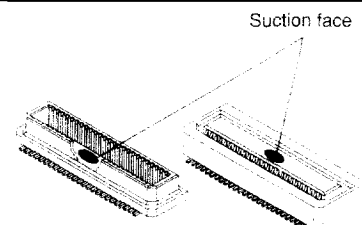
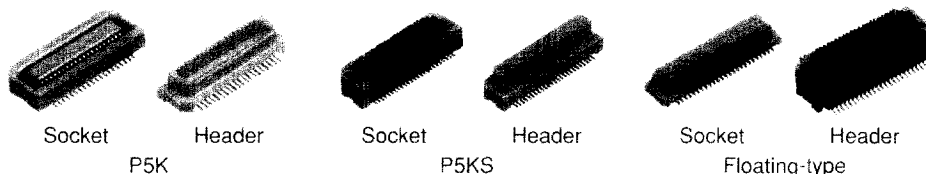


NAIS®**NARROW-PITCH
CONNECTORS
FOR PC BOARDS****NARROW PITCH
(0.5mm) CONNECTORS
— P5 SERIES —****FEATURES****1. Low profile of 3mm****2. Unique bellows-type contacts**

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

3. Automatic mounting

- 1) Suction area for suction-type automatic placement machines is employed.
- 2) Embossed tape packaging is standard.
- 3) Terminal construction which is virtually resistant to solder bridging.

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, 6.5mm type	7mm, 8mm, 9mm type																
Electrical characteristics	Rated current	0.2A (0.5A is possible for 10 contacts type)		Detection current: 1mA Using 500V DC megohmmeter Measured with YHP4328A															
	Rated voltage	AC, DC 60V																	
	Breakdown voltage	150V AC for 1 min.																	
	Insulation resistance	Min. 1000MΩ																	
	Contact resistance	Max. 60mΩ																	
Mechanical characteristics	Composite insertion force	Max. 0.785N {80gf} × no. of contacts (initial)		Measures the maximum load in the post axial direction until removal															
	Composite removal force	Min. 0.0588N {6gf} × no. of contacts																	
	Post holding force	Min. 0.981N {100gf}																	
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 sec./350°C within 3 sec.		Infrared reflow soldering Soldering iron															
	Thermal shock resistance (header and socket mated)	5 cycles, insulation resistance min. 100MΩ, contact resistance max. 60mΩ		<table><tr><th>Sequence</th><th>Temperature (°C)</th><th>Time (minutes)</th></tr><tr><td>1</td><td>-55</td><td>30</td></tr><tr><td>2</td><td>25</td><td>Max. 5</td></tr><tr><td>3</td><td>85</td><td>30</td></tr><tr><td>4</td><td>25</td><td>Max. 5</td></tr></table>	Sequence	Temperature (°C)	Time (minutes)	1	-55	30	2	25	Max. 5	3	85	30	4	25	Max. 5
	Sequence	Temperature (°C)	Time (minutes)																
	1	-55	30																
	2	25	Max. 5																
	3	85	30																
	4	25	Max. 5																
	Humidity resistance (header and socket mated)	120 hours, insulation resistance min. 100MΩ, contact resistance max. 60mΩ	120 hours, insulation resistance min. 100MΩ, contact resistance max. 80mΩ	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	24 hours, insulation resistance min. 100MΩ, contact resistance max. 80mΩ	Bath temperature 35±2°C, saltwater concentration 5±1%															
	H ₂ S resistance (header and socket mated)	48 hours, contact resistance max. 60mΩ	48 hours, contact resistance max. 80mΩ	Bath temperature 40±2°C, gas concentration 3±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																

2. Material and surface treatment

Part name	Material	Surface treatment
Molded portion	Heat-resistant resin (UL94V-0)	—
Contact	Copper alloy	Contact portion: Au plating over Ni Terminal portion: Au plating over Ni

