

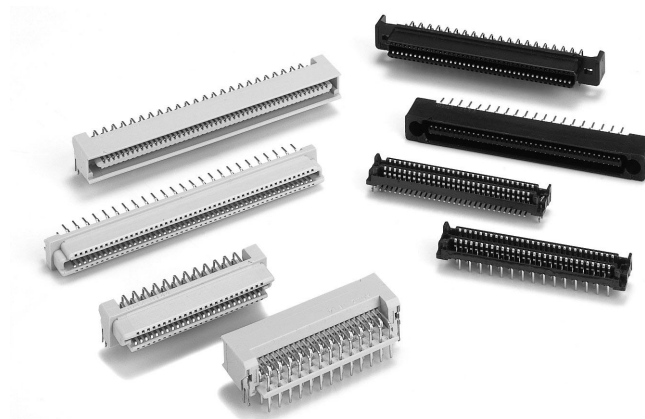
# Half-Pitch Connectors

## 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

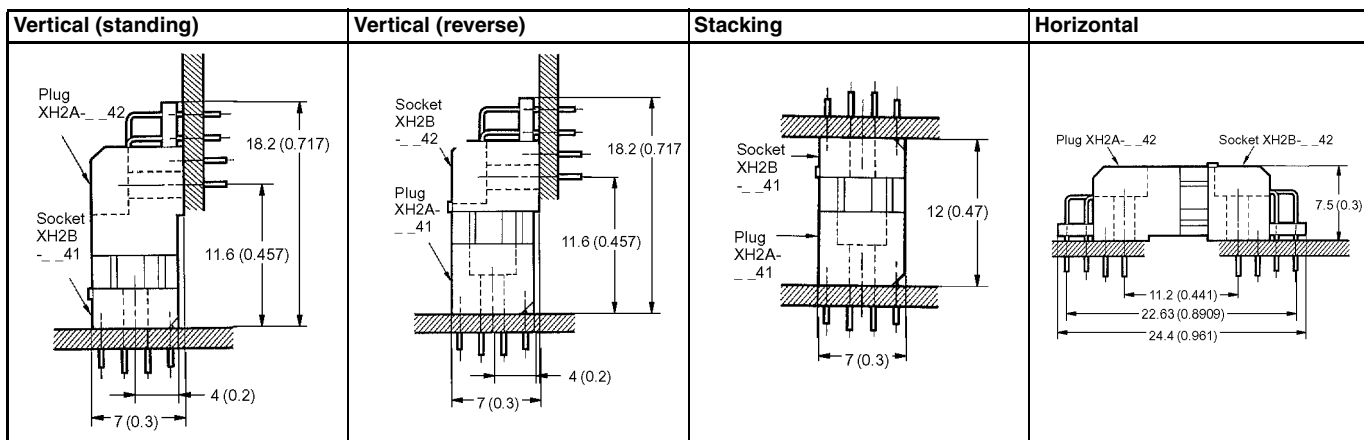
Rated current	0.5 A (at 20°C)
Contact resistance*	30 mΩ max. (at 20 mV, 100 mA max.)
Insulation resistance	10 <sup>3</sup> mΩ min (at 500 VDC)
Withstand voltage	650 VAC for 1 min. (leakage current 1 mA max.)
Connector insertion	80 gf (0.18 lb.f) max. per contact
Connector removal	10 gf (0.022 lb.f) max. 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	

