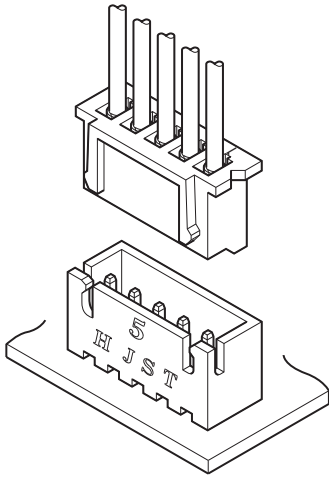


# XH CONNECTOR

2.5 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



Highly reliable, versatile 2.5 mm pitch wire-to-board connector with an assembled board height of 9.8 mm for low profile applications.

- Original double-leaf contact design
- Box-shaped shrouded header
- Header is also available with boss
- The 4 pin version conforms to JEMA's Home Automation (HA terminal) standards.

## ■ Specifications

- Current rating: 3 A AC/DC (AWG #22)
  - Voltage rating: 250 V AC/DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance:
    - Initial value/ 10 mΩ max.
    - After environmental tests/ 20 mΩ max.
  - Insulation resistance: 1,000 MΩ min.
  - Withstanding voltage:
    - There shall be no breakdown or flashover while applying 1,000 VAC for one minute.
  - Applicable wire range:
    - Conductor size/ AWG #30 to AWG #22
    - Insulation O.D./  $\phi$  0.9 mm to  $\phi$  1.9 mm
  - Applicable PC board thickness: 1.6 mm
- \* Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

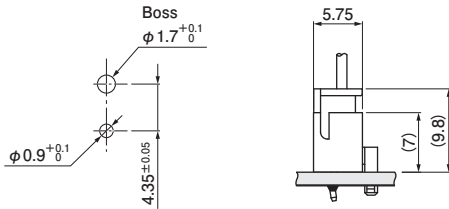
## ■ Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

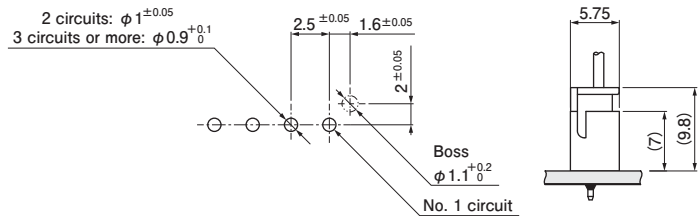
\* Specifications registered to overseas standards may differ from the general specifications listed above.

## PC board layout and Assembly layout

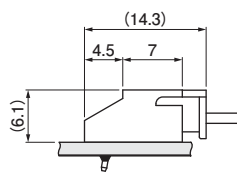
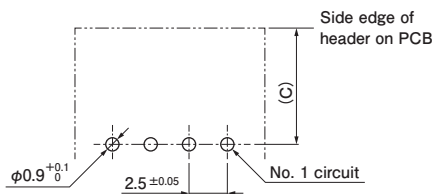
### Top entry type <Single circuit>



### <2 circuits or more>



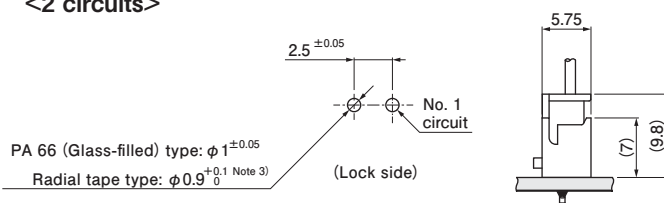
### Side entry type



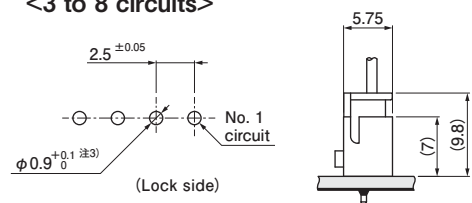
- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$  and shall not accumulate.  
 3. Dimension C: See "Header/ Side entry type" section on page 4.  
 4. Hole dimensions differ depending on the type of PCB and PCB drilling method.  
 When using PCB made of hard material composed of fiberglass cloth, please consider a larger hole diameter.  
 The above dimensions are reference values. Please contact JST for details.

