



NARROW-PITCH CONNECTORS FOR PC BOARDS

NARROW-PITCH (0.8mm) CONNECTORS — P8 SERIES —



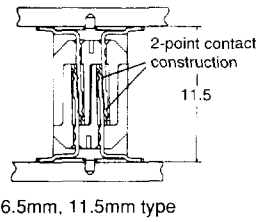
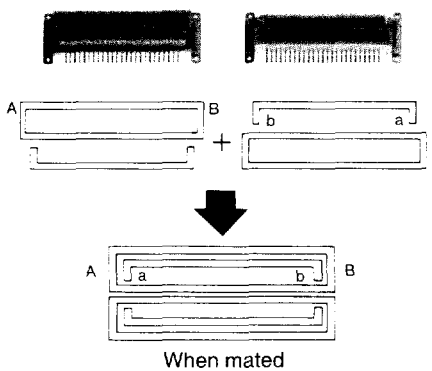
| Stacking height | Pitch | | | | | | | | | | | |
|-----------------|-------|-------|-----|-------|-----|-------|-----|-------|-----|-----|--------|------|
| | 3mm | 3.5mm | 4mm | 4.5mm | 5mm | 5.5mm | 6mm | 6.5mm | 7mm | 8mm | 11.5mm | 13mm |
| 16 | ● | — | ● | — | — | — | — | — | — | — | — | — |
| 20 | ● | — | ● | — | ● | — | ● | — | ● | ● | — | — |
| 22 | — | — | — | — | — | — | — | — | ● | — | — | — |
| 24 | ● | — | — | — | — | — | ● | — | — | — | — | — |
| 26 | ● | — | ● | — | — | — | — | — | ● | — | — | — |
| 30 | ● | ● | ● | ● | ● | ● | ● | — | ● | ● | ● | — |
| 34 | — | — | — | — | — | — | — | — | — | ● | — | — |
| 40 | ● | — | ● | — | ● | — | ● | — | ● | ● | ● | — |
| 50 | ● | — | ● | — | ● | — | ● | ● | ● | ● | ● | ● |
| 60 | ● | — | — | — | — | — | — | — | — | — | — | — |
| 80 | ● | — | ● | — | ● | — | ● | — | ● | ● | ● | ● |
| 90 | ● | — | — | — | — | — | — | — | — | — | — | — |
| 100 | ● | — | ● | — | ● | — | ● | — | ● | ● | ● | — |

● Available

FEATURES

1. A wide variety available, including 0.8mm pitch and ultra-low 3mm profile.

2. Original sockets and headers with the same shape (6.5mm, 11.5mm type)

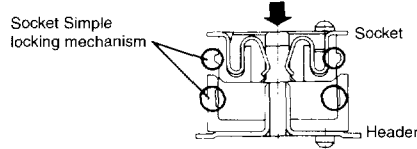


4. Long Lifetime

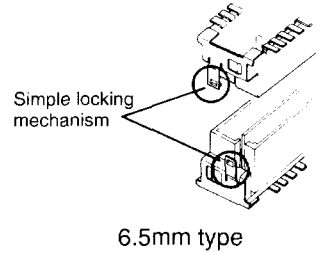
The 0.2µm Au plating layer and our unique pinhole filling technology*2 ensure long lifetime.

- 3mm, 4mm, 5mm, 6mm, 7mm, 8mm type: 50 times
- 6.5mm, 11.5mm type: 100 times

5. Simple locking mechanism assure high resistance to vibration and impact



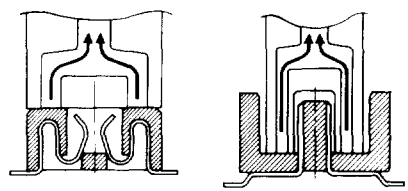
3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 13mm type



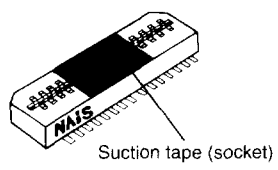
6. Compatibility with Automatic Placement

The surface-mount design makes connectors compatible with the automatic placement process.

- 1) Compatible with suction-type placement machine:
- Using the following type of suction nozzle makes the connectors compatible with automatic placement without the need for suction tape.

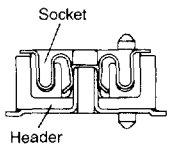


- A unique suction tape configuration makes the connectors compatible with suction-type automatic placement machines.

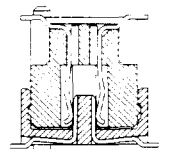


3. Unique bellows-type*1 contacts

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



3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm type



6mm, 7mm, 8mm, 13mm type

AXN(1/3/4)

2) Positioning tab



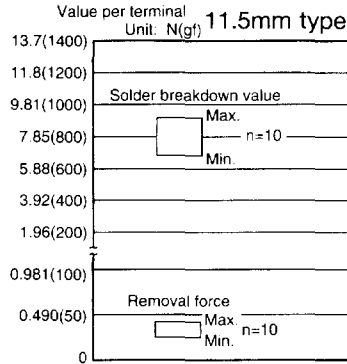
Tab for positioning on the PC board.
Suitable for both manual and automatic insertion.

3) Reverse mating prevention key:
Reverse mating is prevented by positioning bosses which are asymmetrical in both position and diameter.

4) Compatibility with embossed tape package.

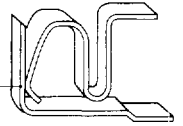
5) Comparison of solder breakdown value and removal force

Solder breakdown value:
Measures the value at which the soldered portion breaks down when pulled in the connector removal direction



Notes:

*1. Bellows contacts:
The bellows contacts comprise thin formed sheet metal. They offer reliable contact since a rounded corner, instead of a sharp edge, is used for contact.