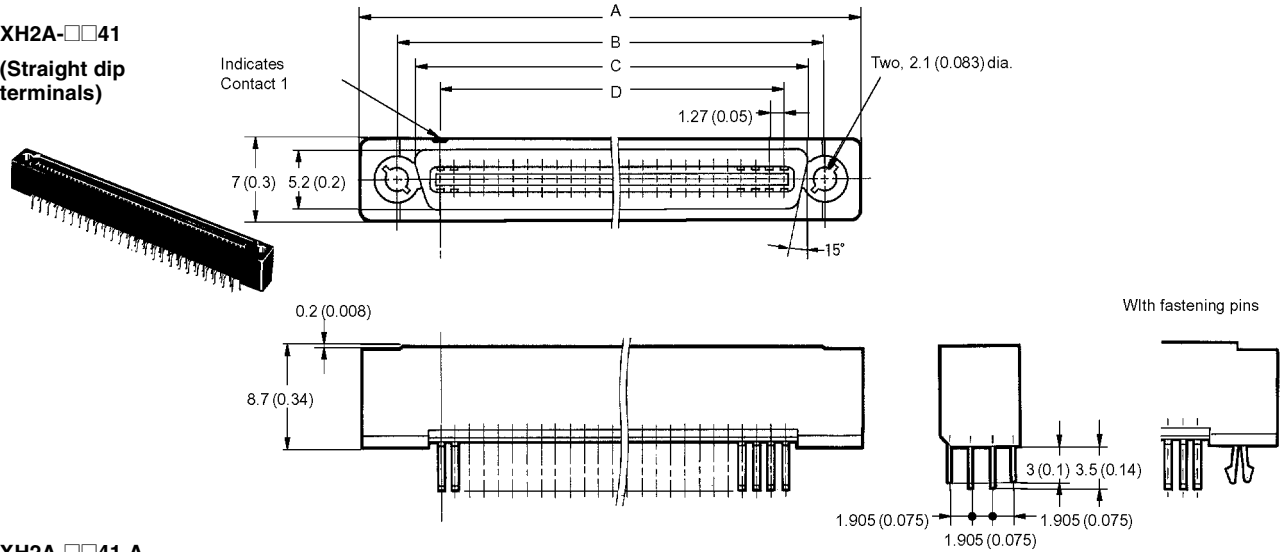
## Mating Diagram



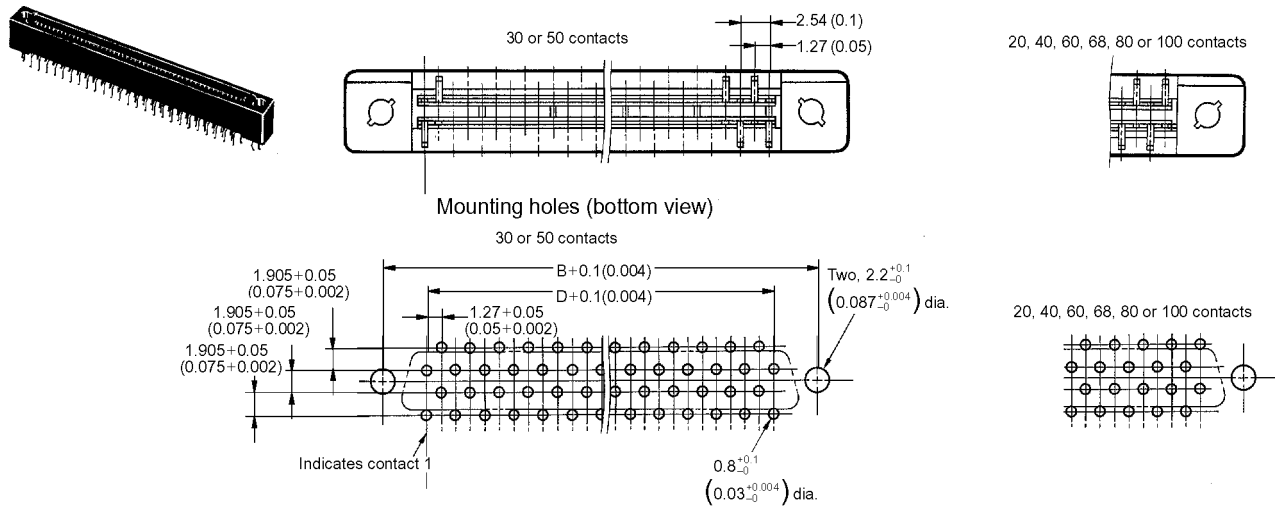
\*The standard and reverse models function as the standard DIN connectors (XC5).

