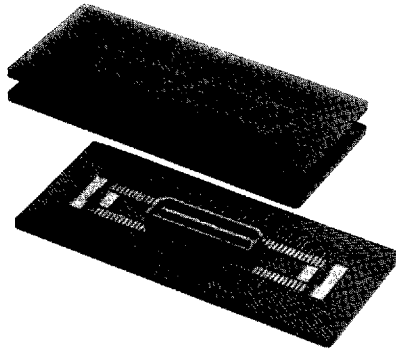


NAIS[®]

NARROW-PITCH CONNECTORS FOR PC BOARDS

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



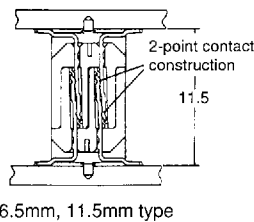
Stacking height	Pitch											
	3mm	3.5mm	4mm	4.5mm	5mm	5.5mm	6mm	6.5mm	7mm	8mm	11.5mm	13mm
16	●	—	●	—	—	—	—	—	—	—	—	—
20	●	—	●	—	●	—	●	—	●	●	—	—
22	—	—	—	—	—	—	—	—	●	—	—	—
24	●	—	—	—	—	—	●	—	—	—	—	—
26	●	—	●	—	—	—	●	—	●	—	—	—
30	●	●	●	●	●	●	●	●	●	●	●	—
34	—	—	—	—	—	—	—	—	—	●	—	—
40	●	—	●	—	●	—	●	—	●	●	●	—
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)

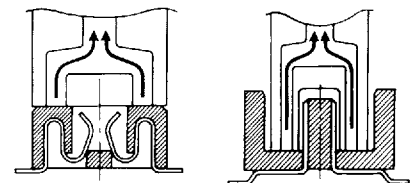


6. Compatibility with Automatic Placement

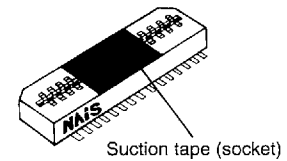
The surface-mount design makes connectors compatible with the automatic placement process.

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.



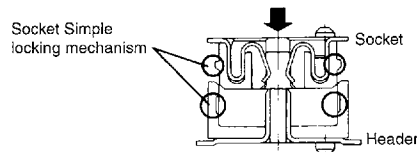
Suction tape (socket)

4. Long Lifetime

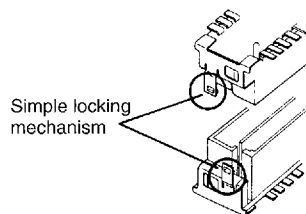
The 0.2μm Au plating layer and our unique pinhole filling technology*2 ensure long lifetime.

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

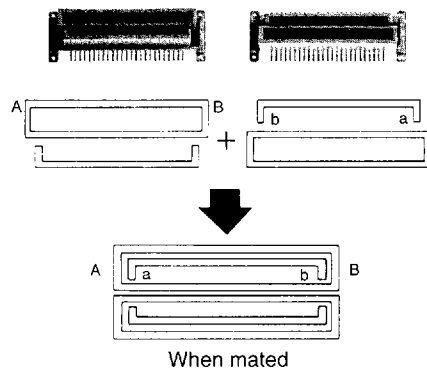
5. Simple locking mechanism assure high resistance to vibration and impact



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

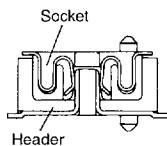


6.5mm type

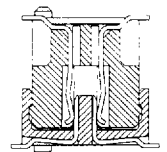


3. Unique bellows-type*1 contacts

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

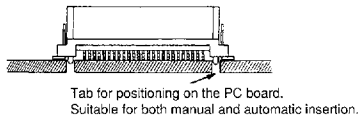


3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm type



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

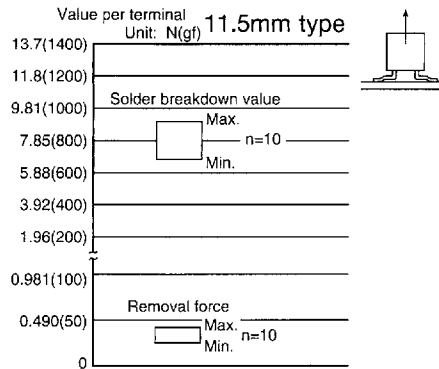
2) Positioning tab



- 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.

