | AXK5F34547YG (From Oct. 2005)                        | AXK6F34545YJ                                   | AXK6F34547YG (From Oct. 2005)                        |                       |              |
|              | 36              | AXK5F36545YJ                                   | AXK5F36547YG (From Oct. 2005)                        | AXK6F36545YJ                                   | AXK6F36547YG (From Oct. 2005)                        |                       |              |
|              | 40              | AXK5F40545YJ                                   | AXK5F40547YG (From Oct. 2005)                        | AXK6F40545YJ                                   | AXK6F40547YG (From Oct. 2005)                        |                       |              |
|              | 44              | AXK5F44545YJ                                   | AXK5F44547YG (From Oct. 2005)                        | AXK6F44545YJ                                   | AXK6F44547YG (From Oct. 2005)                        |                       |              |
|              | 50              | AXK5F50545YJ                                   | AXK5F50547YG (From Oct. 2005)                        | AXK6F50545YJ                                   | AXK6F50547YG (From Oct. 2005)                        |                       |              |
|              | 60              | AXK5F60545YJ                                   | AXK5F60547YG (From Oct. 2005)                        | AXK6F60545YJ                                   | AXK6F60547YG (From Oct. 2005)                        |                       |              |
|              | 70              | AXK5F70545YJ                                   | AXK5F70547YG (From Oct. 2005)                        | AXK6F70545YJ                                   | AXK6F70547YG (From Oct. 2005)                        |                       |              |
|              | 80              | AXK5F80545YJ                                   | AXK5F80547YG (From Oct. 2005)                        | AXK6F80545YJ                                   | AXK6F80547YG (From Oct. 2005)                        |                       |              |
| 100          | AXK5F00545YJ    | AXK5F00547YG (From Oct. 2005)                  | AXK6F00545YJ   | AXK6F00547YG (From Oct. 2005)                  |  |                       |              |

- Notes: 1. Regarding ordering units, During production: Please make orders in 1-reel units.  
Samples for mounting confirmation: Available in units of 50 pieces. Please consult us. (See "Regarding sample orders to confirm proper mounting" on page 13.)  
Samples: Small lot orders are possible. Please consult us.
2. The standard type comes without positioning bosses. Connectors with positioning bosses are available for on-demand production. For this type of connector, 9th digit of the part no. changes from 4 to 3. e.g.  
Mated height 1.5mm, 10 contacts for sockets: AXK5F10337YG
3. The 11th digit "Y" in the socket/header part number indicates the connector has a V notch. (For details, please consult one of our sales offices.)

## 1. Characteristics

|                               | Item  | Specifications   | Conditions  |
|-------------------------------|---|--|---|
| Electrical characteristics    | Rated current   | 0.5A/contact (Max. 10 A at total contacts)   |   |
|                               | Rated voltage   | 60V AC/DC  |   |
|                               | Breakdown voltage                                     | 150V AC for 1 minute   | Detection current: 1mA  |
|                               | Insulation resistance                                 | Min. 1,000M $\Omega$ (initial)   | Using 500V DC megger  |
|                               | Contact resistance                                    | Max. 90m $\Omega$  | Measured based on the HP4338B measurement method of JIS C 5402  |
| Mechanical characteristics    | Composite insertion force                             | Max. 0.981N {100gf}/contacts $\times$ contacts (initial)                                   |   |
|                               | Composite removal force                               | Min. 0.0588N {6gf}/contacts $\times$ contacts  |   |
|                               | Post holding force                                    | Min. 0.981N {100gf}/contact  | Measures the maximum load in the post axial direction until removal   |
| Environmental characteristics | Ambient temperature                                   | -55°C to +85°C   | No freezing at low temperatures   |
|                               | Soldering heat resistance                             | Max. peak temperature of 245°C   | Infrared reflow soldering   |
|                               |   | 300°C within 5 seconds   | Soldering iron  |
|                               | Thermal shock resistance (header and socket mated)    | 5 cycles, insulation resistance min. 100M $\Omega$ , contact resistance max. 90m $\Omega$  | Sequence<br>1. -55 $\frac{3}{8}$ °C, 30 minutes<br>2. ~, Max. 5 minutes<br>3. 85 $\frac{3}{8}$ °C, 30 minutes<br>4. ~, Max. 5 minutes |
|                               | Humidity resistance (header and socket mated)         | 120 hours, insulation resistance min. 100M $\Omega$ , contact resistance max. 90m $\Omega$ | Bath temperature 40 $\pm$ 2°C, humidity 90 to 95% R.H.  |
|                               | Saltwater spray resistance (header and socket mated)  | 24 hours, insulation resistance min. 100M $\Omega$ , contact resistance max. 90m $\Omega$  | Bath temperature 35 $\pm$ 2°C, saltwater concentration 5 $\pm$ 1%   |
|                               | H <sub>2</sub> S resistance (header and socket mated) | 48 hours, contact resistance max. 90m $\Omega$   | Bath temperature 40 $\pm$ 2°C, gas concentration 3 $\pm$ 1 ppm, humidity 75 to 80% R.H.   |
| Lifetime characteristics      | Insertion and removal life                            | 50 times   | Repeated insertion and removal speed of max. 200 times/hours  |
| Unit weight                   |   | Mated height 1.5mm, 20 contacts; Socket: 0.06g<br>Header: 0.04g                            |   |