PRODUCT TYPES

No of contacts	Products name	P5K										P5KS										Packing quantity	
		Stacking height	3 mm	3.5 mm	4 mm	4.5 mm	5 mm	5.5 mm	6 mm	6.5 mm	7 mm	8 mm	9 mm	Reel	Outer carton								
20	Socket	AXK5S20145P*	AXK5S20145P*	AXK5S20045P*	AXK5S20245P*	AXK5S20045P*	AXK5S20245P*	AXK5S20045P*	AXK5S20245P*	AXK5S20340P*	AXK5S20340P*	AXK5S20340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S20345P*	AXK6S20245P*	AXK6S20445P*	AXK6S20445P*	AXK6S20545P*	AXK6S20545P*	AXK6S20645P*	AXK6S20645P*	AXK6S20445P*	AXK6S20545P*	AXK6S20645P*											
30	Socket	AXK5S30145P*	—	AXK5S30045P*	AXK5S30245P*	AXK5S30045P*	AXK5S30245P*	AXK5S30045P*	AXK5S30245P*	AXK5S30340P*	AXK5S30340P*	AXK5S30340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S30345P*	—	AXK6S30445P*	AXK6S30445P*	AXK6S30545P*	AXK6S30545P*	AXK6S30645P*	AXK6S30645P*	AXK6S30445P*	AXK6S30545P*	AXK6S30645P*											
40	Socket	AXK5S40145P*	AXK5S40145P*	AXK5S40045P*	AXK5S40245P*	AXK5S40045P*	AXK5S40245P*	AXK5S40045P*	AXK5S40245P*	AXK5S40340P*	AXK5S40340P*	AXK5S40340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S40345P*	AXK6S40245P*	AXK6S40445P*	AXK6S40445P*	AXK6S40545P*	AXK6S40545P*	AXK6S40645P*	AXK6S40645P*	AXK6S40445P*	AXK6S40545P*	AXK6S40645P*											
50	Socket	AXK5S50145P*	—	AXK5S50045P*	AXK5S50245P*	AXK5S50045P*	AXK5S50245P*	AXK5S50045P*	AXK5S50245P*	AXK5S50340P*	AXK5S50340P*	AXK5S50340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S50345P*	—	AXK6S50445P*	AXK6S50445P*	AXK6S50545P*	AXK6S50545P*	AXK6S50645P*	AXK6S50645P*	AXK6S50445P*	AXK6S50545P*	AXK6S50645P*											
60	Socket	AXK5S60145P*	—	AXK5S60045P*	AXK5S60245P*	AXK5S60045P*	AXK5S60245P*	AXK5S60045P*	AXK5S60245P*	AXK5S60340P*	AXK5S60340P*	AXK5S60340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S60345P*	—	AXK6S60445P*	AXK6S60445P*	AXK6S60545P*	AXK6S60545P*	AXK6S60645P*	AXK6S60645P*	AXK6S60445P*	AXK6S60545P*	AXK6S60645P*											
80	Socket	AXK5S80145P*	—	AXK5S80045P*	AXK5S80245P*	AXK5S80045P*	AXK5S80245P*	AXK5S80045P*	AXK5S80245P*	AXK5S80340P*	AXK5S80340P*	AXK5S80340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S80345P*	—	AXK6S80445P*	AXK6S80445P*	AXK6S80545P*	AXK6S80545P*	AXK6S80645P*	AXK6S80645P*	AXK6S80445P*	AXK6S80545P*	AXK6S80645P*											
100	Socket	AXK5S00145P*	—	AXK5S00045P*	AXK5S00245P*	AXK5S00045P*	AXK5S00245P*	AXK5S00045P*	AXK5S00245P*	AXK5S00340P*	AXK5S00340P*	AXK5S00340P*	1 000 pcs.	2 000 pcs.									
	Header	AXK6S00345P*	—	AXK6S00445P*	AXK6S00445P*	AXK6S00545P*	AXK6S00545P*	AXK6S00645P*	AXK6S00645P*	AXK6S00445P*	AXK6S00545P*	AXK6S00645P*											

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. The standard type comes with no positioning bosses. Connectors with positioning bosses are available for on-demand production. For this type of connector, please change the 8th digit of the P5K ordering number and the 9th of P5KS ordering number to "3".
- Example: For P5K 20-contact with 3mm stacking height: AXK5S20135P
For P5K 20-contact with 4mm stacking height: AXK5S20035P

AXK(5/6)

DIMENSIONS

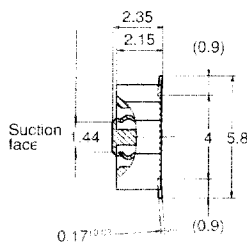
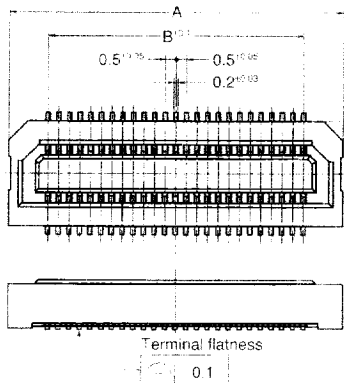
P5K: Stacking height 3mm, 3.5mm type

• Socket



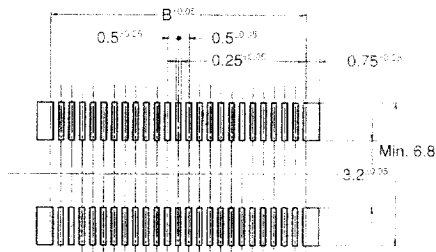
Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50
100	28.20	24.50