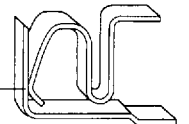
5) Comparison of solder breakdown value and removal force

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.



*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		No freezing at low temperatures															
	Soldering heat resistance	Max. peak temperature of 245°C 300°C within 5 seconds		Infrared reflow soldering Soldering iron															
	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⁺⁰₋₃</td> <td>30</td> </tr> <tr> <td>2</td> <td>25⁻³₋₁₀</td> <td>Max. 5</td> </tr> <tr> <td>3</td> <td>85⁺³₀</td> <td>30</td> </tr> <tr> <td>4</td> <td>25⁻¹⁰₋₃</td> <td>Max. 5</td> </tr> </tbody> </table>	Sequence	Temperature (°C)	Time (minutes)	1	-55 ⁺⁰ ₋₃	30	2	25 ⁻³ ₋₁₀	Max. 5	3	85 ⁺³ ₀	30	4	25 ⁻¹⁰ ₋₃	Max. 5
	Sequence	Temperature (°C)	Time (minutes)																
	1	-55 ⁺⁰ ₋₃	30																
	2	25 ⁻³ ₋₁₀	Max. 5																
	3	85 ⁺³ ₀	30																
	4	25 ⁻¹⁰ ₋₃	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 package			Remarks
			Part No.	Packing quantity		Part No.	Packing quantity		
				Stick	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 package			Remarks
			Part No.	Packing quantity		Part No.	Packing quantity		
				Stick	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.	—	—	—		
6.5 mm	50		AXN150431S	20 pcs.	300 pcs.	AXN150431P	800 pcs.	1,600 pcs.	Sockets and headers have same outlines.
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		AXN1300115S	30 pcs.	300 pcs.	AXN1300115P	350 pcs.	700 pcs.	Sockets and headers have same outlines.
	40		AXN1400115S	25 pcs.	300 pcs.	AXN1400115P	350 pcs.	700 pcs.	
	50		AXN1500115S	20 pcs.	300 pcs.	AXN1500115P	350 pcs.	700 pcs.	
	80		AXN1800115S	12 pcs.	300 pcs.	AXN1800115P	250 pcs.	500 pcs.	
	100		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.

AXN(1/3/4)

DIMENSIONS

mm General tolerance: ± 0.3

• Stacking height 3mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 13mm type

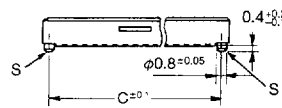
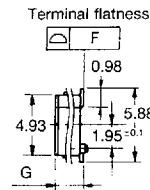
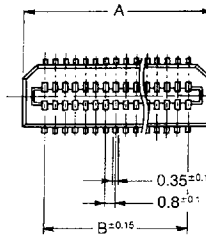
1) Socket body



Dimension table (mm)

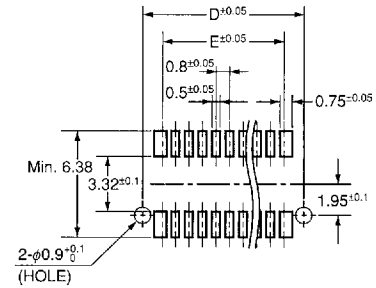
No. of contacts	A	B	C	D	E	F
16	9.00	5.60	7.90	7.90	5.60	0.1
20	10.60	7.20	9.50	9.50	7.20	
22	11.40	8.00	10.30	10.30	8.00	
24	12.20	8.80	11.10	11.10	8.80	
26	13.00	9.60	11.90	11.90	9.60	
30	14.60	11.20	13.50	13.50	11.20	
34	16.20	12.80	15.10	15.10	12.80	
40	18.60	15.20	17.50	17.50	15.20	
50	23.40	19.20	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

