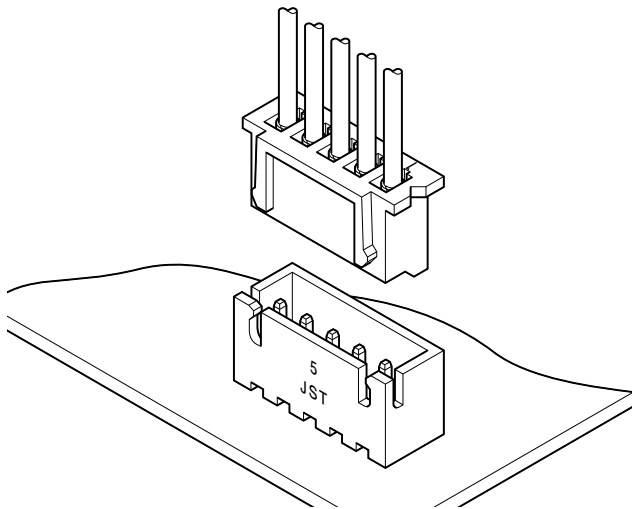




# XH CONNECTOR

2.5 mm pitch/Disconnectable Crimp style connectors



The XH connector was developed based on the high reliability and versatility of our NH series connectors. The connector is very small with a mounting height of 9.8 mm.

- Original folded beam contact
- Box-shaped shrouded header
- Header with a boss
- Interchangeability
- Conforming to the HA terminal

## 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: 1,000 VAC/minute
  - Applicable wire: AWG #30 to #22
  - Applicable PC board thickness: 1.6 mm
- \* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).
- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

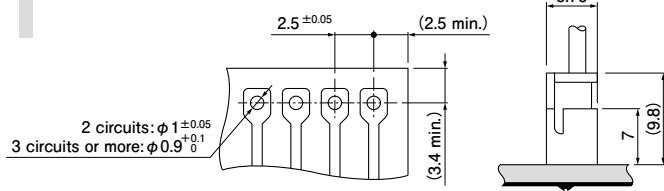
## Standards

- Ⓜ Recognized E60389
- ⚠ J50014297

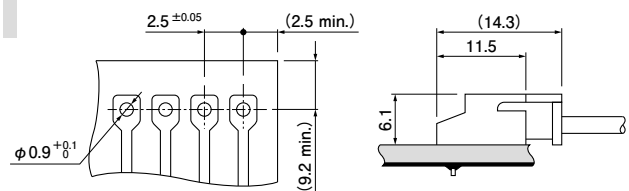
## PC board layout and Assembly layout

<Through-hole type (viewed from soldering side)>

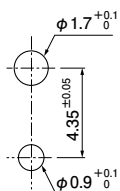
Top entry type



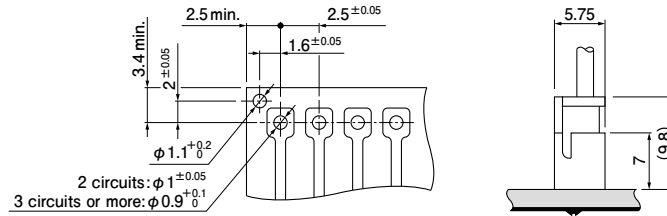
Side entry type



Top entry type with a boss  
<Single circuit>



<2 circuits or more>

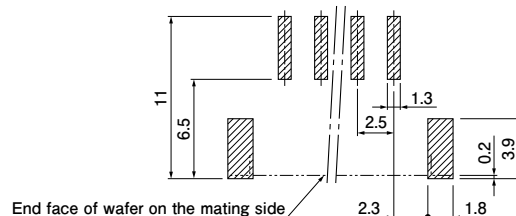


Note: 1. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.