Rounded corner makes contact.

*2. Pinhole filling process covers the Au plating layer surface with a very thin film (100Å) to fill pin holes.

APPLICATIONS

Small portable equipment, personal computers, word processors, video equipment, radio communication equipment, cellular telephone, PCS, etc.

SPECIFICATIONS

1. Characteristics

| Item | Specifications | | Conditions | | | | | | | | | | | | | | | | |
|---|---|---|--|---|----------|------------------|----------------|---|----------------------------------|----|---|----------------------------------|--------|---|---------------------------------|----|---|----------------------------------|--------|
| | 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 13mm type | 6.5mm, 11.5mm type | | | | | | | | | | | | | | | | | |
| Electrical characteristics | Rated current | 0.5A | | | | | | | | | | | | | | | | | |
| | Rated voltage | AC, DC 60V | | | | | | | | | | | | | | | | | |
| | Breakdown voltage | 250V AC for 1 minute | | | | | | | | | | | | | | | | | |
| | Insulation resistance | Min. 1,000MΩ | | | | | | | | | | | | | | | | | |
| | Contact resistance | Max. 60mΩ | Max. 50mΩ | Detection current: 1mA Using 500V DC megohmmeter Measured with YHP4328A | | | | | | | | | | | | | | | |
| Mechanical characteristics | Composite insertion force | Max. 43.1N {4.40kgf} (30 contacts) | Max. 0.785N {80gf} × no. of contacts {Initial} | | | | | | | | | | | | | | | | |
| | Composite removal force | Min. 6.37N {0.65kgf} (30 contacts) | Min. 0.127N {13gf} × no. of contacts | | | | | | | | | | | | | | | | |
| Environmental characteristics | Ambient temperature | -55°C to +85°C | | | | | | | | | | | | | | | | | |
| | Soldering heat resistance | Max. peak temperature of 245°C 300°C within 5 seconds | | | | | | | | | | | | | | | | | |
| | Thermal shock resistance (header and socket mated) | 5 cycles, insulation resistance min. 100MΩ, contact resistance max. 60mΩ | 5 cycles, insulation resistance min. 100MΩ, contact resistance max. 50mΩ | <table border="1"> <thead> <tr> <th>Sequence</th> <th>Temperature (°C)</th> <th>Time (minutes)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-55⁻³/₅</td> <td>30</td> </tr> <tr> <td>2</td> <td>25⁻¹⁰/₅</td> <td>Max. 5</td> </tr> <tr> <td>3</td> <td>85⁻³/₅</td> <td>30</td> </tr> <tr> <td>4</td> <td>25⁻¹⁰/₅</td> <td>Max. 5</td> </tr> </tbody> </table> | Sequence | Temperature (°C) | Time (minutes) | 1 | -55 ⁻³ / ₅ | 30 | 2 | 25 ⁻¹⁰ / ₅ | Max. 5 | 3 | 85 ⁻³ / ₅ | 30 | 4 | 25 ⁻¹⁰ / ₅ | Max. 5 |
| | Sequence | Temperature (°C) | Time (minutes) | | | | | | | | | | | | | | | | |
| | 1 | -55 ⁻³ / ₅ | 30 | | | | | | | | | | | | | | | | |
| | 2 | 25 ⁻¹⁰ / ₅ | Max. 5 | | | | | | | | | | | | | | | | |
| | 3 | 85 ⁻³ / ₅ | 30 | | | | | | | | | | | | | | | | |
| | 4 | 25 ⁻¹⁰ / ₅ | Max. 5 | | | | | | | | | | | | | | | | |
| Humidity resistance (header and socket mated) | 120 hours, insulation resistance min. 100MΩ, contact resistance max. 60mΩ | 240 hours, insulation resistance min. 100MΩ, contact resistance max. 50mΩ | Bath temperature 40±2°C, humidity 90 to 95% R.H. | | | | | | | | | | | | | | | | |
| Saltwater spray resistance (header and socket mated) | 24 hours, insulation resistance min. 100MΩ, contact resistance max. 60mΩ | 48 hours, insulation resistance min. 100MΩ, contact resistance max. 50mΩ | Bath temperature 35±2°C, saltwater concentration 5±1% | | | | | | | | | | | | | | | | |
| H ₂ S resistance (header and socket mated) | 48 hours, contact resistance max. 60mΩ | 96 hours, contact resistance max. 50mΩ | Bath temperature 40±2°C, gas concentration 3±1 ppm, humidity 75 to 80% R.H. | | | | | | | | | | | | | | | | |
| SO ₂ resistance (header and socket mated) | 48 hours, contact resistance max. 60mΩ | 96 hours, contact resistance max. 50mΩ | Bath temperature 40±2°C, gas concentration 10±3 ppm, humidity 90 to 95% R.H. | | | | | | | | | | | | | | | | |
| Lifetime characteristics | Insertion and removal life | 50 times | 100 times Repeated insertion and removal speed of max. 200 times/hours | | | | | | | | | | | | | | | | |

2. Material and surface treatment

| Part name | 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 13mm type | | 6.5mm, 11.5mm type | |
|----------------|--|---|--|---|
| | Material | Surface treatment | Material | Surface treatment |
| Molded portion | Heat-resistant resin (UL94V-0) | — | Liquid crystal polymer resin (UL94V-0) | — |
| Bracket | — | — | Copper alloy | SnPb plating over Ni |
| Contact | Copper alloy | 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm type Contact portion: Au plating over Ni Terminal portion: Socket – Au plating over Ni Header – SnPb plating over Ni 6mm, 7mm, 8mm, 13mm type Contact portion: Au plating over Ni Terminal portion: Socket/Header – SnPb plating over Ni | Copper alloy | Contact portion: Au plating over Ni Terminal portion: SnPb plating over Ni |