## ■ XH2A Plugs, Straight Dip Terminals

**XH2A-□□41**  
(Straight dip terminals)



**XH2A-□□41-A**  
(Straight dip terminals, with fastening pins)



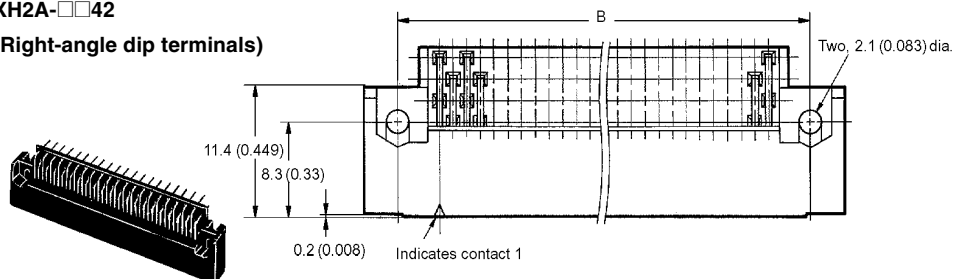
## Ordering Information

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

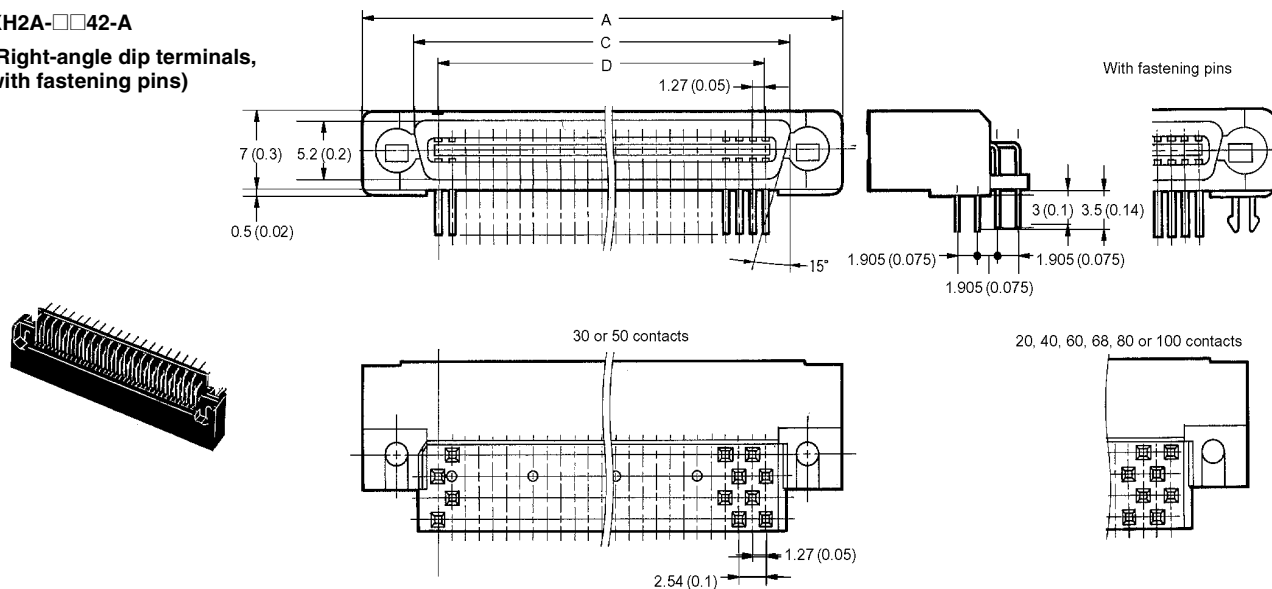
XH2A-□□42

(Right-angle dip terminals)

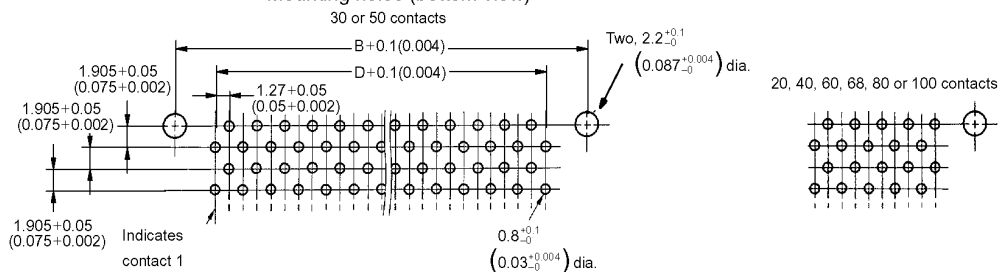


XH2A-□□42-A

(Right-angle dip terminals, with fastening pins)