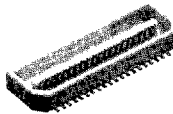


S: Positioning boss

Recommended PC board pattern (top view)



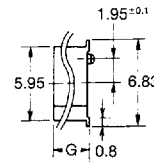
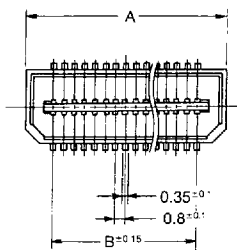
2) Header



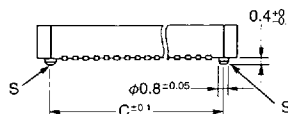
Dimension table (mm)

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

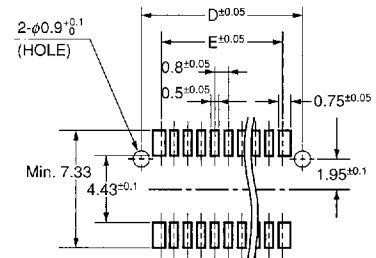


Terminal flatness



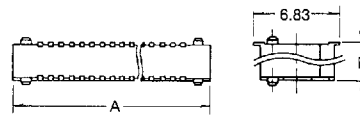
S: Positioning boss

Recommended PC board pattern (top view)



3) Socket and header are mated

mm General tolerance: ± 0.3

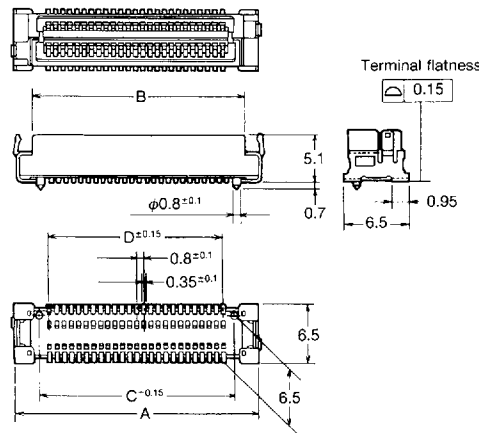
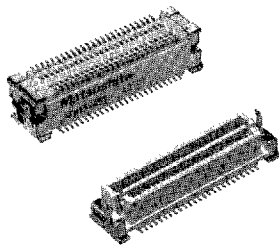


Dimension table (mm)

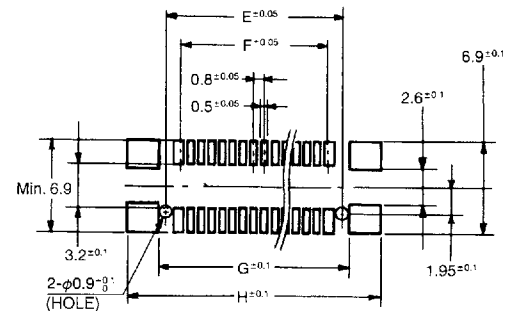
No. of contacts	A	Stacking height		B
16	10.05			
20	11.65			
22	12.45	3mm		3
24	13.25	3.5mm		3.5
26	14.05	4mm		4
30	15.65	4.5mm		4.5
40	19.65	5mm		5
50	25.85	5.5mm		5.5
60	29.85	6mm		6
80	37.85	7mm		7
90	41.85	8mm		8
100	45.85	13mm		13

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

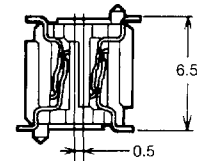
Stacking height 6.5mm type



Recommended PC board pattern (top view)