## PC board layout and Assembly layout/ PA 66 (Glass-filled) type, Radial tape type

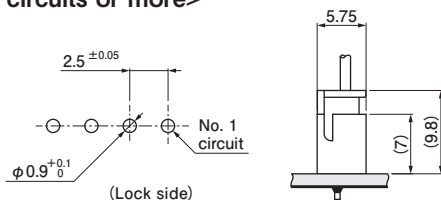
### Top entry type <2 circuits>



### <3 to 8 circuits>



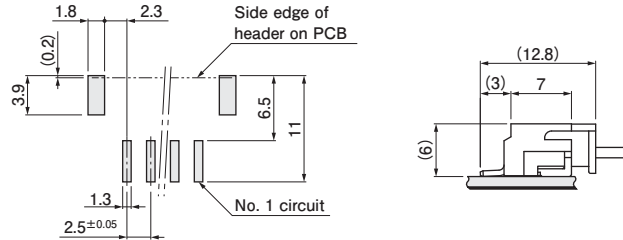
### <9 circuits or more>



- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$  and shall not accumulate.  
 3. Radial tape style packaging conforms to PCB hole diameter specifications on the automatic insertion machine.  
 4. Hole dimensions differ depending on the type of PCB and PCB drilling method.  
 When using PCB made of hard material composed of fiberglass cloth with glass-filled PA 66, please consider a larger hole diameter.  
 The above dimensions are reference values. Please contact JST for details.

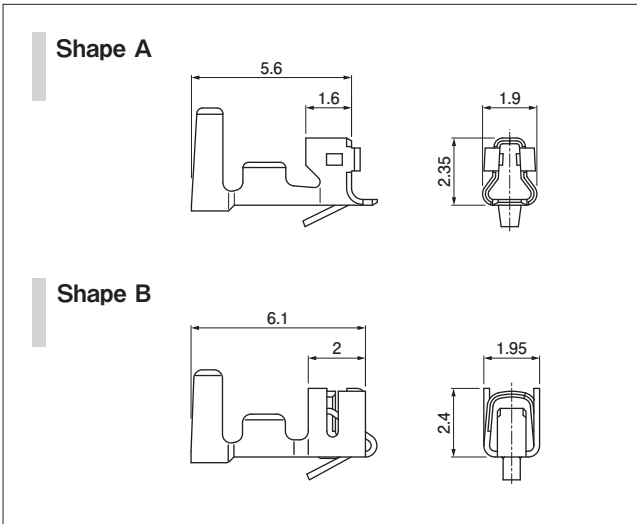
## PC board layout and Assembly layout/ SMT type

### Side entry type



- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB pattern pitch shall be  $\pm 0.05$  and shall not accumulate.  
 3. The above dimensions are reference values. Please contact JST for details.

## Contact



Shape	Model No.	Applicable wire range		Q'ty/ reel
		Conductor size AWG (mm <sup>2</sup> )	Insulation O.D. (mm)	
A	SXH-001T-P0.6N	#26 to #22 (0.13 to 0.33)	1.3 to 1.9	5,000
B	SXH-002T-P0.6	#30 to #26 (0.05 to 0.13)	0.9 to 1.3	8,000
	SXH-001T-P0.6	#28 to #22 (0.08 to 0.33)	0.9 to 1.9	

Material and Surface finish, etc.  
 Phosphor bronze, tin-plated

- Note: 1. Contact JST for gold-plated products.  
 2. Contact JST also if you require shielded wires, thin wires or other special wires.  
 3. SXH-001T-P0.6N is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration.

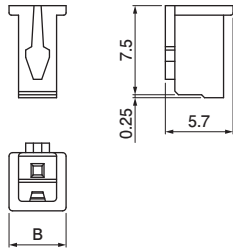
### Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SXH-001T-P0.6N	AP-K2N	MKS-L	APLMK SXH001-06N
SXH-002T-P0.6			APLMK SXH002-06
SXH-001T-P0.6			APLMK SXH001-06

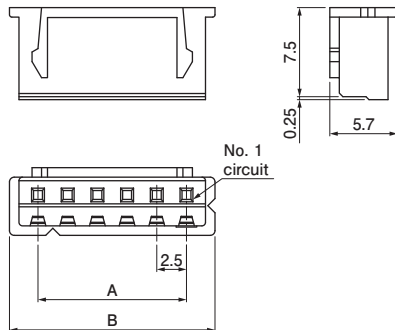
Note: Contact JST for fully automatic crimping applicator.