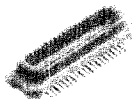


mm General tolerance ± 0.2

Recommended PC board pattern
(top view)

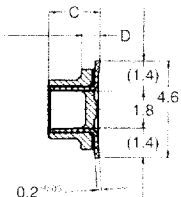
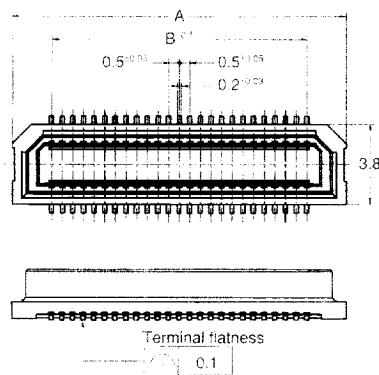


• Header



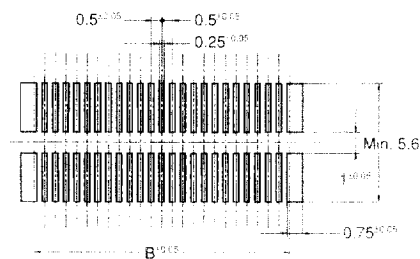
Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50
100	28.20	24.50

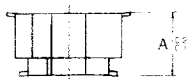


Stacking height	C	D
3.0 mm	2.4	0.85
3.5 mm	2.9	1.35

Recommended PC board pattern
(top view)



• Socket and header are mated



Stacking height	A
3.0 mm	3.0
3.5 mm	3.5

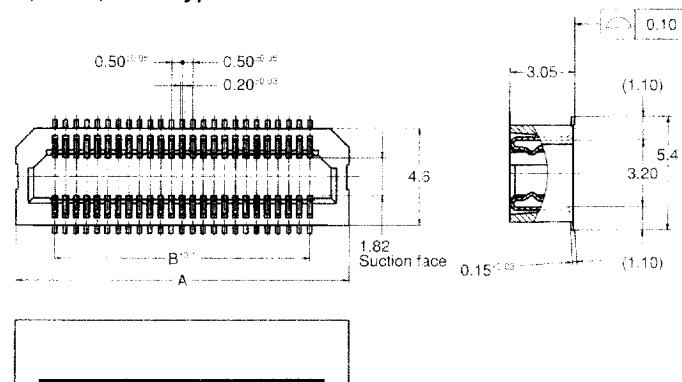
P5KS: Stacking height 4mm, 5mm, 6mm type

• Socket



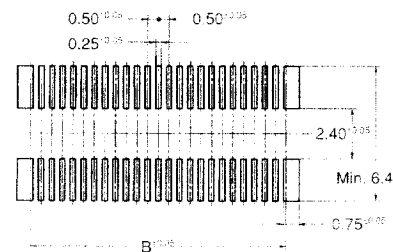
Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50
100	28.20	24.50



mm General tolerance ± 0.2

Recommended PC board pattern
(top view)

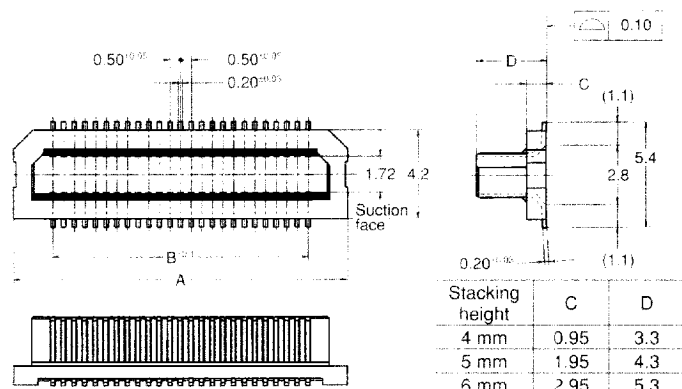


• Header

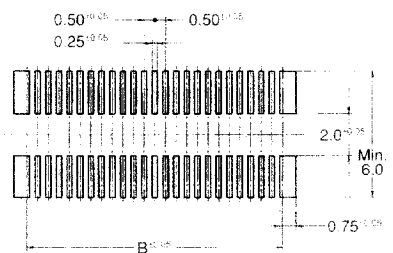


Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50
100	28.20	24.50



Recommended PC board pattern
(top view)