PRODUCT TYPES

| Stacking height | No. of contacts | | Tube package | | | Embossed tape & reel package | | | Remarks |
|-----------------|-----------------|------------|--------------|------------------|--------------|------------------------------|------------------|--------------|--|
| | | | Part No. | Packing quantity | | Part No. | Packing quantity | | |
| | | | | Tube | Outer carton | | Reel | Outer carton | |
| 3 mm | 16 | Socket | AXN316038S | 50 pcs. | 300 pcs. | AXN316038P* | 1,000 pcs. | 2,000 pcs. | Sockets and header have different outlines. |
| | | Header | AXN416330S | 50 pcs. | 300 pcs. | AXN416330P* | 1,000 pcs. | 2,000 pcs. | |
| | 20 | Socket | AXN320038S | 50 pcs. | 300 pcs. | AXN320038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN420330S | 50 pcs. | 300 pcs. | AXN420330P* | 1,000 pcs. | 2,000 pcs. | |
| | 24 | Socket | AXN324038S | 30 pcs. | 300 pcs. | AXN324038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN424330S | 30 pcs. | 300 pcs. | AXN424330P* | 1,000 pcs. | 2,000 pcs. | |
| | 26 | Socket | AXN326038S | 30 pcs. | 300 pcs. | AXN326038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN426330S | 30 pcs. | 300 pcs. | AXN426330P* | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330038S | 30 pcs. | 300 pcs. | AXN330038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430330S | 30 pcs. | 300 pcs. | AXN430330P* | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340038S | 25 pcs. | 300 pcs. | AXN340038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440330S | 25 pcs. | 300 pcs. | AXN440330P* | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350038S | 20 pcs. | 300 pcs. | AXN350038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450330S | 20 pcs. | 300 pcs. | AXN450330P* | 1,000 pcs. | 2,000 pcs. | |
| | 60 | Socket | AXN360038S | 15 pcs. | 300 pcs. | AXN360038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN460330S | 15 pcs. | 300 pcs. | AXN460330P* | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380038S | 12 pcs. | 300 pcs. | AXN380038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480330S | 12 pcs. | 300 pcs. | AXN480330P* | 1,000 pcs. | 2,000 pcs. | |
| 90 | Socket | AXN390038S | 12 pcs. | 300 pcs. | AXN390038P* | 1,000 pcs. | 2,000 pcs. | | |
| | Header | AXN490330S | 12 pcs. | 300 pcs. | AXN490330P* | 1,000 pcs. | 2,000 pcs. | | |
| 100 | Socket | AXN300038S | 12 pcs. | 300 pcs. | — | — | — | | |
| | Header | AXN400330S | 12 pcs. | 300 pcs. | — | — | — | | |
| 3.5 mm | 30 | Socket | AXN330238S | 30 pcs. | 300 pcs. | AXN330238P* | 1,000 pcs. | 2,000 pcs. | Sockets and header have different outlines. |
| | | Header | AXN430330S | 30 pcs. | 300 pcs. | AXN430330P* | 1,000 pcs. | 2,000 pcs. | |
| 4 mm | 16 | Socket | AXN316038S | 50 pcs. | 300 pcs. | AXN316038P* | 1,000 pcs. | 2,000 pcs. | Sockets and header have different outlines. |
| | | Header | AXN416430S | 50 pcs. | 300 pcs. | AXN416430P | 1,000 pcs. | 2,000 pcs. | |
| | 20 | Socket | AXN320038S | 50 pcs. | 300 pcs. | AXN320038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN420430S | 50 pcs. | 300 pcs. | AXN420430P | 1,000 pcs. | 2,000 pcs. | |
| | 26 | Socket | AXN326038S | 30 pcs. | 300 pcs. | AXN326038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN426430S | 30 pcs. | 300 pcs. | AXN426430P | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330038S | 30 pcs. | 300 pcs. | AXN330038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430430S | 30 pcs. | 300 pcs. | AXN430430P | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340038S | 25 pcs. | 300 pcs. | AXN340038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440430S | 25 pcs. | 300 pcs. | AXN440430P | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350038S | 20 pcs. | 300 pcs. | AXN350038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450430S | 20 pcs. | 300 pcs. | AXN450430P | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380038S | 12 pcs. | 300 pcs. | AXN380038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480430S | 12 pcs. | 300 pcs. | AXN480430P | 1,000 pcs. | 2,000 pcs. | |
| 100 | Socket | AXN300038S | 12 pcs. | 300 pcs. | — | — | — | | |
| | Header | AXN400430S | 12 pcs. | 300 pcs. | — | — | — | | |
| 4.5 mm | 30 | Socket | AXN330238S | 30 pcs. | 300 pcs. | AXN330238P* | 1,000 pcs. | 2,000 pcs. | Sockets and header have different outlines. |
| | | Header | AXN430430S | 30 pcs. | 300 pcs. | AXN430430P | 1,000 pcs. | 2,000 pcs. | |
| 5 mm | 20 | Socket | AXN320038S | 50 pcs. | 300 pcs. | AXN320038P* | 1,000 pcs. | 2,000 pcs. | Sockets and header have different outlines. |
| | | Header | AXN420530S | 50 pcs. | 300 pcs. | AXN420530P | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330038S | 30 pcs. | 300 pcs. | AXN330038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430530S | 30 pcs. | 300 pcs. | AXN430530P | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340038S | 25 pcs. | 300 pcs. | AXN340038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440530S | 25 pcs. | 300 pcs. | AXN440530P | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350038S | 20 pcs. | 300 pcs. | AXN350038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450530S | 20 pcs. | 300 pcs. | AXN450530P | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380038S | 12 pcs. | 300 pcs. | AXN380038P* | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480530S | 12 pcs. | 300 pcs. | AXN480530P | 1,000 pcs. | 2,000 pcs. | |
| | 100 | Socket | AXN300038S | 12 pcs. | 300 pcs. | — | — | — | |
| | | Header | AXN400530S | 12 pcs. | 300 pcs. | — | — | — | |
| 5.5 mm | 30 | Socket | AXN330238S | 30 pcs. | 300 pcs. | AXN330238P* | 1,000 pcs. | 2,000 pcs. | Sockets and headers have different outlines. |
| | | Header | AXN430530S | 30 pcs. | 300 pcs. | AXN430530P | 1,000 pcs. | 2,000 pcs. | |