## Housing

### <Single circuit>

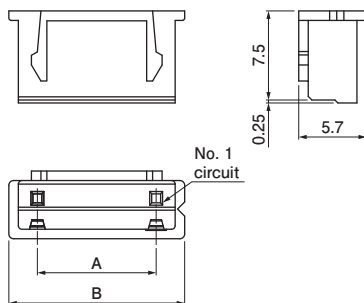


### <2 to 16, 20 circuits>

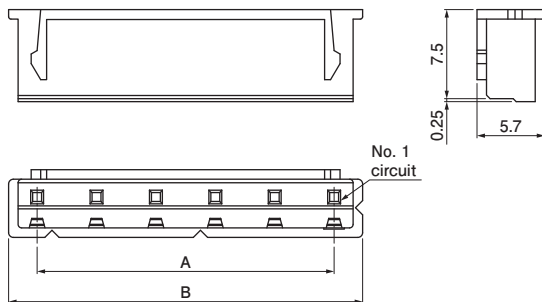


### Plugged up hole

#### <2 circuits, 10 mm pitch>



#### <6 circuits, 5 mm pitch>



No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
1	XHP-1	—	4.8	1,000
2	XHP-2	2.5	7.3	1,000
Note 1) 2	XHP-2(10.0)-U	10.0	14.8	1,000
3	XHP-3	5.0	9.8	1,000
4	XHP-4	7.5	12.3	1,000
5	XHP-5	10.0	14.8	1,000
6	XHP-6	12.5	17.3	1,000
Note 2) 6	XHP-6(5.0)-U	25.0	29.8	1,000
7	XHP-7	15.0	19.8	1,000
8	XHP-8	17.5	22.3	1,000
9	XHP-9	20.0	24.8	1,000
10	XHP-10	22.5	27.3	1,000
11	XHP-11	25.0	29.8	1,000
12	XHP-12	27.5	32.3	1,000
13	XHP-13	30.0	34.8	1,000
14	XHP-14	32.5	37.3	1,000
15	XHP-15	35.0	39.8	1,000
16	XHP-16	37.5	42.3	1,000
20	XHP-20	47.5	52.3	500

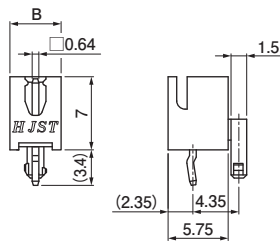
Material and Surface finish, etc.

PA 6, natural (white)

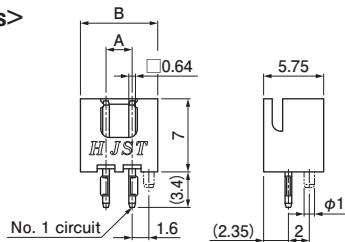
- Note: 1. XHP-2(10.0)-U means the 2-circuits housing with 10.0 mm pitch, and 3-circuits of 5-circuits are filled with the resin.  
 2. XHP-6(5.0)-U means the 6-circuits housing with 5.0 mm pitch and each even number circuit is filled with the resin.  
 3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Header