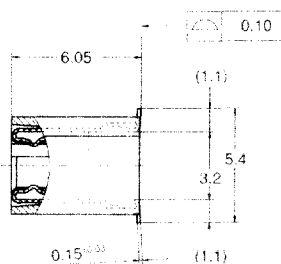
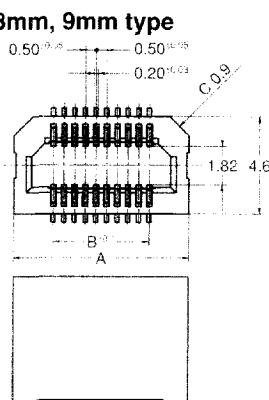
P5KS: Stacking height 7mm, 8mm, 9mm type

• Socket



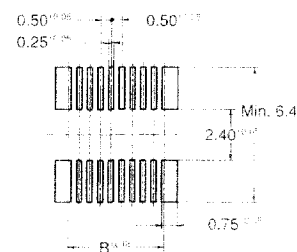
Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50



mm General tolerance ± 0.2

Recommended PC board pattern (top view)

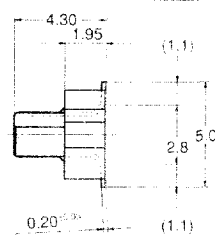
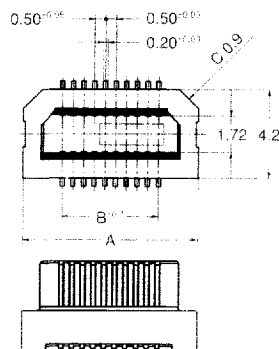


• Header



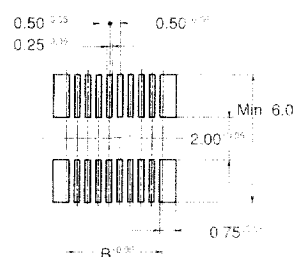
Dimension table (mm)

No. of contacts	A	B
20	8.20	4.50
30	10.70	7.00
40	13.20	9.50
50	15.70	12.00
60	18.20	14.50
80	23.20	19.50

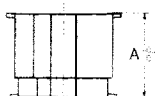


Stacking height	C	D
7 mm	0.95	3.3
8 mm	1.95	4.3
9 mm	2.95	5.3

Recommended PC board pattern (top view)



• Socket and header are mated



Stacking height	A
4 mm	4.0
4.5 mm	4.5
5 mm	5.0
5.5 mm	5.5
6 mm	6.0
6.5 mm	6.5
7 mm	7.0
8 mm	8.0
9 mm	9.0

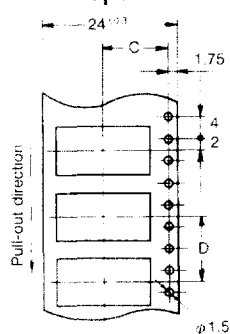
Note: P5K series cannot be mated to P5KS series

EMBOSS TAPE AND REEL (Common for respective contact type and socket-header)

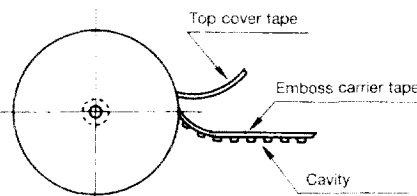
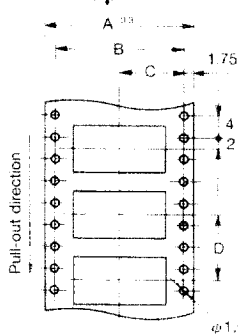
1. Tape dimensions (Conforming to JIS C 0806-1990)

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

Tape I

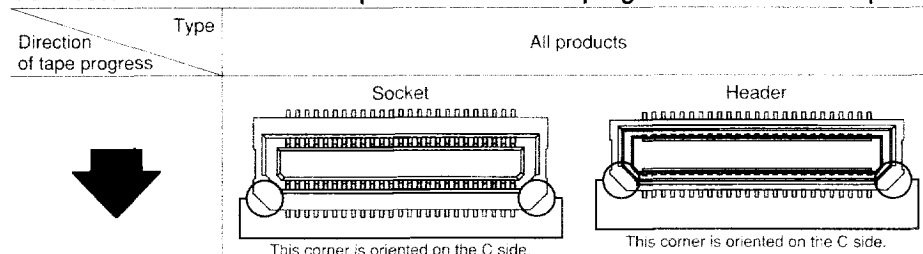


Tape II



No. of contacts	Type of taping	A	B	C	D	E	F	Quantity per reel
less than 58	Tape I	24.0	—	11.5	12.0	24.4	$\phi 330$	1,000
60~78	Tape II	32.0	28.4	14.2	12.0	32.4	$\phi 330$	1,000
80~100	Tape II	44.0	40.4	20.2	12.0	44.4	$\phi 330$	1,000

Connector orientation with respect to direction of progress of embossed tape



- Notes) 1. For other detailed information described above, please consult us.
2. As to improve the product, specification may be subject to change. Please consult us.