

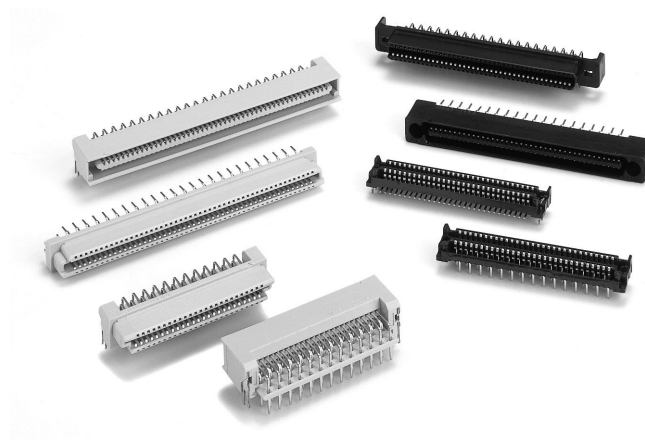
Half-Pitch Connectors

XH2

Allows high-density mounting for electronic devices.

A half-pitch connector with a pitch of 1.27 mm (0.05 in.) for compactness.

- A pitch of 1.27 mm (0.05 in.) for high-density mounting of double-row arrangements.
- A quadruple-row staggered arrangement (1.27 mm x 1.905 mm) (0.05 in. x 0.075 in.) for board connection.
- The bellows contact design, enables smooth mating and resistance to bending.
- Space saving mating length of 3.1 mm (0.12 in.).
- Positive contact locking assures long-term contact quality. The gold/palladium plating has been improved for better contact reliability.
- A special finish prevents flux rise. Also, it has fastening pins to standardize all the terminals.



Ordering Information

See ordering tables on the following pages.

Specifications

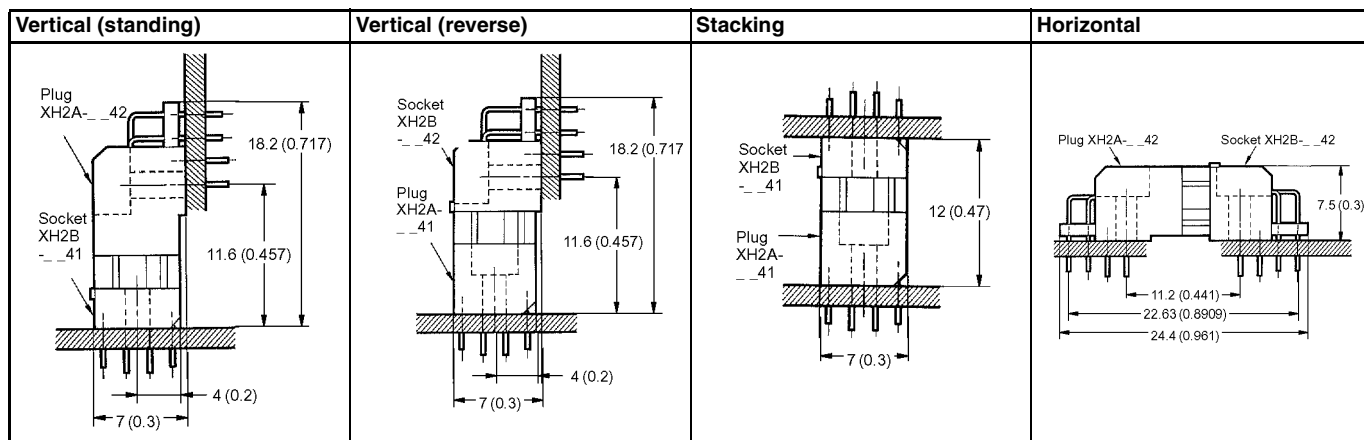
Rated current	0.5 A (at 20°C)
Contact resistance*	30 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	10 ³ mΩ min (at 500 VDC)
Withstand voltage	650 VAC for 1 min. (leakage current 1 mA max.)
Connector insertion	80 gf (0.18 lb.f) max. per contact
Connector removal	10 gf (0.022 lb.f) max. per contact
Usage durability	400 times min.
Operating temperature	-55 to 105°C