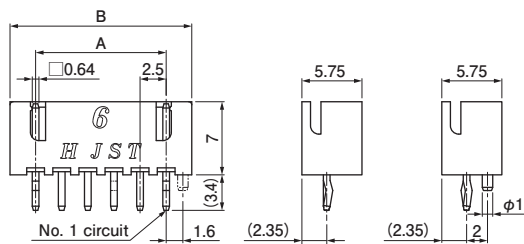
### Top entry type <Single circuit>



### <2 circuits>

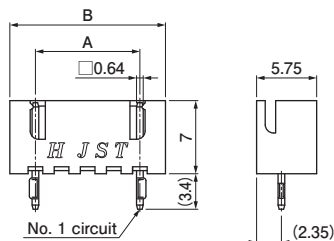


### <3 circuits or more>



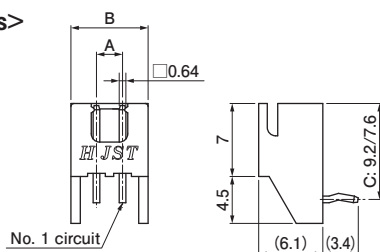
### Top entry type, plugged up hole

#### <2 circuits, 10 mm pitch>

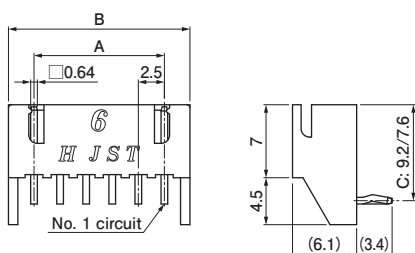


### Side entry type

#### <2 circuits>



#### <3 circuits or more>



### Top entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Without boss	With boss	A	B	Without boss	With boss
1	—	B1B-XH-AM	—	4.9	—	1,000
2	B2B-XH-A	B2B-XH-AM	2.5	7.4	1,000	1,000
2	B2(10.0)B-XH-A-U <small>Note2)</small>	—	10.0	14.9	1,000	—
3	B3B-XH-A	B3B-XH-AM	5.0	9.9	1,000	1,000
4	B4B-XH-A	B4B-XH-AM	7.5	12.4	500	500
5	B5B-XH-A	B5B-XH-AM	10.0	14.9	500	500
6	B6B-XH-A	B6B-XH-AM	12.5	17.4	500	500
7	B7B-XH-A	B7B-XH-AM	15.0	19.9	500	500
8	B8B-XH-A	B8B-XH-AM	17.5	22.4	250	250
9	B9B-XH-A	B9B-XH-AM	20.0	24.9	250	250
10	B10B-XH-A	B10B-XH-AM	22.5	27.4	250	250
11	B11B-XH-A	—	25.0	29.9	250	—
12	B12B-XH-A	B12B-XH-AM	27.5	32.4	250	250
13	B13B-XH-A	—	30.0	34.9	250	—
14	B14B-XH-A	—	32.5	37.4	250	—
15	B15B-XH-A	—	35.0	39.9	250	—
16	B16B-XH-A	—	37.5	42.4	200	—
20	B20B-XH-A	—	47.5	52.4	100	—

Material and Surface finish, etc.

Post: Brass, copper-undercoated, tin-plated  
Wafer: PA 66, natural (white)

Note: 1. This product displays (LF)(SN) on a label.

2. B2(10.0)B-XH-A-U means the 2-circuits housing with 10.0 mm pitch, and 3-circuits of 5-circuits are filled with the resin.

3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

### Side entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	C: 9.2 (mm)	C: 7.6 (mm)	A	B	
2	S2B-XH-A	S2B-XH-A-1	2.5	7.4	1,000
3	S3B-XH-A	S3B-XH-A-1	5.0	9.9	1,000
4	S4B-XH-A	S4B-XH-A-1	7.5	12.4	500
5	S5B-XH-A	S5B-XH-A-1	10.0	14.9	500
6	S6B-XH-A	S6B-XH-A-1	12.5	17.4	500
7	S7B-XH-A	S7B-XH-A-1	15.0	19.9	250
8	S8B-XH-A	S8B-XH-A-1	17.5	22.4	250
9	S9B-XH-A	S9B-XH-A-1	20.0	24.9	250
10	S10B-XH-A	S10B-XH-A-1	22.5	27.4	250
11	S11B-XH-A	S11B-XH-A-1	25.0	29.9	250
12	S12B-XH-A	S12B-XH-A-1	27.5	32.4	200
13	S13B-XH-A	S13B-XH-A-1	30.0	34.9	200
14	S14B-XH-A	S14B-XH-A-1	32.5	37.4	200
15	S15B-XH-A	S15B-XH-A-1	35.0	39.9	100
16	S16B-XH-A	—	37.5	42.4	100

Material and Surface finish, etc.