Notes:

1. Minimum ordering quantity is a single reel (1,000 pcs./lot) for embossed tape package. As for * marked products, 1,500 pcs./lot is available. When ordering, please change the suffix "P" to "J".
2. Connectors with suction tape are also available except for 16 contacts type. For this type of connector, insert the letter "C" between the 3rd and 4th column of the ordering number.
Example: For a 20-contact socket with 3mm stacking height (embossed tape package): AXN320C038P
3. The standard type comes with positioning bosses. Connectors with no positioning bosses are available for on-demand production (3,000 pcs./lot or more).
4. 100-contact connectors are not available in an embossed tape package as the required embossed tape width exceeds the JIS standard.

PRODUCT TYPES

| Stacking height | No. of contacts | | Tube package | | | Embossed tape & reel package | | | Remarks |
|-----------------|-----------------|------------|--------------|------------------|--------------|------------------------------|------------------|--------------|--|
| | | | Part No. | Packing quantity | | Part No. | Packing quantity | | |
| | | | | Tube | Outer carton | | Reel | Outer carton | |
| 6 mm | 20 | Socket | AXN320130S | 50 pcs. | 300 pcs. | AXN320130P | 1,000 pcs. | 2,000 pcs. | Sockets and headers have different outlines. |
| | | Header | AXN420330S | 50 pcs. | 300 pcs. | AXN420330P* | 1,000 pcs. | 2,000 pcs. | |
| | 24 | Socket | AXN324130S | 30 pcs. | 300 pcs. | AXN324130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN424330S | 30 pcs. | 300 pcs. | AXN424330P* | 1,000 pcs. | 2,000 pcs. | |
| | 26 | Socket | AXN326130S | 30 pcs. | 300 pcs. | AXN326130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN426330S | 30 pcs. | 300 pcs. | AXN426330P* | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330130S | 30 pcs. | 300 pcs. | AXN330130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430330S | 30 pcs. | 300 pcs. | AXN430330P* | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340130S | 25 pcs. | 300 pcs. | AXN340130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440330S | 25 pcs. | 300 pcs. | AXN440330P* | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350130S | 20 pcs. | 300 pcs. | AXN350130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450330S | 20 pcs. | 300 pcs. | AXN450330P* | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380130S | 12 pcs. | 300 pcs. | AXN380130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480330S | 12 pcs. | 300 pcs. | AXN480330P* | 1,000 pcs. | 2,000 pcs. | |
| 100 | Socket | AXN300130S | 12 pcs. | 300 pcs. | — | — | — | | |
| | Header | AXN400330S | 12 pcs. | 300 pcs. | — | — | — | | |
| 7 mm | 20 | Socket | AXN320130S | 50 pcs. | 300 pcs. | AXN320130P | 1,000 pcs. | 2,000 pcs. | Sockets and headers have different outlines. |
| | | Header | AXN420430S | 50 pcs. | 300 pcs. | AXN420430P | 1,000 pcs. | 2,000 pcs. | |
| | 22 | Socket | AXN322130S | 30 pcs. | 300 pcs. | AXN322130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN422430S | 30 pcs. | 300 pcs. | AXN422430P | 1,000 pcs. | 2,000 pcs. | |
| | 26 | Socket | AXN326130S | 30 pcs. | 300 pcs. | AXN326130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN426430S | 30 pcs. | 300 pcs. | AXN426430P | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330130S | 30 pcs. | 300 pcs. | AXN330130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430430S | 30 pcs. | 300 pcs. | AXN430430P | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340130S | 25 pcs. | 300 pcs. | AXN340130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440430S | 25 pcs. | 300 pcs. | AXN440430P | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350130S | 20 pcs. | 300 pcs. | AXN350130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450430S | 20 pcs. | 300 pcs. | AXN450430P | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380130S | 12 pcs. | 300 pcs. | AXN380130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480430S | 12 pcs. | 300 pcs. | AXN480430P | 1,000 pcs. | 2,000 pcs. | |
| 100 | Socket | AXN300130S | 12 pcs. | 300 pcs. | — | — | — | | |
| | Header | AXN400430S | 12 pcs. | 300 pcs. | — | — | — | | |
| 8 mm | 20 | Socket | AXN320130S | 50 pcs. | 300 pcs. | AXN320130P | 1,000 pcs. | 2,000 pcs. | Sockets and headers have different outlines. |
| | | Header | AXN420530S | 50 pcs. | 300 pcs. | AXN420530P | 1,000 pcs. | 2,000 pcs. | |
| | 30 | Socket | AXN330130S | 30 pcs. | 300 pcs. | AXN330130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN430530S | 30 pcs. | 300 pcs. | AXN430530P | 1,000 pcs. | 2,000 pcs. | |
| | 34 | Socket | AXN334130S | 30 pcs. | 300 pcs. | AXN334130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN434530S | 30 pcs. | 300 pcs. | AXN434530P | 1,000 pcs. | 2,000 pcs. | |
| | 40 | Socket | AXN340130S | 25 pcs. | 300 pcs. | AXN340130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN440530S | 25 pcs. | 300 pcs. | AXN440530P | 1,000 pcs. | 2,000 pcs. | |
| | 50 | Socket | AXN350130S | 20 pcs. | 300 pcs. | AXN350130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN450530S | 20 pcs. | 300 pcs. | AXN450530P | 1,000 pcs. | 2,000 pcs. | |
| | 80 | Socket | AXN380130S | 12 pcs. | 300 pcs. | AXN380130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480530S | 12 pcs. | 300 pcs. | AXN480530P | 1,000 pcs. | 2,000 pcs. | |
| | 100 | Socket | AXN300130S | 12 pcs. | 300 pcs. | — | — | — | |
| | | Header | AXN400530S | 12 pcs. | 300 pcs. | — | — | — | |
| 11.5 mm | 30 | Socket | AXN1300115S | 30 pcs. | 300 pcs. | AXN1300115P | 350 pcs. | 700 pcs. | Sockets and headers have same outlines. |
| | 40 | Socket | AXN1400115S | 25 pcs. | 300 pcs. | AXN1400115P | 350 pcs. | 700 pcs. | |
| | 50 | Socket | AXN1500115S | 20 pcs. | 300 pcs. | AXN1500115P | 350 pcs. | 700 pcs. | |
| | 80 | Socket | AXN1800115S | 12 pcs. | 300 pcs. | AXN1800115P | 250 pcs. | 500 pcs. | |
| | 100 | Socket | AXN1000115S | 12 pcs. | 300 pcs. | — | — | — | |
| 13 mm | 50 | Socket | AXN350130S | 20 pcs. | 300 pcs. | AXN350130P | 1,000 pcs. | 2,000 pcs. | Socket and headers have different outlines. |
| | | Header | AXN450030S | 20 pcs. | 300 pcs. | AXN450040P | 500 pcs. | 1,000 pcs. | |
| | 80 | Socket | AXN380130S | 12 pcs. | 300 pcs. | AXN380130P | 1,000 pcs. | 2,000 pcs. | |
| | | Header | AXN480030S | 12 pcs. | 300 pcs. | AXN480040P | 500 pcs. | 1,000 pcs. | |