2. Hole dimensions differ according to the type of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

<SMT type (viewed from connector mounting side)>

Side entry type



Note: 1. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

## Contact



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

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

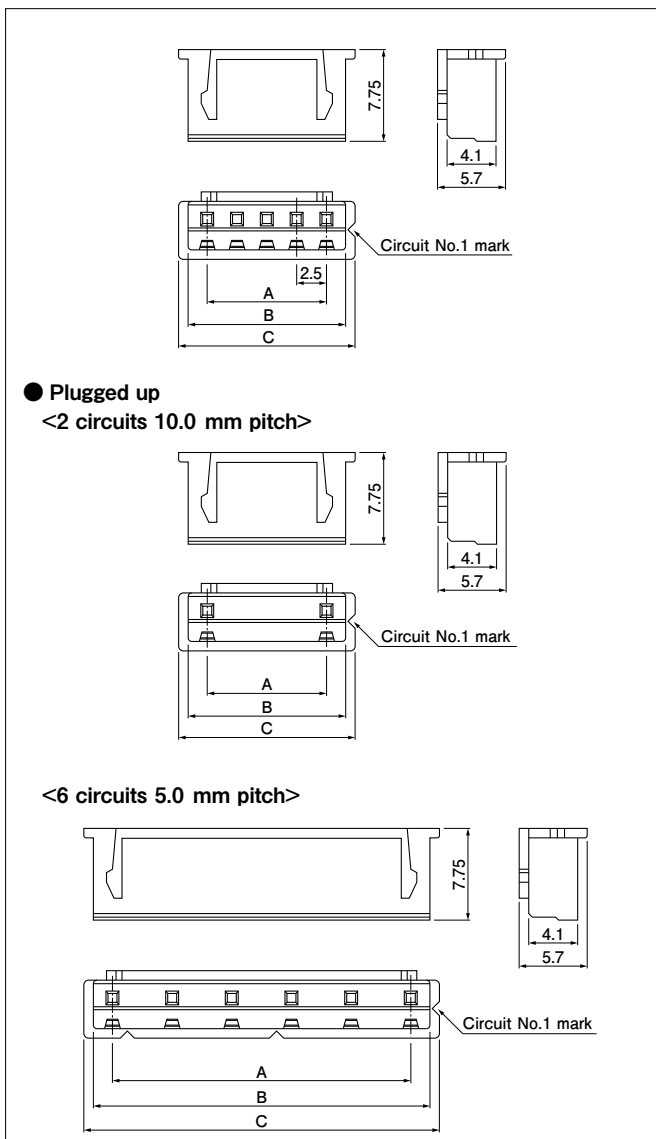
Note:

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

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

Note: Contact JST for fully automatic crimping applicator.

## Housing



No. of circuits	Model No.	Dimensions (mm)			Q'ty/bag
		A	B	C	
1	XHP-1	—	3.2	4.8	1,000
2	XHP-2	2.5	5.7	7.3	1,000
2	Note1) XHP-2(10.0)-U	10.0	13.2	14.8	1,000
3	XHP-3	5.0	8.2	9.8	1,000
4	XHP-4	7.5	10.7	12.3	1,000
5	XHP-5	10.0	13.2	14.8	1,000
6	XHP-6	12.5	15.7	17.3	1,000
6	Note2) XHP-6(5.0)-U	25.0	28.2	29.8	1,000
7	XHP-7	15.0	18.2	19.8	1,000
8	XHP-8	17.5	20.7	22.3	1,000
9	XHP-9	20.0	23.2	24.8	1,000
10	XHP-10	22.5	25.7	27.3	1,000
11	XHP-11	25.0	28.2	29.8	1,000
12	XHP-12	27.5	30.7	32.3	1,000
13	XHP-13	30.0	33.2	34.8	1,000
14	XHP-14	32.5	35.7	37.3	1,000
15	XHP-15	35.0	38.2	39.8	1,000
16	XHP-16	37.5	40.7	42.3	1,000
20	XHP-20	47.5	50.7	52.3	500

### Material and Finish

PA 6, UL94V-0, natural (white)

### RoHS2 compliance

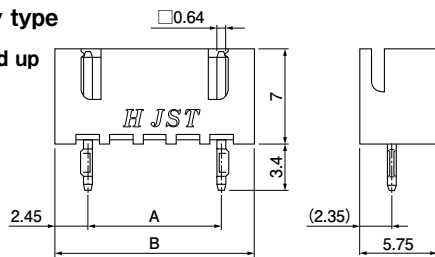
- Note: 1. XHP-2(10.0)-U means the 2-circuits housing with 10.0 mm pitch, and 3-circuits of 5-circuits are filled with the resin. Unlisted in UL/TÜV.
2. XHP-6(5.0)-U means the 6-circuits housing with 5.0 mm pitch and each even number circuit is filled with the resin. Unlisted in UL/TÜV.