*For XH2A-□□42 and XH2B-□□41

Materials and Finish

Item		Plug	Socket
Housing		PBT resin with glass (UL94V-0) (black)	
Locator		PBT resin with glass (UL94V-0) (black)	
Contact	Mating end	Phosphor bronze/nickel base, gold/palladium plating	Phosphor bronze/nickel base/gold/palladium plating
	Terminal	Phosphor bronze/nickel base, copper plating (2mm)	Phosphor bronze/nickel base copper plating (2mm)
Fastening pins		Phosphor bronze/copper plating	

Mating Diagram

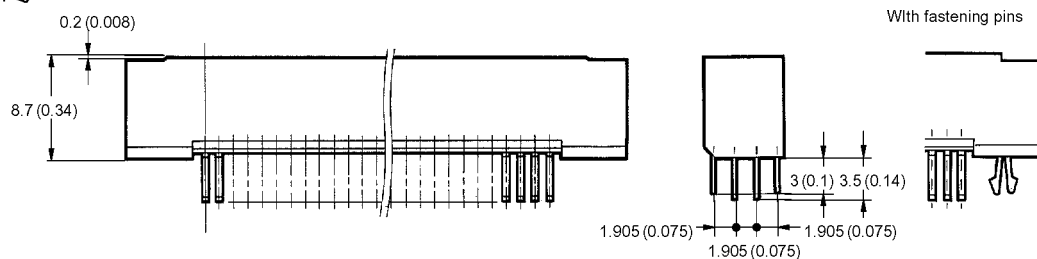
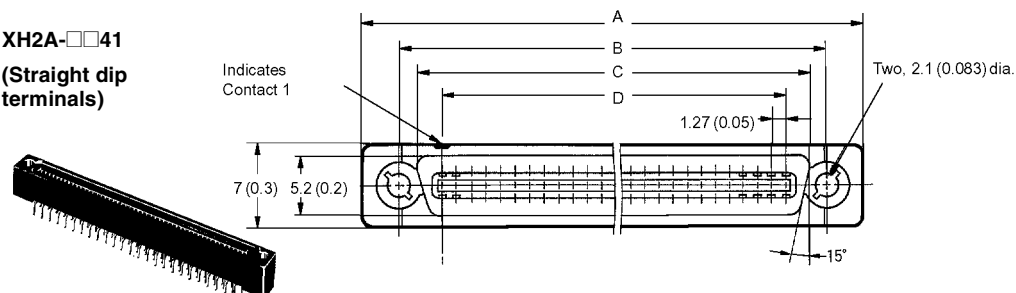


*The standard and reverse models function as the standard DIN connectors (XC5).