## 2. Material and surface treatment

| Part name      | Material                       | Surface treatment   |
|----------------|--------------------------------|---|
| Molded portion | Heat-resistant resin (UL94V-0) | —   |
| Contact/Post   | Copper alloy                   | Contact portion: Ni plating on base, Au plating on surface<br>Terminal portion: Ni plating on base, Au plating on surface (Except for thick of terminal)<br>However, the area adjacent to the terminal on Ni barrier models is exposed to Ni on base. |

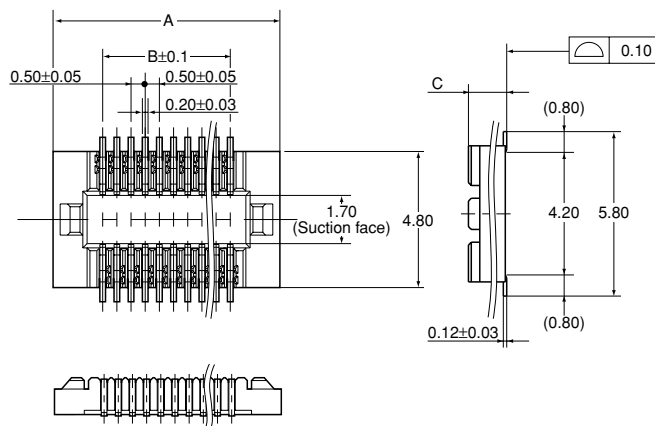
## DIMENSIONS

- Socket (Mated height: 1.5mm, 2.0mm, 2.5mm)



Dimension table (mm)

| No. of contacts | A     | B     |
|-----------------|-------|-------|
| 10              | 5.50  | 2.00  |
| 12              | 6.00  | 2.50  |
| 14              | 6.50  | 3.00  |
| 16              | 7.00  | 3.50  |
| 18              | 7.50  | 4.00  |
| 20              | 8.00  | 4.50  |
| 22              | 8.50  | 5.00  |
| 24              | 9.00  | 5.50  |
| 26              | 9.50  | 6.00  |
| 30              | 10.50 | 7.00  |
| 32              | 11.00 | 7.50  |
| 34              | 11.50 | 8.00  |
| 36              | 12.00 | 8.50  |
| 40              | 13.00 | 9.50  |
| 44              | 14.00 | 10.50 |
| 50              | 15.50 | 12.00 |
| 60              | 18.00 | 14.50 |
| 70              | 20.50 | 17.00 |
| 80              | 23.00 | 19.50 |
| 100             | 28.00 | 24.50 |