# XH CONNECTOR

## Header

### Top entry type

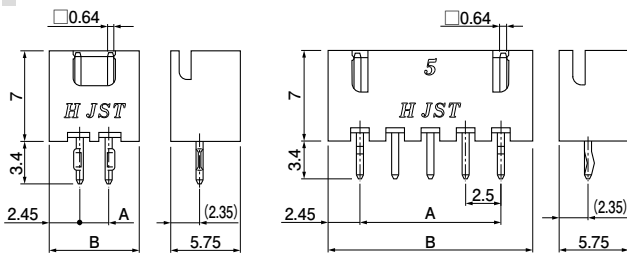
● plugged up



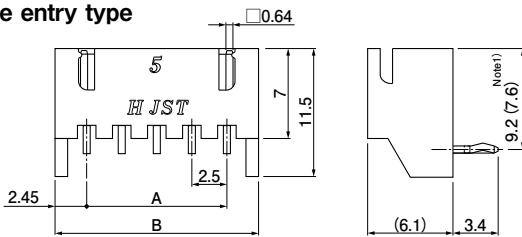
### Top entry type

<2 circuits>

<3 circuits or more>



### Side entry type



No. of circuits	Model No.			Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	Side entry type	A	B	Top entry type	Side entry type
2	B2B-XH-A	S2B-XH-A-1	S2B-XH-A	2.5	7.4	1,000	1,000
Note2) 2	B2(10.0)B-XH-A-U	—	—	10.0	14.9	1,000	—
3	B3B-XH-A	S3B-XH-A-1	S3B-XH-A	5.0	9.9	1,000	1,000
4	B4B-XH-A	S4B-XH-A-1	S4B-XH-A	7.5	12.4	500	500
5	B5B-XH-A	S5B-XH-A-1	S5B-XH-A	10.0	14.9	500	500
6	B6B-XH-A	S6B-XH-A-1	S6B-XH-A	12.5	17.4	500	500
7	B7B-XH-A	S7B-XH-A-1	S7B-XH-A	15.0	19.9	500	250
8	B8B-XH-A	S8B-XH-A-1	S8B-XH-A	17.5	22.4	250	250
9	B9B-XH-A	S9B-XH-A-1	S9B-XH-A	20.0	24.9	250	250
10	B10B-XH-A	S10B-XH-A-1	S10B-XH-A	22.5	27.4	250	250
11	B11B-XH-A	S11B-XH-A-1	S11B-XH-A	25.0	29.9	250	250
12	B12B-XH-A	S12B-XH-A-1	S12B-XH-A	27.5	32.4	250	200
13	B13B-XH-A	S13B-XH-A-1	S13B-XH-A	30.0	34.9	250	200
14	B14B-XH-A	S14B-XH-A-1	S14B-XH-A	32.5	37.4	250	200
15	B15B-XH-A	S15B-XH-A-1	S15B-XH-A	35.0	39.9	250	100
16	B16B-XH-A	—	S16B-XH-A	37.5	42.4	200	100
20	B20B-XH-A	—	—	47.5	52.4	100	—

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

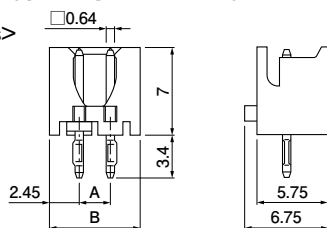
RoHS2 compliance This product displays (LF)(SN) on a label.

- Note: 1. Side entry type 2 to 15 circuits with a size of 7.6 mm from the end face of the mating part to the post for mounting the PC board are also available. For ordering, please add "-1" to the end of the above model number.
2. B2(10.0)B-XH-A-U means the 2-circuits header with 10.0 mm pitch, and 3 holes of 5-circuit housing among posts are plugged up. (Unlisted in UL/TÜV.)
3. Headers are interchangeable with those of the NR and NRD insulation displacement connector, and JQ board-to-board connector

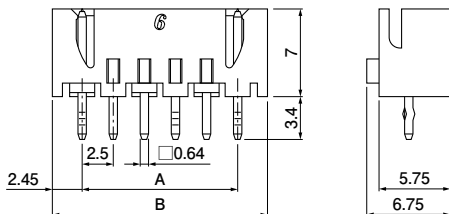
## Header

### Top entry type of glass-filled nylon

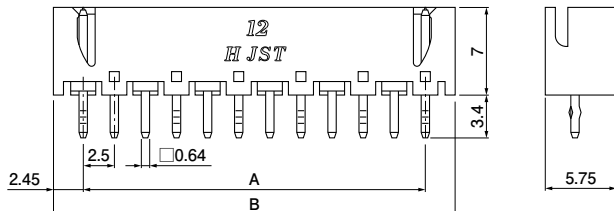
<2 circuits>



<3 to 8 circuits>



<9 circuits or more>



No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		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 Finish

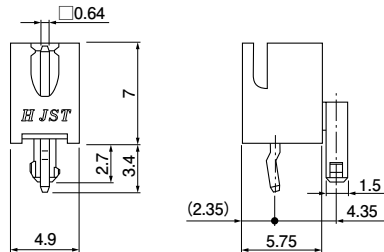
Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS2 compliance This product displays (LF)(SN) on a label.