■ XH2A Plugs, Straight Dip Terminals

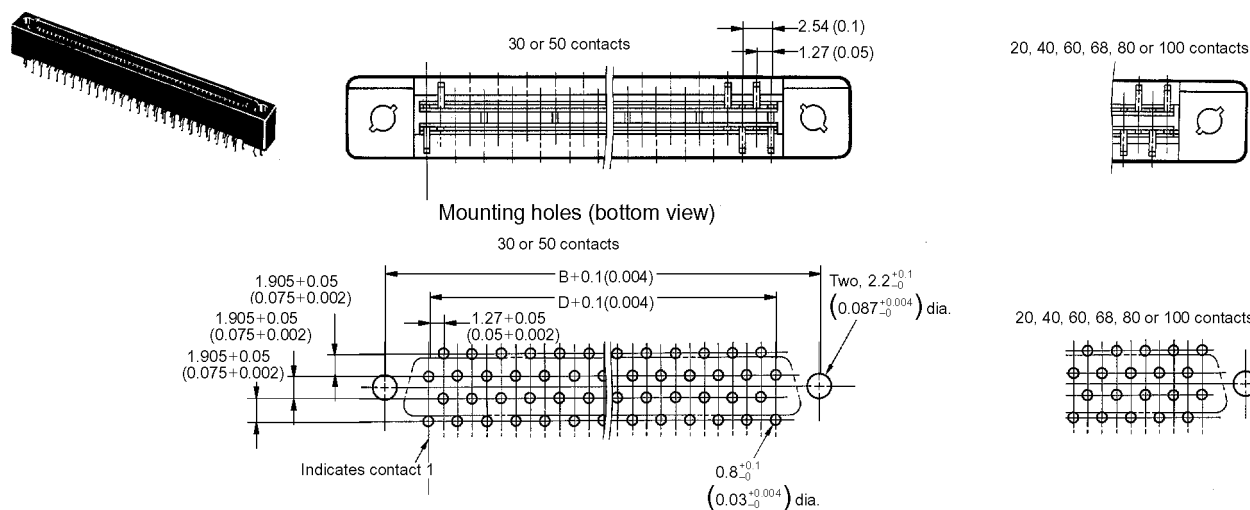
XH2A-□□41

(Straight dip terminals)



XH2A-□□41-A

(Straight dip terminals, with fastening pins)



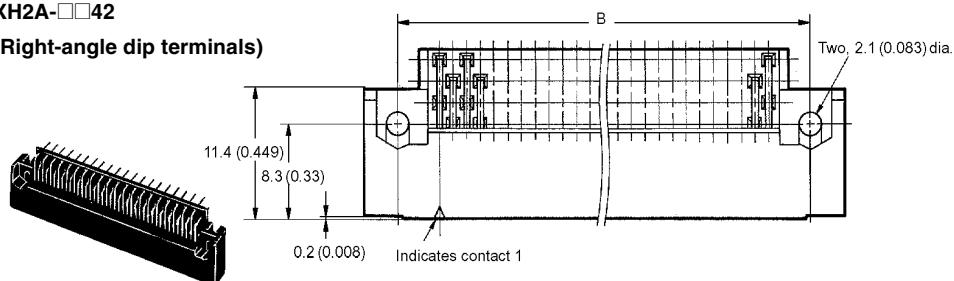
Ordering Information

No. of contacts	Dimensions [mm (in.)]				Model	
	A	B	C	D	Plug/straight dip terminals	Plug/straight dip terminals with fastening pins
20	25.4 (1)	19.05 (0.75)	15.8 (0.622)	11.43 (0.45)	XH2A-2041	XH2A-2041-A
30	31.8 (1.25)	25.40 (1)	22.2 (0.874)	17.78 (0.7)	XH2A-3041	XH2A-3041-A
40	38.1 (1.5)	31.75 (1.25)	28.5 (1.12)	24.13 (0.95)	XH2A-4041	XH2A-4041-A
50	44.5 (1.75)	38.10 (1.5)	34.9 (1.37)	30.48 (1.2)	XH2A-5041	XH2A-5041-A
60	50.8 (2)	45 (1.75)	41.2 (1.62)	36.83 (1.45)	XH2A-6041	XH2A-6041-A
68	55.9 (2.2)	49.53 (1.95)	46.3 (1.82)	41.91 (1.65)	XH2A-6841	XH2A-6841-A
80	63.5 (2.5)	57.15 (2.25)	53.9 (2.12)	49.53 (1.95)	XH2A-8041	XH2A-8041-A
100	76.2 (3)	69.85 (2.75)	66.6 (2.62)	62.23 (2.45)	XH2A-0141	XH2A-0141-A