Notes:

1. Minimum ordering quantity is a single reel (1,000 pcs./lot) for embossed tape package.
2. Connectors with suction tape are also available except for 16 contacts type. For this type of connector, insert the letter "C" between the 3rd and 4th column of the ordering number.
Example: For a 20-contact socket with 3mm stacking height (embossed tape package): AXN320C038P
3. The standard type comes with positioning bosses. Connectors with no positioning bosses are available for on-demand production (3,000 pcs/lot or more).
4. 100-contact connectors are not available in an embossed tape package as the required embossed tape width exceeds the JIS standard.
5. The standard type of 13mm embossed tape package does not come with positioning bosses.

DIMENSIONS

• Stacking height 3mm, 4mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 13mm type

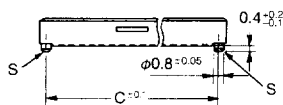
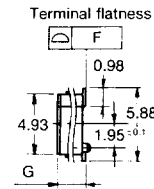
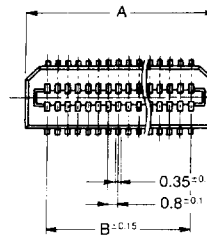
1) Socket body



Dimension table (mm)

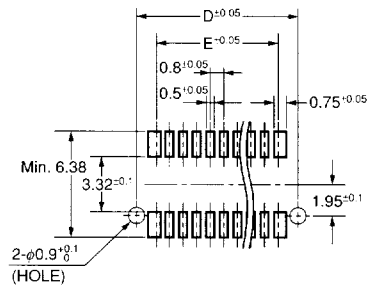
| No. of contacts | A | B | C | D | E | F |
|-----------------|-------|-------|-------|-------|-------|-----|
| 16 | 9.00 | 5.60 | 7.90 | 7.90 | 5.60 | 0.1 |
| 20 | 10.60 | 7.20 | 9.50 | 9.50 | 7.20 | |
| 22 | 11.40 | 8.00 | 10.30 | 10.30 | 8.00 | |
| 24 | 12.20 | 8.80 | 11.10 | 11.10 | 8.80 | |
| 26 | 13.00 | 9.60 | 11.90 | 11.90 | 9.60 | |
| 30 | 14.60 | 11.20 | 13.50 | 13.50 | 11.20 | |
| 34 | 16.20 | 12.80 | 15.10 | 15.10 | 12.80 | |
| 40 | 18.60 | 15.20 | 17.50 | 17.50 | 15.20 | |
| 50 | 23.40 | 19.20 | 21.50 | 21.50 | 19.20 | |
| 60 | 27.40 | 23.20 | 25.50 | 25.50 | 23.20 | |
| 80 | 35.40 | 31.20 | 33.50 | 33.50 | 31.20 | |
| 90 | 39.40 | 35.20 | 37.50 | 37.50 | 35.20 | |
| 100 | 43.40 | 39.20 | 41.50 | 41.50 | 39.20 | |

| Stacking height | G |
|----------------------------|-----|
| 3mm, 4mm, 5mm common | 2.2 |
| 3.5mm, 4.5mm, 5.5mm common | 2.7 |
| 6mm, 7mm, 8mm, 13mm common | 5.2 |