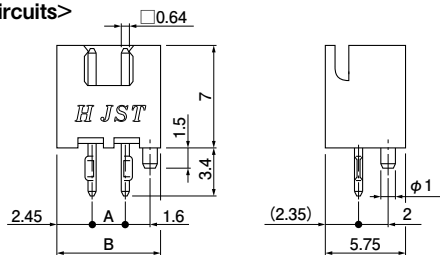
## Header

### Top entry type with a boss

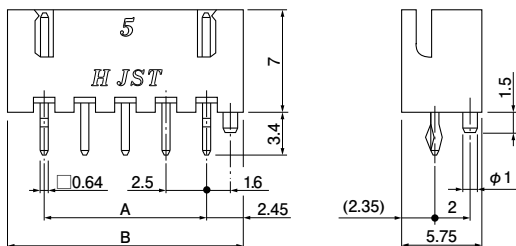
<1 circuit>



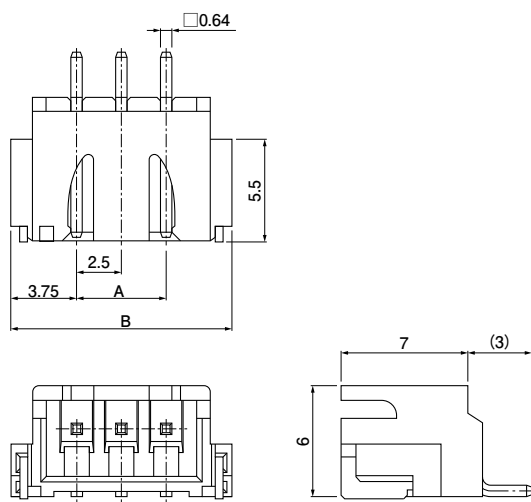
<2 circuits>



<3 circuits or more>



### Header (SMT type)



No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
1	*B1B-XH-AM	—	—	1,000
2	B2B-XH-AM	2.5	7.4	1,000
3	B3B-XH-AM	5.0	9.9	1,000
4	B4B-XH-AM	7.5	12.4	500
5	B5B-XH-AM	10.0	14.9	500
6	B6B-XH-AM	12.5	17.4	500
7	B7B-XH-AM	15.0	19.9	500
8	B8B-XH-AM	17.5	22.4	250
9	B9B-XH-AM	20.0	24.9	250
10	B10B-XH-AM	22.5	27.4	250
12	B12B-XH-AM	27.5	32.4	250

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

**RoHS2 compliance** This product displays (LF)(SN) on a label.

Note: 1. Headers are interchangeable with those of the NR and NRD insulation displacement connector, and JQ board-to-board connector.

2. \*Marked products are unlisted in UL/TÜV.