■ XH2A Plugs, Right-angle Dip Terminals

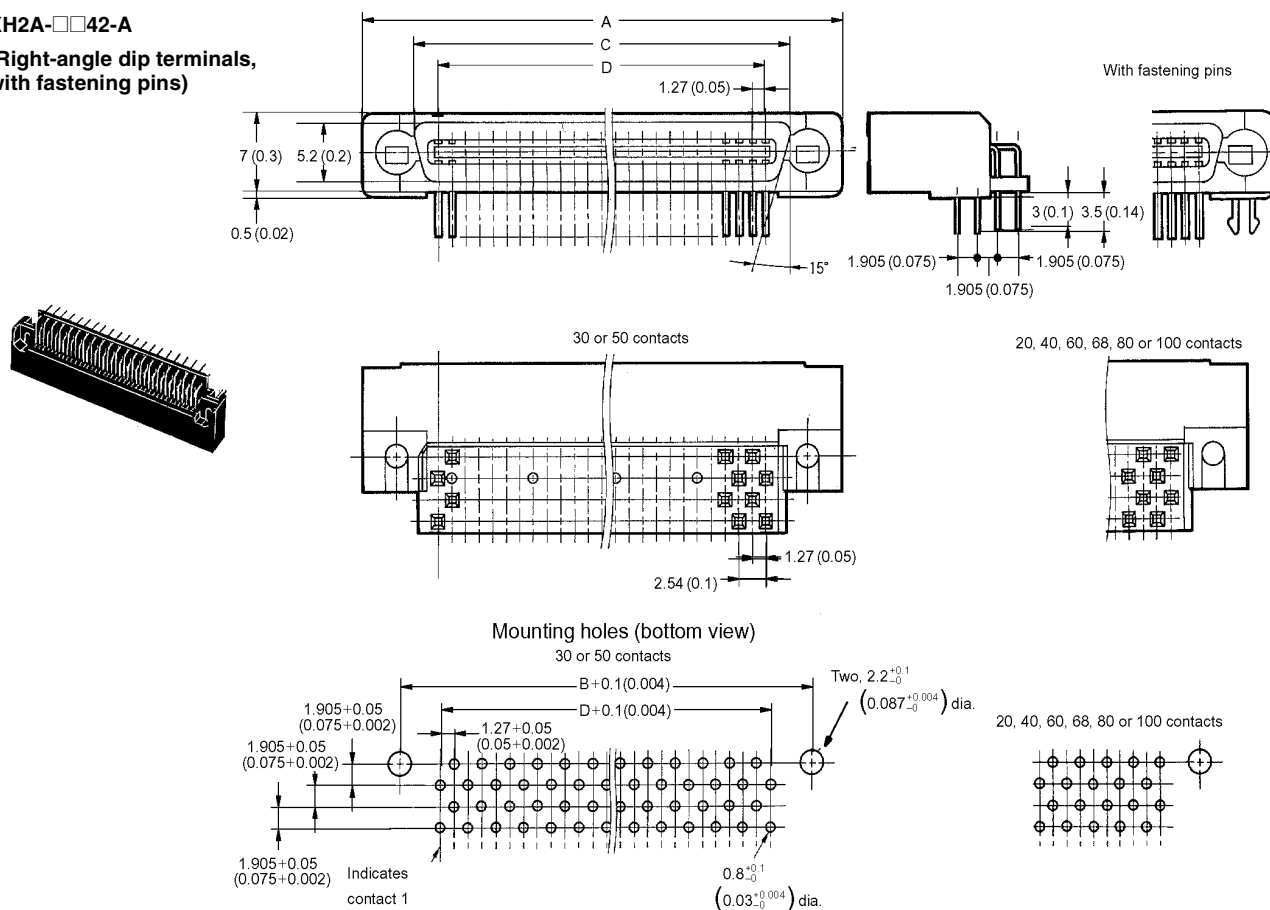
XH2A-□□42

(Right-angle dip terminals)



XH2A-□□42-A

(Right-angle dip terminals, with fastening pins)