Mounting holes (bottom view)

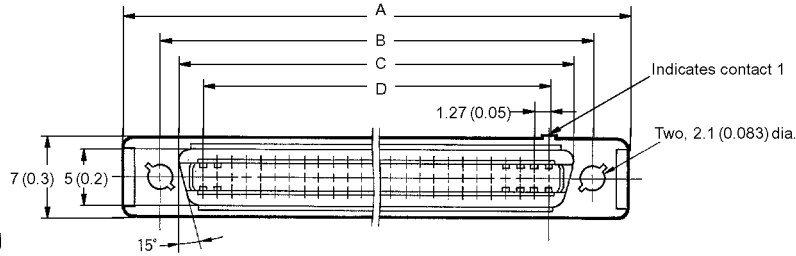
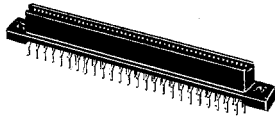


## Ordering Information

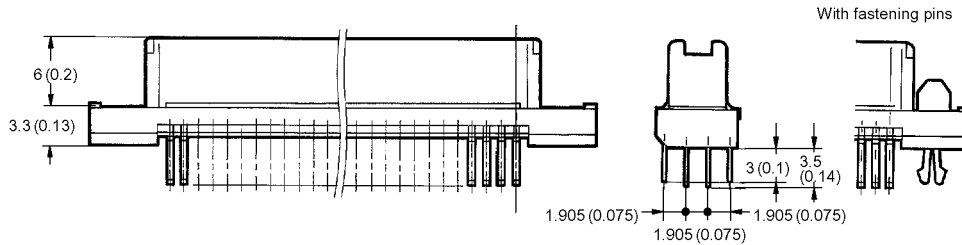
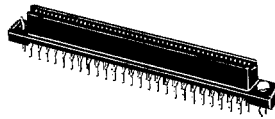
No. of contacts	Dimensions [mm (in.)]				Model	
	A	B	C	D	Plug/straight dip terminals	Plug/straight dip terminals with fastening pins
20	25.4 (1)	19.05 (0.75)	15.8 (0.622)	11.43 (0.45)	XH2A-2042	XH2A-2042-A
30	31.8 (1.25)	25.40 (1)	22.2 (0.874)	17.78 (0.7)	XH2A-3042	XH2A-3042-A
40	38.1 (1.5)	31.75 (1.25)	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

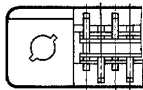
**XH2B-□□41**  
(Straight dip terminal)



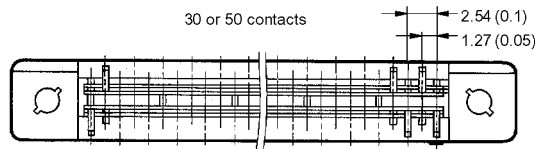
**XH2B-□□41-A**  
(Straight dip terminal, with fastening pins)



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

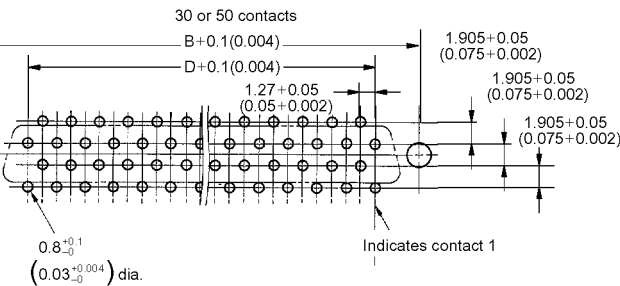
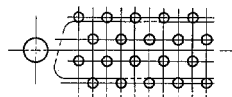