Post: Brass, copper-undercoated, tin-plated  
Wafer: PA 66, natural (white)

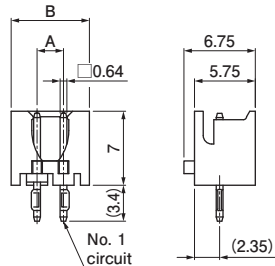
Note: 1. This product displays (LF)(SN) on a label.

2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

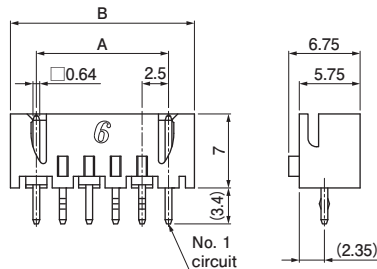
## Header/ PA 66 (Glass-filled) type

### Top entry type

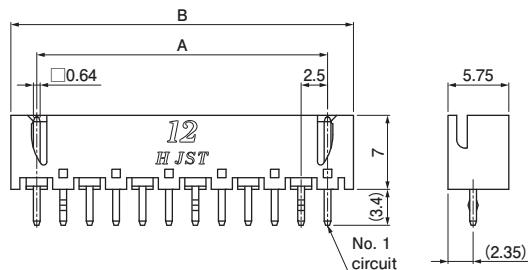
#### <2 circuits>



#### <3 to 8 circuits>



#### <9 circuits or more>



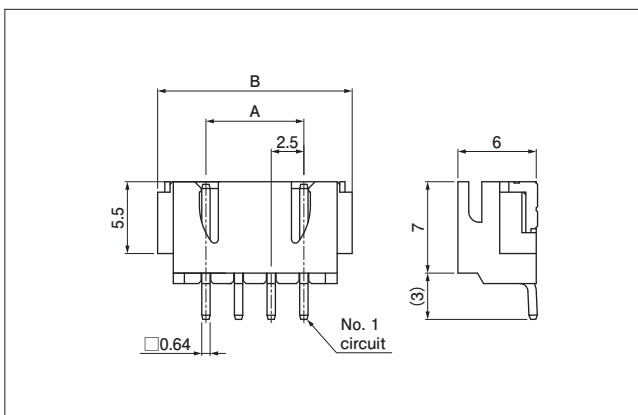
No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
2	B2B-XH-2	2.5	7.4	1,000
3	B3B-XH-2	5.0	9.9	1,000
4	B4B-XH-2	7.5	12.4	500
5	B5B-XH-2	10.0	14.9	500
6	B6B-XH-2	12.5	17.4	500
7	B7B-XH-2	15.0	19.9	500
8	B8B-XH-2	17.5	22.4	250
9	B9B-XH-2	20.0	24.9	250
10	B10B-XH-2	22.5	27.4	250
11	B11B-XH-2	25.0	29.9	250
12	B12B-XH-2	27.5	32.4	250
13	B13B-XH-2	30.0	34.9	250
14	B14B-XH-2	32.5	37.4	250
15	B15B-XH-2	35.0	39.9	250

#### Material and Surface finish, etc.

Post: Brass, copper-undercoated, tin-plated  
 Wafer: PA 66 (Glass-filled), natural (ivory)

- Note: 1. This product displays (LF)(SN) on a label.  
 2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Header/ SMT type