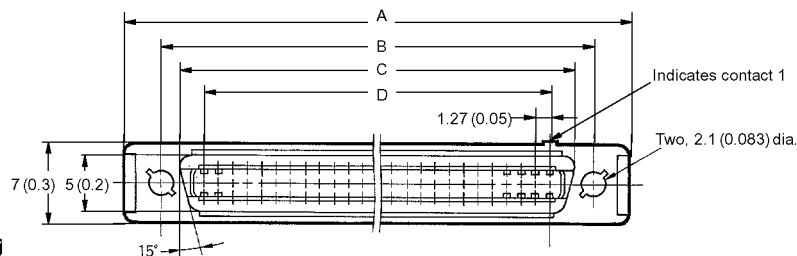
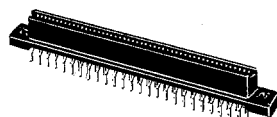
Ordering Information

No. of contacts	Dimensions [mm (in.)]				Model	
	A	B	C	D	Plug/straight dip terminals	Plug/straight dip terminals with fastening pins
20	25.4 (1)	19.05 (0.75)	15.8 (0.622)	11.43 (0.45)	XH2A-2042	XH2A-2042-A
30	31.8 (1.25)	25.40 (1)	22.2 (0.874)	17.78 (0.7)	XH2A-3042	XH2A-3042-A
40	38.1 (1.5)	31.75 (1.25)	28.5 (1.12)	24.13 (0.95)	XH2A-4042	XH2A-4042-A
50	44.5 (1.75)	38.10 (1.5)	34.9 (1.37)	30.48 (1.2)	XH2A-5042	XH2A-5042-A
60	50.8 (2)	44.45 (1.75)	41.2 (1.62)	36.83 (1.45)	XH2A-6042	XH2A-6042-A
68	55.9 (2.2)	49.53 (1.95)	46.3 (1.82)	41.91 (1.65)	XH2A-6842	XH2A-6842-A
80	63.5 (2.5)	57.15 (2.25)	53.9 (2.12)	49.53 (1.95)	XH2A-8042	XH2A-8042-A
100	76.2 (3)	69.85 (2.75)	66.6 (2.62)	62.23 (2.45)	XH2A-0142	XH2A-0142-A

XH2A Sockets, Straight Dip Terminals

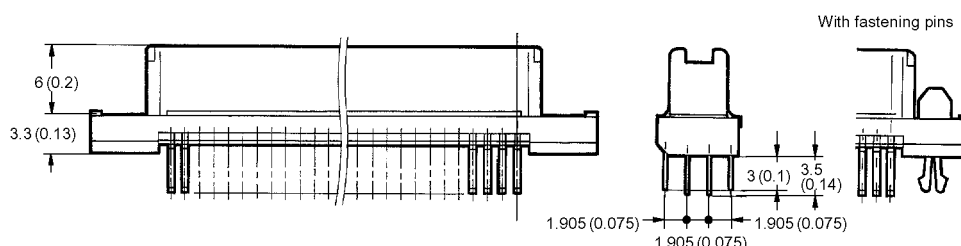
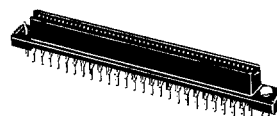
XH2B-□□41

(Straight dip terminal)

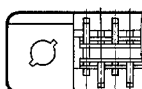


XH2B-□□41-A

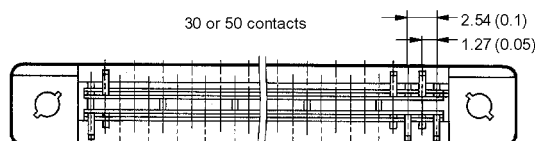
(Straight dip terminal, with fastening pins)