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 Finish

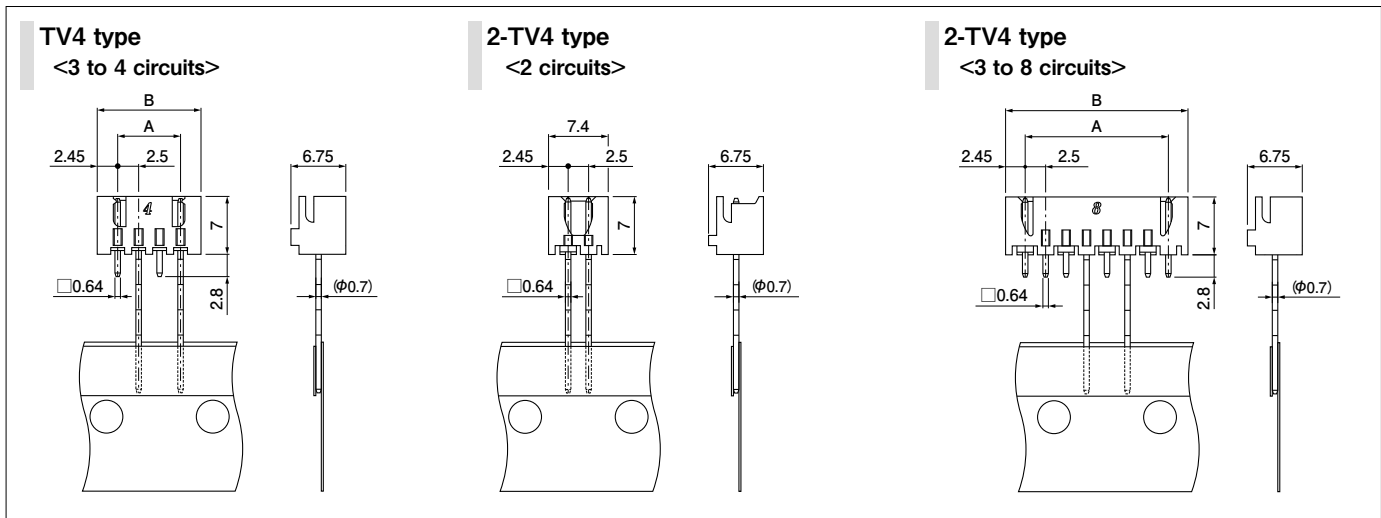
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 6T, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS2 compliance** This product displays (LF)(SN) on a label.

Note: The products listed above are supplied on embossed-tape.

# XH CONNECTOR

## Header on radial-tape



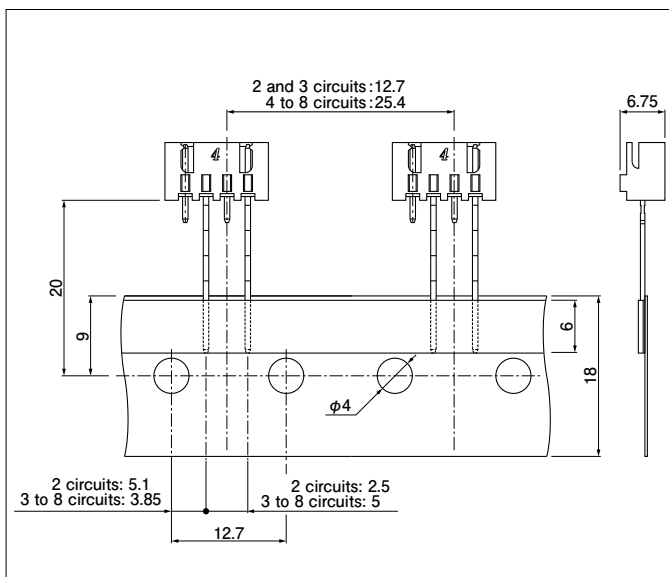
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	TV4	2-TV4	A	B	
2	—	B2B-XH-2-TV4	—	—	1,000
3	B3B-XH-TV4	B3B-XH-2-TV4	5.0	9.9	1,000
4	B4B-XH-TV4	B4B-XH-2-TV4	7.5	12.4	500
5	—	B5B-XH-2-TV4	10.0	14.9	500
6	—	B6B-XH-2-TV4	12.5	17.4	500
7	—	B7B-XH-2-TV4	15.0	19.9	500
8	—	B8B-XH-2-TV4	17.5	22.4	500

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: TV4 type/ PA 66, UL94V-0, natural (white)  
 2-TV4 type/ Glass-filled PA 66, UL94V-0, natural (ivory)

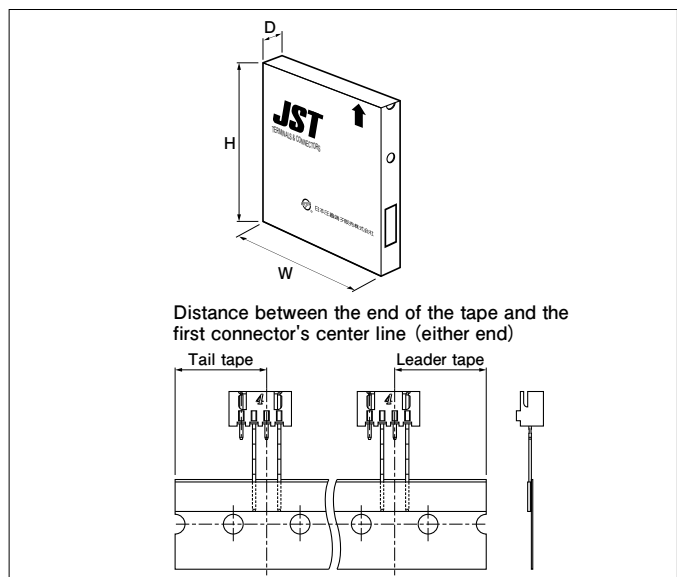
RoHS2 compliance This product displays (LF)(SN) on a label.  
 Note: Unlisted in UL/TÜV.