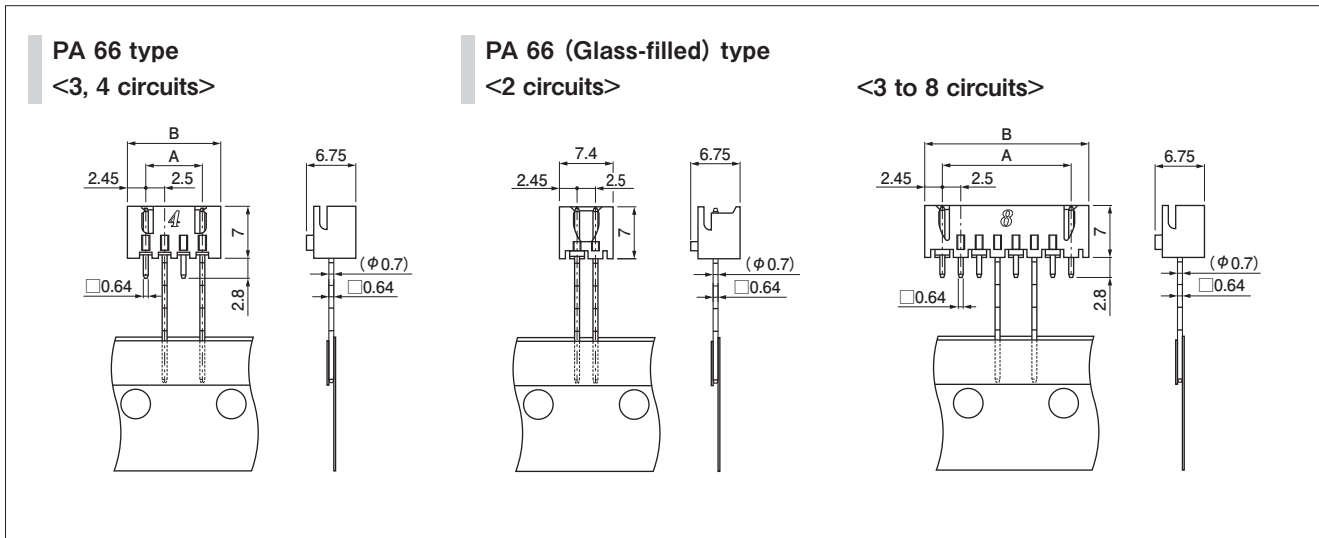
No. of circuits	Model No.	Dimensions (mm)		Q'ty/reel
		A	B	
3	S3B-XH-SM4-TB	5.0	12.5	500
4	S4B-XH-SM4-TB	7.5	15.0	500
6	S6B-XH-SM4-TB	12.5	20.0	500

#### Material and Surface finish, etc.

Post: Copper alloy, copper-undercoated, tin-plated  
 Wafer: Modified PA 6T, natural (ivory)  
 Solder tab: Brass, copper-undercoated, tin-plated

- Note: 1. This product displays (LF)(SN) on a label.  
 2. This product is supplied on embossed tape and reel packaging.  
 3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Header/ Radial tape type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	PA 66 type	PA 66 (Glass-filled) type	A	B	
2	—	B2B-XH-2-TV4	—	—	1,000
3	B3B-XH-TV4	B3B-XH-2-TV4	5.0	9.9	1,000
4	B4B-XH-TV4	B4B-XH-2-TV4	7.5	12.4	500
5	—	B5B-XH-2-TV4	10.0	14.9	500
6	—	B6B-XH-2-TV4	12.5	17.4	500
7	—	B7B-XH-2-TV4	15.0	19.9	500
8	—	B8B-XH-2-TV4	17.5	22.4	500

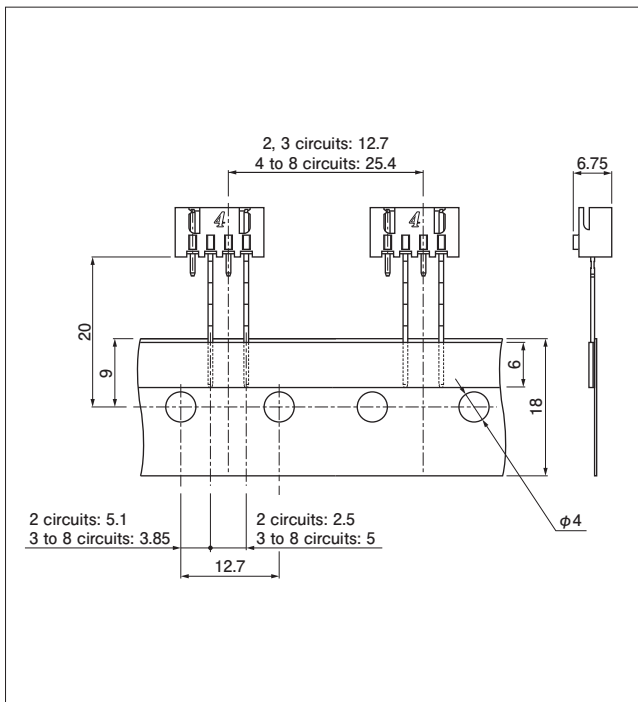
### Material and Surface finish, etc.