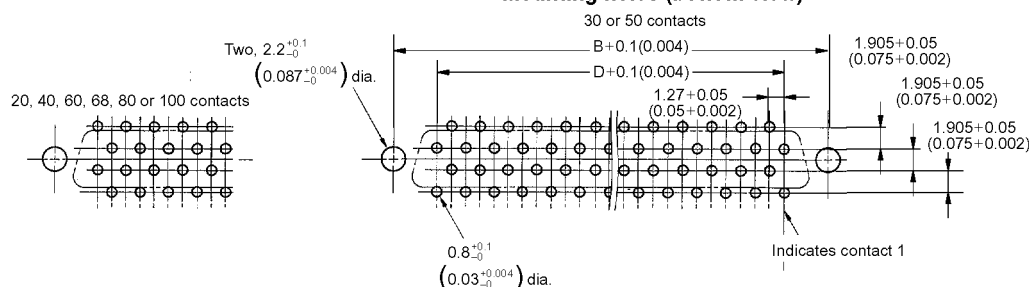
20, 40, 60, 68, 80 or 100 contacts



30 or 50 contacts



Mounting holes (bottom view)



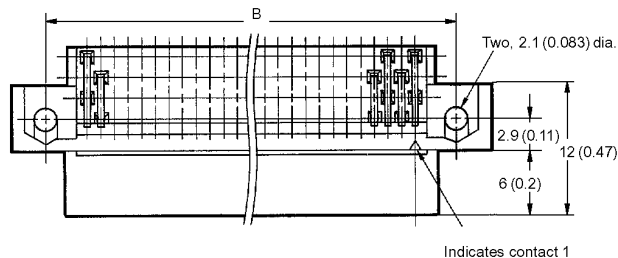
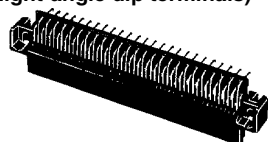
Ordering Information

No. of contacts	Dimensions [mm (in.)]				Model	
	A	B	C	D	Plug/straight dip terminals	Plug/straight dip terminals with fastening pins
20	25.4 (1)	19.05 (0.75)	15.7 (0.618)	11.43 (0.45)	XH2B-2041	XH2B-2041-A
30	31.8 (1.25)	25.40 (1)	22.1 (0.87)	17.78 (0.7)	XH2B-3041	XH2B-3041-A
40	38.1 (1.5)	31.75 (1.25)	28.4 (1.12)	24.13 (0.95)	XH2B-4041	XH2B-4041-A
50	44.5 (1.75)	38.10 (1.5)	34.8 (1.37)	30.48 (1.2)	XH2B-5041	XH2B-5041-A
60	50.8 (2)	44.45 (1.75)	41.1 (1.62)	36.83 (1.45)	XH2B-6041	XH2B-6041-A
68	55.9 (2.2)	49.53 (1.95)	46.2 (1.82)	41.91 (1.65)	XH2B-6841	XH2B-6841-A
80	63.5 (2.5)	57.15 (2.25)	53.8 (2.12)	49.53 (1.95)	XH2B-8041	XH2B-8041-A
100	76.2 (3)	69.85 (2.75)	66.5 (2.62)	62.23 (2.45)	XH2B-0141	XH2B-0141-A

■ XH2A Sockets, Right-angle Dip Terminals

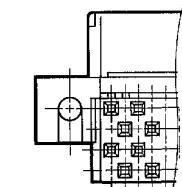
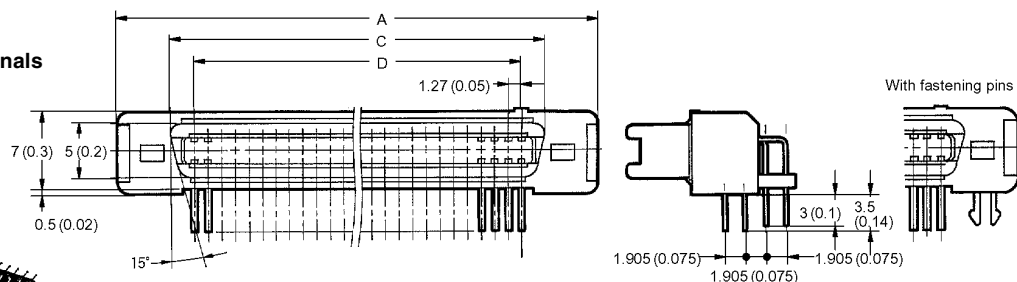
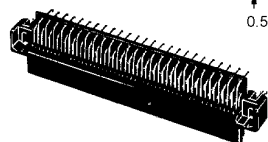
XH2B-□□42

