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

### Through-hole type (viewed from soldering side)

#### Top entry type

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 ±0.05</td>
</tr>
<tr>
<td>(2.5 min.)</td>
</tr>
<tr>
<td>5.75</td>
</tr>
</tbody>
</table>

#### Top entry type with a boss

- **<Single circuit>**
- **<2 circuits or more>**

#### Side entry type

- **<2 circuits or more>**

### SMT type (viewed from connector mounting side)

#### Side entry type

End face of wafer on the mating side

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.5</td>
</tr>
<tr>
<td>2.5</td>
</tr>
<tr>
<td>1.3</td>
</tr>
</tbody>
</table>

Note: 1. Tolerances are non-cumulative: ± 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.

Note: 1. Tolerances are non-cumulative: ± 0.05 mm for all centers.
2. The dimensions above should serve as a guideline. Contact JST for details.
RoHS2 compliance

Note:
1. Contact JST if you require gold-plated contacts or contacts made of brass.
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.

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.

Contact

Model No. Shape Applicable Wire Insulation O.D (mm) Qty/reel
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

Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

Housing

No. of circuits Model No. Dimensions (mm) Qty/bag
1 XHP-1 — 3.2 4.8 1,000
2 XHP-2 2.5 5.7 7.3 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
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)
**XH CONNECTOR**

### Top entry type
- **<2 circuits>**
  - [Diagram of Top entry type <2 circuits>]
- **<3 circuits or more>**
  - [Diagram of Top entry type <3 circuits or more>]

### Side entry type
[Diagram of Side entry type]

### Header
- **Top entry type of glass-filled nylon**
  - **<2 circuits>**
    - [Diagram of Top entry type <2 circuits>]
  - **<3 to 8 circuits>**
    - [Diagram of Top entry type <3 to 8 circuits>]
  - **<9 circuits or more>**
    - [Diagram of Top entry type <9 circuits or more>]

### Table: Header

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q'ty/box</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>B2B-XH-2</td>
<td>2.5</td>
<td>7.4</td>
</tr>
<tr>
<td>3</td>
<td>B3B-XH-2</td>
<td>5.0</td>
<td>9.9</td>
</tr>
<tr>
<td>4</td>
<td>B4B-XH-2</td>
<td>7.5</td>
<td>12.4</td>
</tr>
<tr>
<td>5</td>
<td>B5B-XH-2</td>
<td>10.0</td>
<td>14.3</td>
</tr>
<tr>
<td>6</td>
<td>B6B-XH-2</td>
<td>12.5</td>
<td>17.4</td>
</tr>
<tr>
<td>7</td>
<td>B7B-XH-2</td>
<td>15.0</td>
<td>19.9</td>
</tr>
<tr>
<td>8</td>
<td>B8B-XH-2</td>
<td>17.5</td>
<td>22.4</td>
</tr>
<tr>
<td>9</td>
<td>B9B-XH-2</td>
<td>20.0</td>
<td>24.9</td>
</tr>
<tr>
<td>10</td>
<td>B10B-XH-2</td>
<td>22.5</td>
<td>27.4</td>
</tr>
<tr>
<td>11</td>
<td>B11B-XH-2</td>
<td>25.0</td>
<td>29.9</td>
</tr>
<tr>
<td>12</td>
<td>B12B-XH-2</td>
<td>27.5</td>
<td>32.4</td>
</tr>
<tr>
<td>13</td>
<td>B13B-XH-2</td>
<td>30.0</td>
<td>34.9</td>
</tr>
<tr>
<td>14</td>
<td>B14B-XH-2</td>
<td>32.5</td>
<td>37.4</td>
</tr>
<tr>
<td>15</td>
<td>B15B-XH-2</td>
<td>35.0</td>
<td>39.9</td>
</tr>
<tr>
<td>20</td>
<td>B20B-XH-2</td>
<td>—</td>
<td>47.5</td>
</tr>
</tbody>
</table>

### 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.

**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.
XH CONNECTOR

Header

Top entry type with a boss

<1 circuit>

<2 circuits>

<3 circuits or more>

Header (SMT type)

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

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.

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q’ty/reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>S3B-XH-SM4-TB</td>
<td>5.0</td>
<td>12.5</td>
</tr>
<tr>
<td>4</td>
<td>S4B-XH-SM4-TB</td>
<td>7.5</td>
<td>15.0</td>
</tr>
<tr>
<td>6</td>
<td>S6B-XH-SM4-TB</td>
<td>12.5</td>
<td>20.0</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q'ty/box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2B-XH-2-TV4</td>
<td>A 2.5 B 6.75</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3B-XH-2-TV4</td>
<td>5.0 9.9</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4B-XH-2-TV4</td>
<td>7.5 12.4</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5B-XH-2-TV4</td>
<td>10.0 14.9</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6B-XH-2-TV4</td>
<td>12.5 17.4</td>
<td>500</td>
</tr>
<tr>
<td>7</td>
<td>B7B-XH-2-TV4</td>
<td>15.0 19.9</td>
<td>500</td>
</tr>
<tr>
<td>8</td>
<td>B8B-XH-2-TV4</td>
<td>17.5 22.4</td>
<td>500</td>
</tr>
</tbody>
</table>

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

**Taping specification**

<table>
<thead>
<tr>
<th>Package type</th>
<th>Distance between folds</th>
<th>Box size</th>
<th>Distance between the end of the tape and the first connector’s center line (either end)</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat pack (zigzag folded)</td>
<td>24 indexing holes per fold (304.8 mm)</td>
<td>316(W) × 45 (D) × 330 (H) mm</td>
<td>19.05 mm</td>
<td>1,000 pcs./box</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 to 8 circuits</td>
<td>500 pcs./box</td>
</tr>
</tbody>
</table>

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

### Contact

- **Shape of assembled product:** B…Top entry type, S…Side entry type
- **No. of circuits:** 2, 6
- **Material:** 2…Glass-filled Nylon 66
- **Color:** None…Natural (Ivory), C…Black, R…Red, E…Blue

### Housing with plugged up hole

- **Shape of assembled product:** B…Top entry type
- **No. of circuits:** 2 to 15
- **Material:** 2…Glass-filled Nylon 66
- **Color:** None…Natural (White), BK…Black, R…Red, E…Blue

### Header with plugged up hole

- **Shape of assembled product:** B…Top entry type
- **No. of circuits:** 2
- **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 (Top entry type with boss)

- **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 on radial-tape

- **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

### Housing

- **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

### Header (Glass-filled Nylon)

- **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, L—Lemon yellow, M—Green

### Header (SMT type)

- **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

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