30 or 50 contacts



**Mounting holes (bottom view)**

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



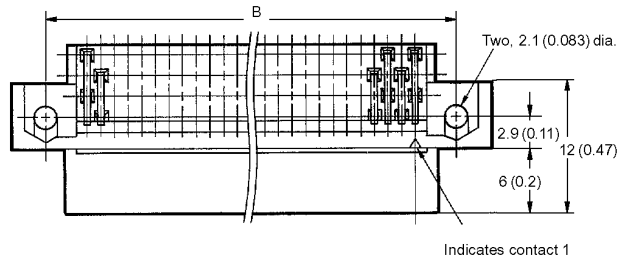
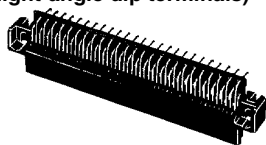
## Ordering Information

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-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

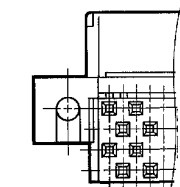
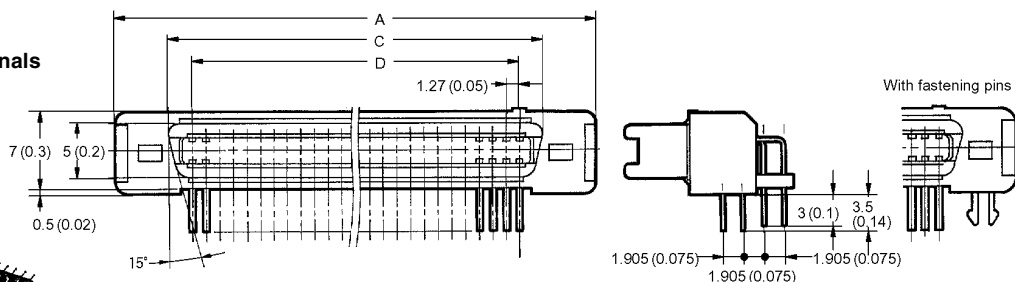
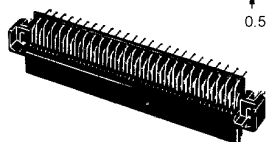
XH2B-□□42

(Right-angle dip terminals)

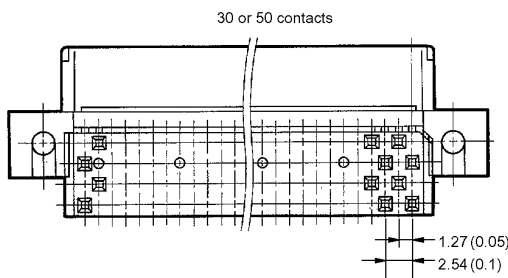


XH2B-□□42-A

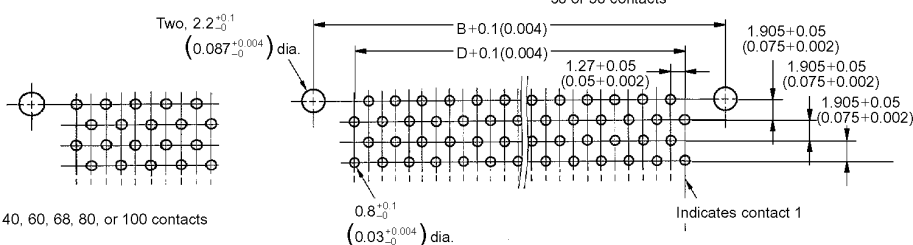
(Right-angle dip terminals with fastening pins)



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

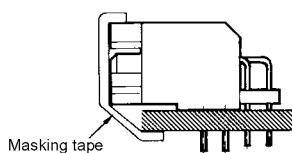
Terminal shape	Mated diagram	Mounting holes (bottom view)
Plug, straight terminals		
Plug, right-angle terminals		
Socket, straight terminals		
Socket, right-angle terminals		

- 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

A large grid of dashed lines for taking notes, consisting of 20 columns and 30 rows.

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  - (iii) Use in consumer products or any use in significant quantities.
  - (iv) Systems, machines and equipment that could present a risk to life or property. Please know and observe all prohibitions of use applicable to this product.

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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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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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