(Right-angle dip terminals)

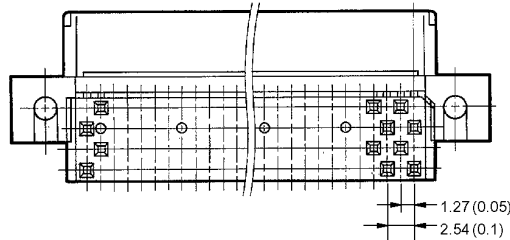


XH2B-□□42-A

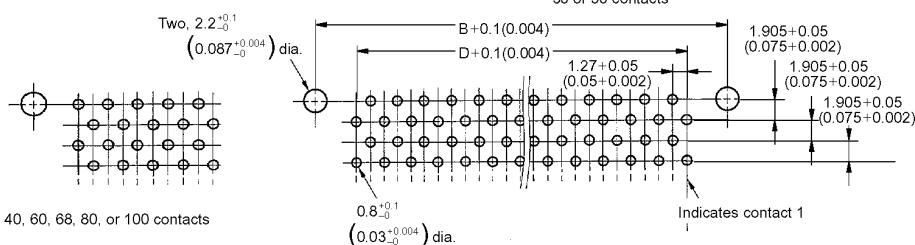
(Right-angle dip terminals with fastening pins)



20, 40, 60, 68, 80, or 100 contacts



Mounting holes (bottom view)



20, 40, 60, 68, 80, or 100 contacts

Ordering Information

No. of contacts	Dimensions [mm (in.)]				Model	
	A	B	C	D	Plug/straight dip terminals	Plug/straight dip terminals with fastening pins
20	25.4 (1)	19.05 (0.75)	15.7 (0.618)	11.43 (0.45)	XH2B-2042	XH2B-2042-A
30	31.8 (1.25)	25.40 (1)	22.1 (0.87)	17.78 (0.7)	XH2B-3042	XH2B-3042-A
40	38.1 (1.5)	31.75 (1.25)	28.4 (1.12)	24.13 (0.95)	XH2B-4042	XH2B-4042-A
50	44.5 (1.75)	38.10 (1.5)	34.8 (1.37)	30.48 (1.2)	XH2B-5042	XH2B-5042-A
60	50.8 (2)	44.45 (1.75)	41.1 (1.62)	36.83 (1.45)	XH2B-6042	XH2B-6042-A
68	55.9 (2.2)	49.53 (1.95)	46.2 (1.82)	41.91 (1.65)	XH2B-6842	XH2B-6842-A
80	63.5 (2.5)	57.15 (2.25)	53.8 (2.12)	49.53 (1.95)	XH2B-8042	XH2B-8042-A
100	76.2 (3)	69.85 (2.75)	66.5 (2.62)	62.23 (2.45)	XH2B-0142	XH2B-0142-A

General Information

■ Contact Numbers

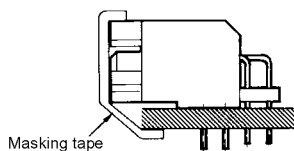
Terminal shape	Mated diagram	Mounting holes (bottom view)
Plug, straight terminals		
Plug, right-angle terminals		
Socket, straight terminals		
Socket, right-angle terminals		

- Contact numbers are not printed on the connectors. Use the triangular mark (indicates contact 1) as a guide when mounting to a board.
- On the mating side, the row terminals on the triangular mark side are called row a, and the other side is called row b. The numbers are in the order shown.
- The triangular marks on the plug and the socket should be aligned when mated. The contact numbers on both sides should match.

■ Precautions

Automated Soldering

Use tape to mask the right-angle connectors before automated-soldering.



MEMO

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To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

OMRON

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