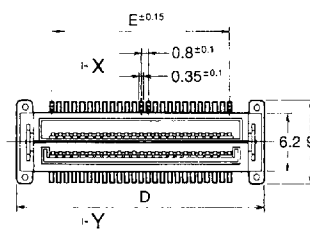
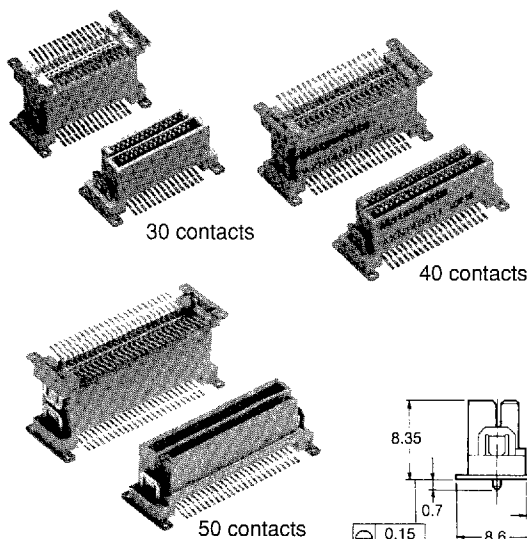
Stacking mated diagram (0.5mm off the center when fit together)



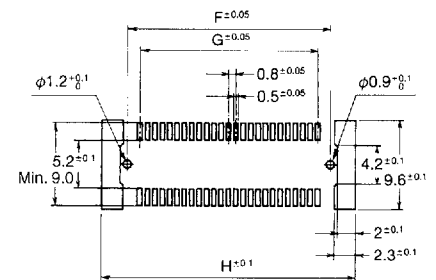
Dimension table (mm)

No. of contacts	A	B	C	D	E	F	G	H
50	26.8	23.3	21.5	19.2	21.5	19.2	22.5	27.2

Stacking height 11.5mm type

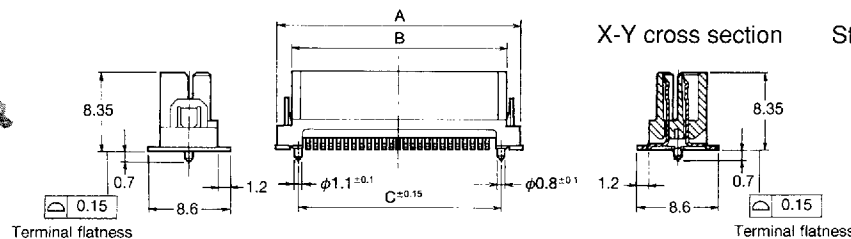


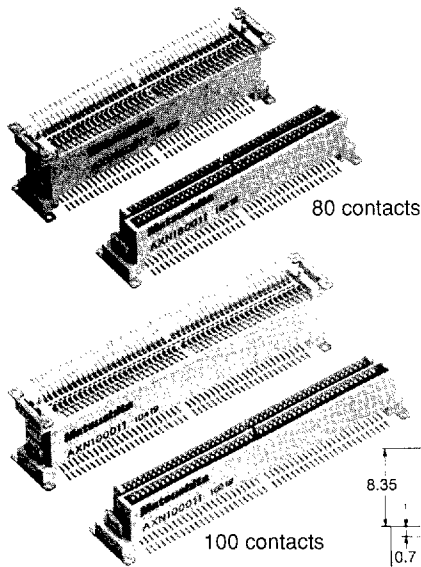
Recommended PC board pattern (top view)