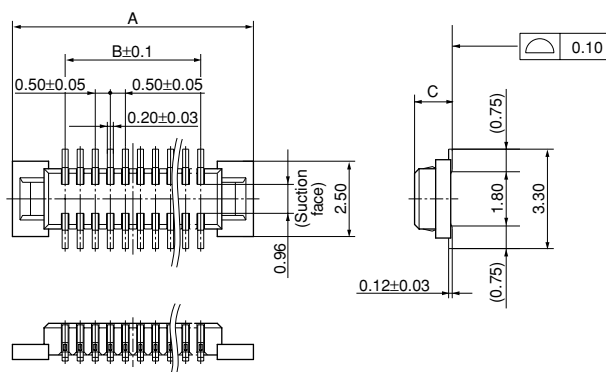
| Mated height   | C    |
|----------------|------|
| 1.5 mm         | 1.35 |
| 2.0 mm, 2.5 mm | 1.85 |

- Header (Mated height: 1.5mm, 2.0mm, 2.5mm)



Dimension table (mm)

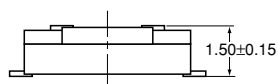
| No. of contacts | A     | B     |
|-----------------|-------|-------|
| 10              | 5.50  | 2.00  |
| 12              | 6.00  | 2.50  |
| 14              | 6.50  | 3.00  |
| 16              | 7.00  | 3.50  |
| 18              | 7.50  | 4.00  |
| 20              | 8.00  | 4.50  |
| 22              | 8.50  | 5.00  |
| 24              | 9.00  | 5.50  |
| 26              | 9.50  | 6.00  |
| 30              | 10.50 | 7.00  |
| 32              | 11.00 | 7.50  |
| 34              | 11.50 | 8.00  |
| 36              | 12.00 | 8.50  |
| 40              | 13.00 | 9.50  |
| 44              | 14.00 | 10.50 |
| 50              | 15.50 | 12.00 |
| 60              | 18.00 | 14.50 |
| 70              | 20.50 | 17.00 |
| 80              | 23.00 | 19.50 |
| 100             | 28.00 | 24.50 |



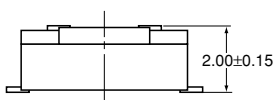
| Mated height   | C    |
|----------------|------|
| 1.5 mm, 2.0 mm | 1.25 |
| 2.5 mm         | 1.75 |

- Socket and header are mated

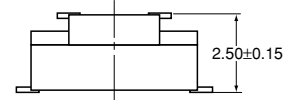
Mated height: 1.5 mm



Mated height: 2.0 mm



Mated height: 2.5 mm



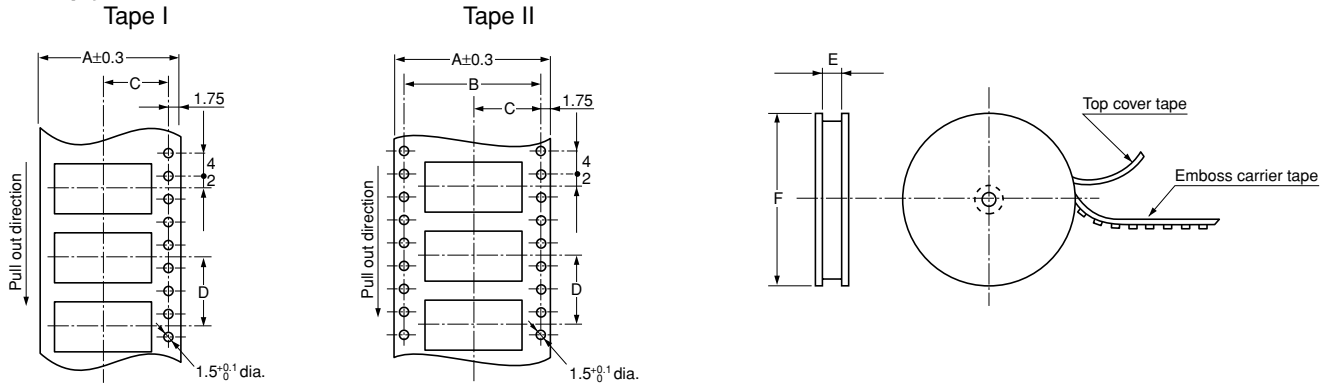
# AXK(5/6)F

## EMBOSSED TAPE DIMENSIONS

(unit:mm, Common for respective contact type, socket and header)

• Tape dimensions (Conforming to JIS C 0806-1990.  
However, some tapes have mounting hole pitches that do not comply with the standard.)