Post: Brass, copper-undercoated, tin-plated  
 Wafer: PA 66 type/ PA 66, natural (white)  
 PA 66 (Glass-filled) type/ PA 66 (Glass-filled), natural (ivory)

- Note: 1. This product displays (LF)(SN) on a label.  
 2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

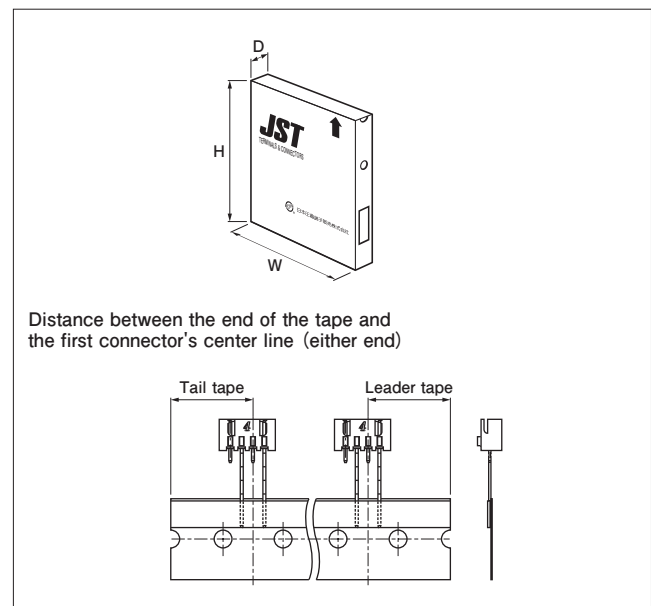
# XH CONNECTOR

## Taping specifications



Note: Conforms to IEC 60286-2 (JIC C 0806-2) "Tape packaging of components with unidirectional leads on continuous tapes".

## Packaging specifications



Packaging style	Flat pack (zigzag folded)	
Distance between folds	24 index holes per fold (304.8 mm)	
Box size	316 (W) × 45 (D) × 330 (H) mm	
Distance between the end of the tape and the first connector's center line (either end)	19.05 mm	
Quantity per package	2, 3 circuits	1,000 pcs./box
	4 to 8 circuits	500 pcs./box

Note: Products of different packaging specifications are also available. Contact JST for details.

## Model number allocation

### Contact

	<b>S</b>	<b>XH - 001</b>	<b>T - P</b>	<b>0.6</b>	
Supply form: Strip form					
Series name					
Applicable wire range:					
Normal type					
002...AWG #30 to AWG #26					
001...AWG #28 to AWG #22					
Low insertion force type					
001...AWG #26 to AWG #22					
Surface finish: Tin-plated					
Material: Phosphor bronze					
Applicable post size					
Type: No indication...Normal type, N...Low insertion force type					

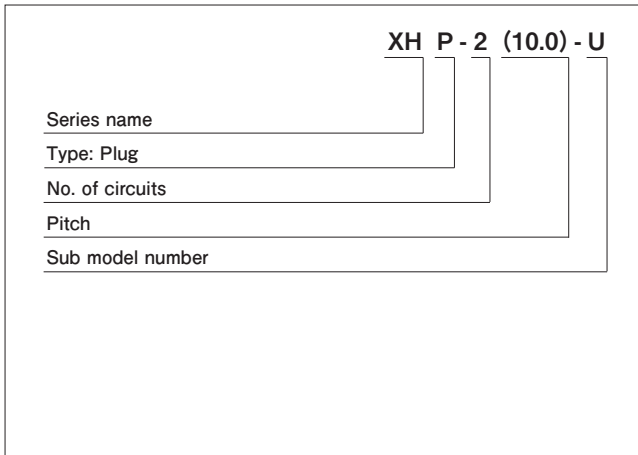
### Housing

			<b>XH</b>	<b>P - 5 -</b>	
Series name					
Type: Plug					
No. of circuits					
Color: No indication...Natural (White), BK...Black, R...Red, E...Blue, Y...Yellow, L...Lemon yellow, M...Green, N...Brown, FY...Fluorescent yellow					