S: Positioning boss

Recommended PC board pattern (top view)



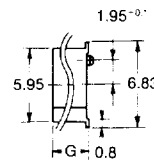
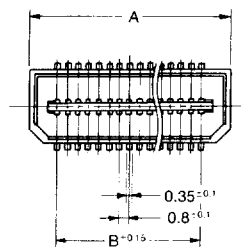
2) Header



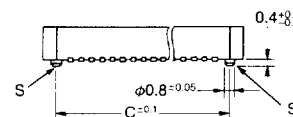
Dimension table (mm)

| No. of contacts | A | B | C | D | E | F |
|-----------------|-------|-------|-------|-------|-------|-----|
| 16 | 10.05 | 5.60 | 7.90 | 7.90 | 5.60 | 0.1 |
| 20 | 11.65 | 7.20 | 9.50 | 9.50 | 7.20 | |
| 22 | 12.45 | 8.00 | 10.30 | 10.30 | 8.00 | |
| 24 | 13.25 | 8.80 | 11.10 | 11.10 | 8.80 | |
| 26 | 14.05 | 9.60 | 11.90 | 11.90 | 9.60 | |
| 30 | 15.65 | 11.20 | 13.50 | 13.50 | 11.20 | |
| 34 | 17.25 | 12.80 | 15.10 | 15.10 | 12.80 | |
| 40 | 19.65 | 15.20 | 17.50 | 17.50 | 15.20 | |
| 50 | 25.85 | 19.20 | 21.50 | 21.50 | 19.20 | |
| 60 | 29.85 | 23.20 | 25.50 | 25.50 | 23.20 | |
| 80 | 37.85 | 31.20 | 33.50 | 33.50 | 31.20 | |
| 90 | 41.85 | 35.20 | 37.50 | 37.50 | 35.20 | |
| 100 | 45.85 | 39.20 | 41.50 | 41.50 | 39.20 | |

| Stacking height | G |
|------------------------|-------|
| 3mm, 3.5mm, 6mm common | 2.72 |
| 4mm, 4.5mm, 7mm common | 3.72 |
| 5mm, 5.5mm, 8mm common | 4.72 |
| 13mm | 10.14 |

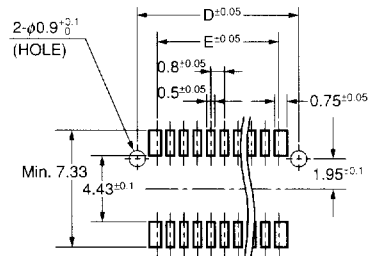


Terminal flatness



S: Positioning boss

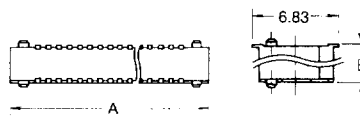
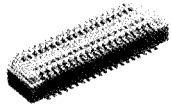
Recommended PC board pattern (top view)



AXN(1/3/4)

3) Socket and header are mated

mm General tolerance: ± 0.3



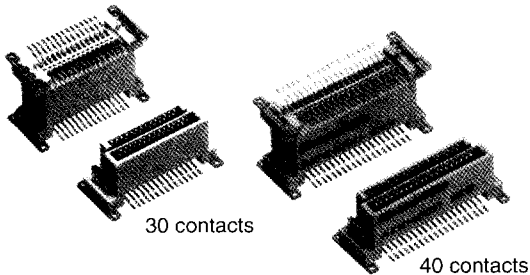
Dimension table (mm)

| No. of contacts | A | Stacking height | B |
|-----------------|-------|-----------------|-----|
| 16 | 10.05 | | |
| 20 | 11.65 | | |
| 22 | 12.45 | 3mm | 3 |
| 24 | 13.25 | 3.5mm | 3.5 |
| 26 | 14.05 | 4mm | 4 |
| 30 | 15.65 | 4.5mm | 4.5 |
| 34 | 17.25 | 5mm | 5 |
| 40 | 19.65 | 5.5mm | 5.5 |
| 50 | 25.85 | 6mm | 6 |
| 60 | 29.85 | 7mm | 7 |
| 80 | 37.85 | 8mm | 8 |
| 90 | 41.85 | 13mm | 13 |
| 100 | 45.85 | | |

Note) Specifications described in this page are subject to change without notice. For details please consult us.

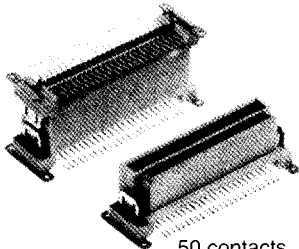
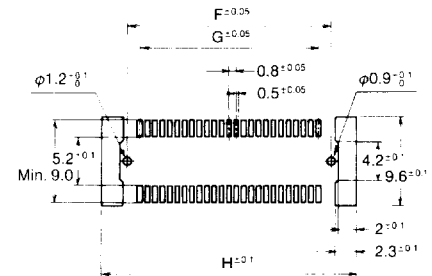
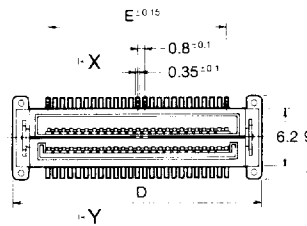
• Stacking height 11.5mm type

Recommended PC board pattern (top view)