X-Y cross section

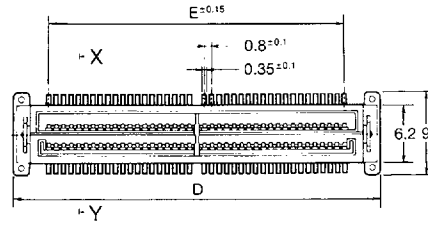
Stacking mated diagram



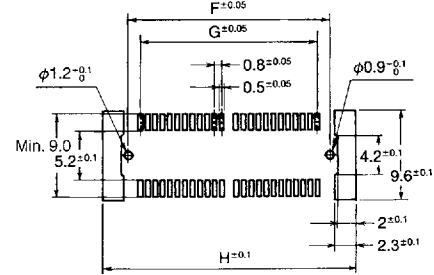


80 contacts

100 contacts

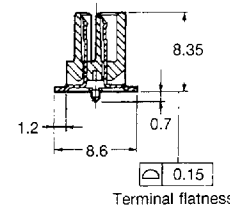


Recommended PC board pattern (top view)

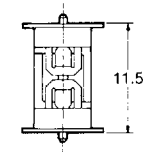


Note) Center terminal is removed for 80 and 100 contact type

X-Y cross section



Stacking mated diagram



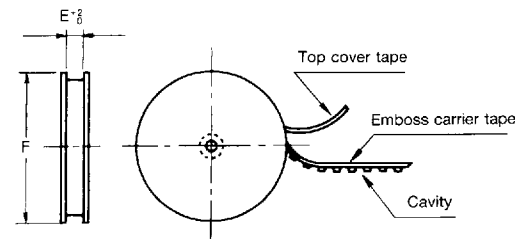
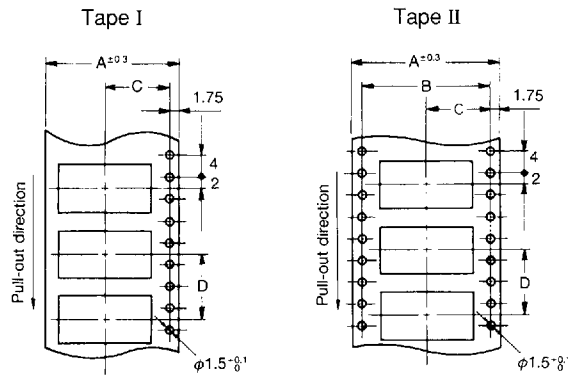
Dimension table (mm)

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)

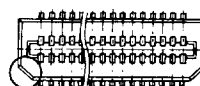
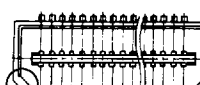




Dimension table (mm)

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	φ330	1,000 pcs.
	34~40	Type II	32.0	28.4	14.2	12.0	32.4	φ330	
	50~60	Type II	44.0	40.4	20.2	12.0	44.4	φ330	
	80~90	Type II	56.0	52.4	26.2	12.0	56.4	φ330	
Socket: 6mm, 7mm, 8mm Header: 5mm, 5.5mm, 8mm	16~32	Type I	24.0	—	11.5	12.0	24.4	φ370	1,000 pcs.
	34~40	Type II	32.0	28.4	14.2	12.0	32.4	φ370	
	50~60	Type II	44.0	40.4	20.2	12.0	44.4	φ370	
	80~90	Type II	56.0	52.4	26.2	12.0	56.4	φ370	
6.5mm	50	Type II	44.0	40.4	20.2	16.0	44.4	φ370	800 pcs.
11.5mm	30~40	Type II	32.0	28.4	14.2	24.0	32.4	φ370	350 pcs.
	50	Type II	44.0	40.4	20.2	24.0	44.4	φ370	350 pcs.
	80	Type II	56.0	52.4	26.2	24.0	56.4	φ370	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	 <p>This corner is oriented on the C side</p>	Socket and header are common
	Header	 <p>This corner is oriented on the C side</p>		

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

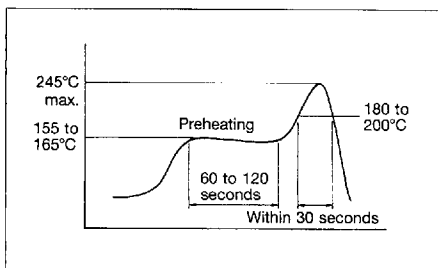
1. Screen thickness during solder printing

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.