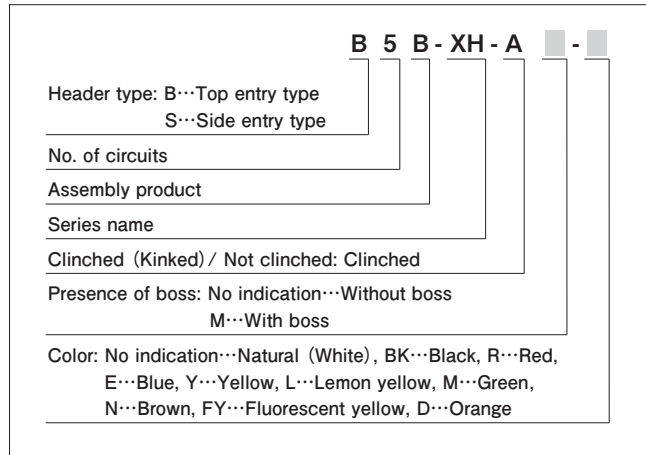


## Model number allocation

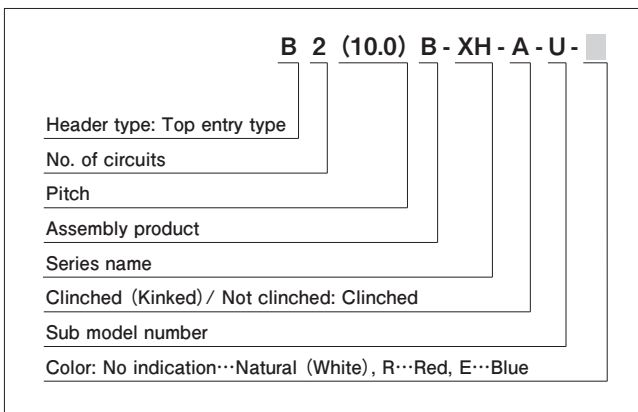
### Housing/ Plugged up hole



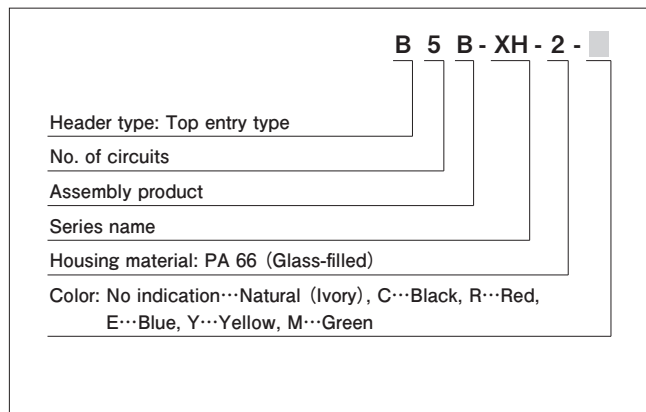
### Header



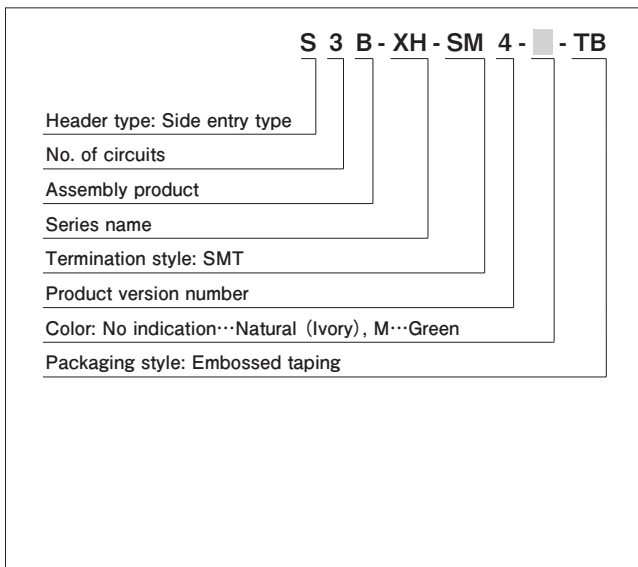
### Header/ Plugged up hole



### Header/ PA 66 (Glass-filled) type



### Header/ SMT type



### Header/ Radial tape type