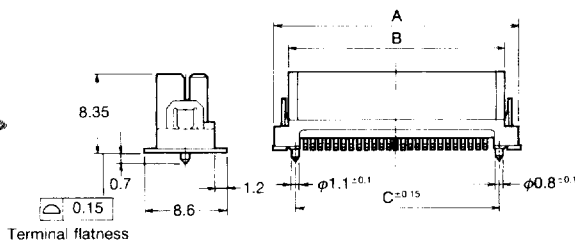


30 contacts

40 contacts

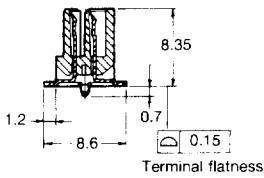


50 contacts



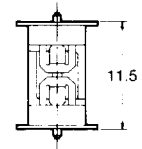
Terminal flatness

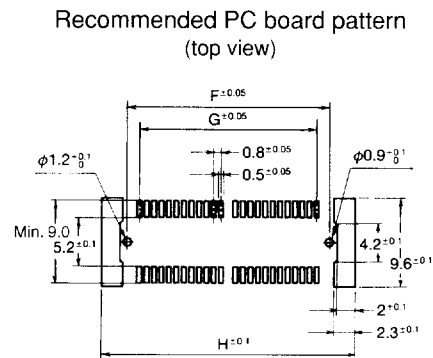
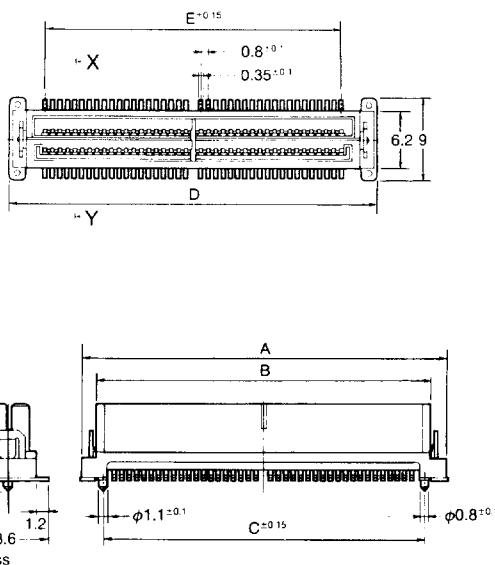
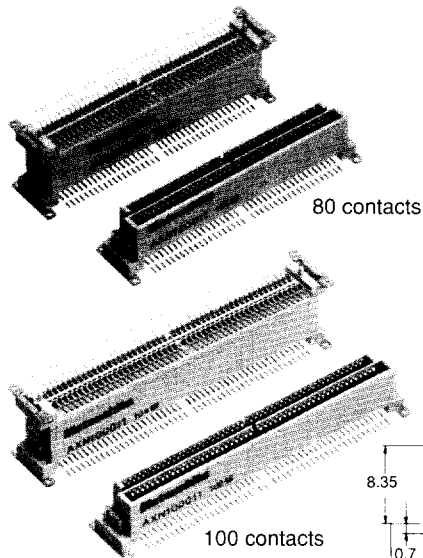
X-Y cross section



Terminal flatness

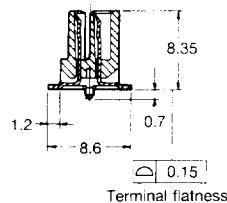
Stacking mated diagram



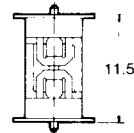


Note) Center terminal is removed for 80 and 100 contact type

X-Y cross section



Stacking mated diagram



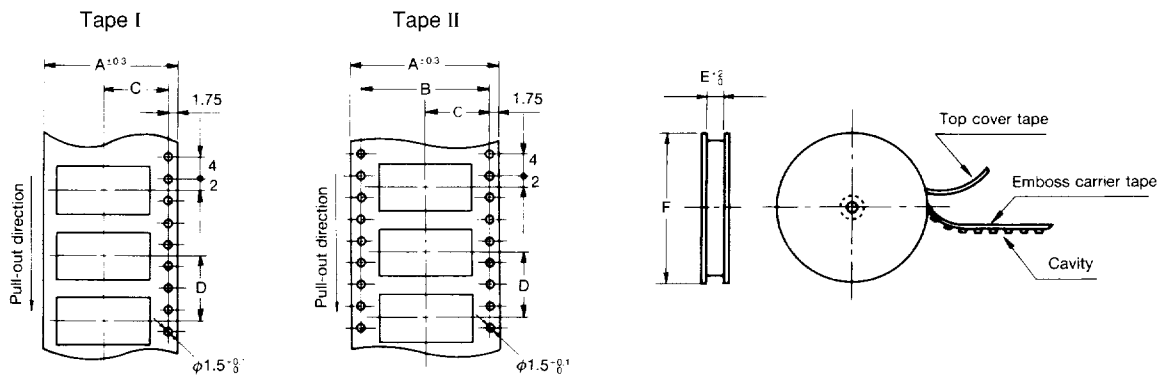
Dimension table (mm)

| No. of contacts | A | B | C | D | E | F | G | H |
|-----------------|------|------|------|------|------|------|------|------|
| 30 | 18.3 | 15.3 | 14.0 | 18.9 | 11.2 | 14.0 | 11.2 | 19.5 |
| 40 | 22.3 | 19.3 | 18.0 | 22.9 | 15.2 | 18.0 | 15.2 | 23.5 |
| 50 | 26.3 | 23.3 | 22.0 | 26.9 | 19.2 | 22.0 | 19.2 | 27.5 |
| 80 | 39.1 | 36.1 | 34.8 | 39.7 | 32.0 | 34.8 | 32.0 | 40.3 |
| 100 | 47.1 | 44.1 | 42.8 | 47.7 | 40.0 | 42.8 | 40.0 | 48.3 |