• Plastic reel dimensions (Conforming to EIAJ ET-7200B)/  
Paper reel dimensions (Conforming to JIS C 0806-1990)



### Dimension table (mm)

(1) Suffix: P (1 reel, 2,000 pieces embossed tape: Plastic reel package) ... From Oct. 2005

| Mated height   | No. of contacts | Type of taping | A    | B    | C    | D    | E      | F        | Quantity per reel |
|--|-----------------|----------------|------|------|------|------|--------|----------|-------------------|
| Socket and header are common:<br>1.5mm, 2.0mm, 2.5mm | 10 to 58        | Tape I         | 24.0 | —    | 11.5 | 12.0 | 25.4±1 | 380 dia. | 2,000 pcs.        |
|  | 60 to 70        | Tape II        | 32.0 | 28.4 | 14.2 | 12.0 | 33.4±1 | 380 dia. | 2,000 pcs.        |
|  | 72 to 100       | Tape II        | 44.0 | 40.4 | 20.2 | 12.0 | 45.4±1 | 380 dia. | 2,000 pcs.        |

(2) Suffix: J (1 reel, 2,000 pieces embossed tape: Paper reel package)

| Mated height   | No. of contacts | Type of taping | A    | B    | C    | D    | E                                 | F        | Quantity per reel |
|--|-----------------|----------------|------|------|------|------|-----------------------------------|----------|-------------------|
| Socket and header are common:<br>1.5mm, 2.0mm, 2.5mm | 10 to 58        | Tape I         | 24.0 | —    | 11.5 | 12.0 | 24.4 <sup>+2</sup> / <sub>0</sub> | 370 dia. | 2,000 pcs.        |
|  | 60 to 70        | Tape II        | 32.0 | 28.4 | 14.2 | 12.0 | 32.4 <sup>+2</sup> / <sub>0</sub> | 370 dia. | 2,000 pcs.        |
|  | 72 to 100       | Tape II        | 44.0 | 40.4 | 20.2 | 12.0 | 44.4 <sup>+2</sup> / <sub>0</sub> | 370 dia. | 2,000 pcs.        |

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

| Direction of tape progress | Type   | Common for P5KF |  |
|----------------------------|--------|-----------------|--|
|                            | Socket | Header          |  |
| ↓                          |        |                 |  |

Note: There is no indication on this product regarding top-bottom or left-right orientation.

# Narrow Pitch Connector P5KF (0.5 mm pitches) for Inspection Usage

## CONNECTOR FOR INSPECTION USAGE APPLICATIONS WITH 3,000 INSERTION AND REMOVAL TIMES



Socket



Header

### FEATURES

#### 1. 3,000 insertion and removals (when as recommended)

From the 50 insertion and removals of standard type, up to 3,000 insertion and removals (with recommended insertion and removal) are possible for use in inspection.

Ideal for inspection of module units and inspection during the device assembly process

#### 2. Same external dimensions and foot pattern as standard type.

Since shape is the same as standard type, inspection is possible without interfering with devices in the vicinity of standard connectors.

#### 3. Improved mating

Insertion and removal have become easier due to a reduction in the mating retention force required by the simple locking structure and also in the amount of force needed for insertion and removal. (We cannot warrant anything regarding mating retention.)

### TABLE OF PRODUCT TYPES

☆: Available for sale

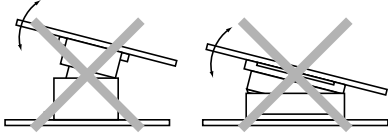
| Product name | P5KF for inspection |
|--------------|---------------------|
| 10           | ☆                   |
| 12           | ☆                   |
| 14           | ☆                   |
| 16           | ☆                   |
| 18           | ☆                   |
| 20           | ☆                   |
| 22           | ☆                   |
| 24           | ☆                   |
| 26           | ☆                   |
| 30           | ☆                   |
| 32           | ☆                   |
| 34           | ☆                   |
| 40           | ☆                   |
| 50           | ☆                   |
| 60           | ☆                   |
| 70           | ☆                   |
| 80           | ☆                   |
| 100          | ☆                   |