## Taping specification



Note: Conforms to JIC C 0806 of "Tape packaging of components with unidirectional leads on continuous tapes".

## Packaging specifications



Package type	Flat pack (zigzag folded)	
Distance between folds	24 indexing 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	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 XH - 001 T - P 0.6</b>
Form: S...Strip form, B...Loose piece	
Series name	
Applicable wire range:	
Normal type 001...AWG #28 to #22	
002...AWG #30 to #26	
Low insertion force type 001...AWG #26 to #22	
Surface finish: T...Tin-plated (reflow treatment)	
Material: P...Phosphor bronze, None...Brass	
Terminal size	
Type name: None...Normal type, N...Low insertion force type	

### Housing

	<b>XH P - 1 -</b>
Series name	
Part name: Plug	
No. of circuits: 1 to 16, 20	
Color: None...Natural (White), BK...Black, R...Red, E...Blue, Y...Yellow, L...Lemon yellow, M...Green, D...Orange, N...Brown, FY...Fluorescent yellow	

### Housing with plugged up hole

	<b>XHP - 2 (10.0) - U -</b>
Series name	
Part name: Plug	
No. of circuits: 2, 6	
Pitch: 5, 10 mm	
Sub model number: Plugged up hole	
Color: None...Natural (White), R...Red, E...Blue	

### Header

	<b>B 2 B - XH - A -</b>
Shape of assembled product: B...Top entry type, S...Side entry type	
No. of circuits: Top entry type...2 to 16, 20 Side entry type...2 to 16	
Part name: Header	
Series name	
Indication of clinch: A...Clinched	
Color: None...Natural (White), BK...Black, R...Red, E...Blue, Y...Yellow, L...Lemon yellow, M...Green, D...Orange, N...Brown, FY...Fluorescent yellow	

### Header with plugged up hole

	<b>B 2 (10.0) B - XH - A - U -</b>
Shape of assembled product: B...Top entry type	
No. of circuits: 2	
Pitch: 10 mm	
Part name: Header	
Series name	
Indication of clinch: A...Clinched	
Sub model number: Plugged up hole	
Color: None...Natural (White), BK...Black, R...Red, E...Blue, Y...Yellow, L...Lemon yellow, M...Green, D...Orange, N...Brown	

### Header (Glass-filled Nylon)

	<b>B 2 B - XH - 2 -</b>
Shape of assembled product: B...Top entry type	
No. of circuits: 2 to 15	
Part name: Header	
Series name	
Material: 2...Glass-filled Nylon 66	
Color: None...Natural (Ivory), C...Black, R...Red, E...Blue, Y...Yellow, M...Green	

### Header (Top entry type with boss)

	<b>B 1 B - XH - AM -</b>
Shape of assembled product: B...Top entry type	
No. of circuits: 1 to 10, 12	
Part name: Header	
Series name	
Shape: With boss	
Color: None...Natural (White), BK...Black, R...Red, E...Blue, Y...Yellow, L...Lemon yellow, M...Green	

### Header (SMT type)

	<b>S 3 B - XH - SM4 - -TB</b>
Shape of assembled product: S...Side entry type	
No. of circuits: 3, 4, 6	
Part name: Header	
Series name	
SMT specification: SM4...With solder tab	
Color: None...Natural (Ivory), M...Green, R...Red, E...Blue, L...Lemon yellow	
Packaging style: TB...Embossed-taping	

### Header on radial-tape

	<b>B 2 B - XH - 2 - TV4 -</b>
Shape of assembled product: B...Top entry type	
No. of circuits: 2 to 8	
Part name: Header	
Series name	
Material: 2...Glass-filled Nylon 66, None...Nylon 66	
Packaging style: TV4...Radial-taping	
Color: None...Natural (TV4 type/White, 2-TV4 type/Ivory), C...Black (Glass-filled), BK...Black (Non-strengthened), R...Red, E...Blue, Y...Yellow, M...Green	

Note: Depending on the colors, it may take some time for delivery.