EMBOSS TAPE AND REEL

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

2. Reel dimensions (Conforming to JIS C 0806-1990)


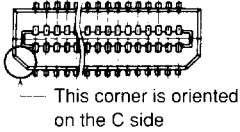
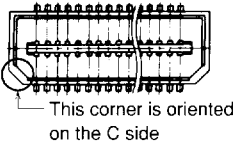




Dimension table (mm)

| Stacking height | No. of contacts | Type of taping | A | B | C | D | E | F | Quantity per reel |
|--|-----------------|----------------|------|------|------|------|------|------------|-------------------|
| Socket: 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm Header: 3mm, 3.5mm, 4mm, 4.5mm, 6mm, 7mm | 16~32 | Type I | 24.0 | — | 11.5 | 12.0 | 24.4 | $\phi 330$ | 1,000 pcs. |
| | 34~40 | Type II | 32.0 | 28.4 | 14.2 | 12.0 | 32.4 | $\phi 330$ | |
| | 50~60 | Type II | 44.0 | 40.4 | 20.2 | 12.0 | 44.4 | $\phi 330$ | |
| | 80~90 | Type II | 56.0 | 52.4 | 26.2 | 12.0 | 56.4 | $\phi 330$ | |
| Socket: 6mm, 7mm, 8mm Header: 5mm, 5.5mm, 8mm | 16~32 | Type I | 24.0 | — | 11.5 | 12.0 | 24.4 | $\phi 370$ | 1,000 pcs. |
| | 34~40 | Type II | 32.0 | 28.4 | 14.2 | 12.0 | 32.4 | $\phi 370$ | |
| | 50~60 | Type II | 44.0 | 40.4 | 20.2 | 12.0 | 44.4 | $\phi 370$ | |
| | 80~90 | Type II | 56.0 | 52.4 | 26.2 | 12.0 | 56.4 | $\phi 370$ | |
| 6.5mm | 50 | Type II | 44.0 | 40.4 | 20.2 | 16.0 | 44.4 | $\phi 370$ | 800 pcs. |
| | 30~40 | Type II | 32.0 | 28.4 | 14.2 | 24.0 | 32.4 | $\phi 370$ | 350 pcs. |
| 11.5mm | 50 | Type II | 44.0 | 40.4 | 20.2 | 24.0 | 44.4 | $\phi 370$ | 350 pcs. |
| | 80 | Type II | 56.0 | 52.4 | 26.2 | 24.0 | 56.4 | $\phi 370$ | 250 pcs. |

Notes) 1. For other detailed information described above, please consult us.
2. In case that the detailed dimensions are needed, please consult us.

Connector orientation with respect to direction of progress of embossed tape

| Direction of tape progress | Type | Stacking height 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm | Stacking height 6.5mm | Stacking height 11.5mm |
|----------------------------|---|--|--|---|
| |  | Socket  Header  | Socket and header are common  | Socket and header are common  |

DATA: HIGH FREQUENCY CHARACTERISTICS

1. Stacking height: 3mm n=5

| | | Frequency | | | |
|----------------|-----------------------|---------------|---------------|---------------|---------------|
| | | 30MHz | 100MHz | 200MHz | 300MHz |
| Isolation (dB) | Between terminals | 70 (70~70) | 53 (53~53) | 41 (40~41) | 34 (34~34) |
| | Between GND terminals | 75 (75~75) | 64 (64~64) | 52 (52~53) | 46 (46~46) |

2. Stacking height: 11.5mm n=5

| | | Frequency | | | |
|----------------|-----------------------|---------------|---------------|---------------|---------------|
| | | 30MHz | 100MHz | 200MHz | 300MHz |
| Isolation (dB) | Between terminals | 60 (58~63) | 43 (43~43) | 32 (32~33) | 25 (25~26) |
| | Between GND terminals | 70 (70~70) | 55 (52~57) | 43 (42~45) | 36 (35~38) |

NOTES

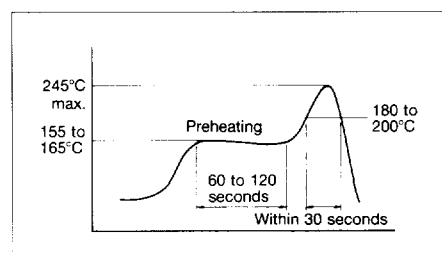
1. Screen thickness during solder printing

Following is a recommended screen thickness for respective stacking height type during cream solder printing.

| Stacking height | Screen thickness during cream solder printing |
|------------------------------|---|
| 3mm, 4mm, 5mm, 6mm, 7mm, 8mm | 0.2mm |
| 6.5mm, 11.5mm | 0.2mm to 0.25mm |

2. Infrared reflow

When performing soldering using infrared reflow, the peak surface temperature of the PC board should not exceed 245°C. The recommended conditions for the reflow temperature profile are shown in the figure on the top right.



3. Stacking height 11.5mm type and 6.5mm type cannot be mated. These two types of models differ in the positioning boss and PC board mounting pad patterns.

4. Since excessive force on the terminals will cause deformation and the integrity of the soldering will be lost during reflow soldering, avoid dropping or rough handling of the product.

5. When mating the connector before soldering, take care not to deform its terminals or fittings. Do not apply excessive stress to terminals as this may cause loose terminals.

6. When stacking height 6.5mm type are mated, the connector comes 0.5mm off the center; take special care in the pattern designing.

7. Keep the PC board warp 0.1mm or below as against the overall length of the connector.

8. These models are made very thin so that they may be smaller in size and lighter in weight than before. Take care not to give them excessive force when mating them together or unmating them; otherwise, breakage may result.

9. During manual soldering, do not apply flux to the connector leads or PC board as connector contacts may be contaminated with flux.

10. The color of the connector mold resin may differ slightly from one lot to another, but this has no effect on connector performance.