Notes:

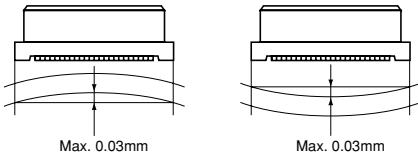
1. You can use with each mated height in common.
2. Please inquire about numbers of contacts other than those given above.
3. Please inquire with us regarding delivery times.
4. Please keep the minimum unit for ordering no less than 50 pieces per lot.
5. Please inquire for further information.

## NOTES

1. As shown below, excess force during insertion may result in damage to the connector or removal of the solder. Please be careful. Also, to prevent connector damage please confirm the correct position before mating connectors.



2. Keep the PC board warp no more than 0.03 mm in relation to the overall length of the connector.

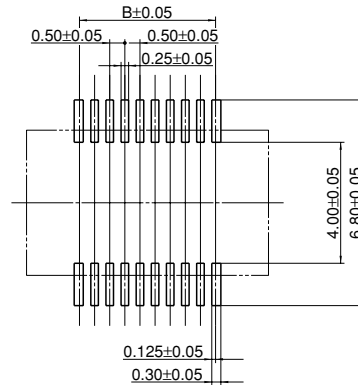


### 3. PC Boards and Recommended Metal Mask Patterns

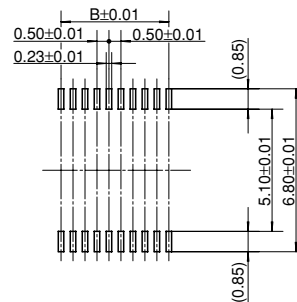
Connectors are mounted with high density, with a pitch interval of 0.4 to 0.5 mm. It is therefore necessary to make sure that the right levels of solder are used, in order to reduce solder bridge and other issues. The figures to the right are recommended metal mask patterns. Please use them as a reference.

#### • Socket

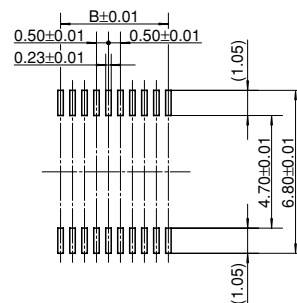
Recommended PC board pattern (TOP VIEW)



Recommended metal mask pattern  
Metal mask thickness: Here, 150 μm  
(Opening area ratio: 56%)

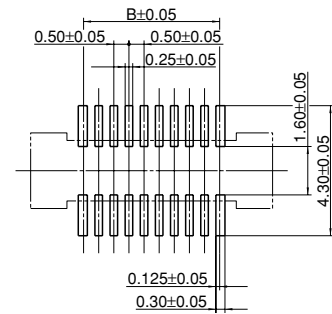


Recommended metal mask pattern  
Metal mask thickness: Here, 120 μm  
(Opening area ratio: 69%)

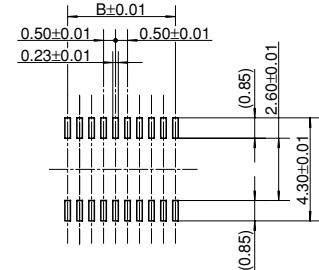


#### • Header

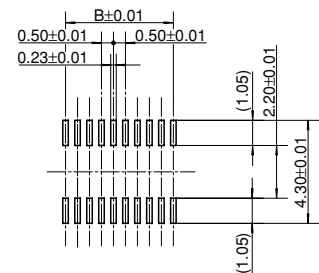
Recommended PC board pattern (TOP VIEW)



Recommended metal mask pattern  
Metal mask thickness: Here, 150 μm  
(Opening area ratio: 58%)



Recommended metal mask pattern  
Metal mask thickness: Here, 120 μm  
(Opening area ratio: 72%)



\* See the dimension table for more information on the B dimension of the socket and header.

Regarding general notes, please refer to page 12.

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