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 9.8mm.

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

**Specifications**

- Current rating: 3A AC, DC (AWG #22)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.
  After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,000V AC/minute
- Applicable wire: AWG #30 to #22
- Applicable PC board thickness: 1.6mm
* RoHS compliant products are published.
* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
* Contact JST for details.

**Standards**

- Recognized E60389
- Certified LR20812
- J50014297

**PC board layout and Assembly layout**

**Top entry type**

- Through-hole type (viewed from soldering side)
- Side entry type

**Top entry type with a boss**

- (1 circuit)

**Side entry type**

- (2 circuits or more)

Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.
2. Hole dimensions differ according to the kind 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 component side)**

- Side entry type

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

Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

For reference:
As the color identification, the following alphabet shall be put in the underlined part.
For availability, delivery and minimum order quantity, contact JST.
ex.

\[
\begin{array}{c|c|c|c|c|c}
\text{Circuit No.} & \text{Model No.} & \text{Applicable Wire} & \text{Insulation O.D} & \text{Q'ty / reel} \\
& & \text{mm²} & \text{AWG#} & \text{mm} & \\
1 & XHP-1 & - & - & 3.2 & 4.8 & 1,000 \\
2 & XHP-2 & 2.5 & 5.7 & 7.3 & 1,000 \\
3 & XHP-2(10.0)-U & 10.0 & 13.2 & 14.8 & 1,000 \\
4 & XHP-3 & 5.0 & 8.2 & 9.8 & 1,000 \\
5 & XHP-4 & 7.5 & 10.7 & 12.3 & 1,000 \\
6 & XHP-5 & 10.0 & 13.2 & 14.8 & 1,000 \\
7 & XHP-6 & 12.5 & 15.7 & 17.3 & 1,000 \\
8 & XHP-6(5.0)-U & 25.0 & 28.2 & 29.8 & 1,000 \\
9 & XHP-7 & 15.0 & 18.2 & 19.8 & 1,000 \\
10 & XHP-8 & 17.5 & 20.7 & 22.3 & 1,000 \\
11 & XHP-9 & 20.0 & 23.2 & 24.8 & 1,000 \\
12 & XHP-10 & 22.5 & 25.7 & 27.3 & 1,000 \\
13 & XHP-11 & 25.0 & 28.2 & 29.8 & 1,000 \\
14 & XHP-12 & 27.5 & 30.7 & 32.3 & 1,000 \\
15 & XHP-13 & 30.0 & 33.2 & 34.8 & 1,000 \\
16 & XHP-14 & 32.5 & 35.7 & 37.3 & 1,000 \\
17 & XHP-15 & 35.0 & 38.2 & 39.8 & 1,000 \\
18 & XHP-16 & 37.5 & 40.7 & 42.3 & 1,000 \\
19 & XHP-20 & 47.5 & 50.7 & 52.3 & 500 \\
\end{array}
\]

Material

PA 6, UL94V-0, natural (white)
Through-hole type shrouded header

The shrouded headers are interchangeable with those of the NR and NRD insulation displacement connectors, and JQ board-to-board connectors.

### Top entry type

- **plugged up**

### Top entry type

- (2 circuits)
- (3 to 20 circuits)

### Side entry type

### Through-hole type shrouded header

Top entry type of glass-filled nylon

- (2 circuits)
- (3 to 8 circuits)
- (9 to 15 circuits)

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Qty/bag</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>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>5</td>
<td>B5B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>6</td>
<td>B6B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>7</td>
<td>B7B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>8</td>
<td>B8B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>9</td>
<td>B9B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>10</td>
<td>B10B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>11</td>
<td>B11B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>12</td>
<td>B12B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>13</td>
<td>B13B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>14</td>
<td>B14B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
<tr>
<td>15</td>
<td>B15B-XH-2</td>
<td>2.5</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**Material and Finish**

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

**RoHS compliance**

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

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. B2B-XH-2-oo

(oo) = (blank)…natural (ivory)
BK…black R…red E…blue Y…yellow L…lemon yellow M…green D…orange N…brown FY…vivid yellow
**XH CONNECTOR**

### Through-hole type shrouded header

The shrouded headers are interchangeable with those of the NR and NRD insulation displacement connectors, and JQ board-to-board connectors.

#### Top entry type with a boss

- **(1 circuit)**
  - Model No.: B11B-XH-AM
  - Dimensions (mm): A = 4.9, B = 7.0
  - Quantity/box: 1,000

- **(2 circuits)**
  - Model No.: B2B-XH-AM
  - Dimensions (mm): A = 2.5, B = 7.4
  - Quantity/box: 1,000

- **(3 to 12 circuits)**
  - Model No.: S3B-XH-SM4-TB
  - Dimensions (mm): A = 5.75, B = 5.75
  - Quantity/box: 500

#### SMT type shrouded header

- **Through-hole type shrouded header**
  - The shrouded headers are interchangeable with those of the NR and NRD insulation displacement connectors, and JQ board-to-board connectors.

- **Model No.: B11B-XH-AM**
  - Post: Brass, copper-undercoated, tin-plated (reflow treatment)
  - Wafer: PA 66, UL94V-0, natural (white)

- **Model No.: S3B-XH-SM4-TB**
  - Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
  - Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS compliance**
- This product displays (LF)(SN) on a label.
- Note: *Marked product is not UL/CSA/TÜV approved.
- For availability, delivery and minimum order quantity, contact JST.
  - ex. B11B-XH-AM-oo
    - (blank)…natural (white)
    - BK…black   R…red   E…blue   Y…yellow   L…lemon yellow
    - M…green

**Material and Finish**

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

**RoHS compliance**
- This product displays (LF)(SN) on a label.
- Note: The products listed above are supplied on embossed-tape.
- For availability, delivery and minimum order quantity, contact JST.
  - ex. S3B-XH-SM4-oo-TB
    - (blank)…natural (ivory)
    - M…green   R…red   E…blue   L…lemon yellow
**XH CONNECTOR**

**Through-hole type shrouded header on radial-tape**

**TV4 type**

(3 to 4 circuits)

**2-TV4 type**

(2 circuits)

<table>
<thead>
<tr>
<th>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 7.5  B 14.9</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>500</td>
</tr>
<tr>
<td>7</td>
<td>B7B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>500</td>
</tr>
<tr>
<td>8</td>
<td>B8B-XH-2-TV4</td>
<td>A 7.5  B 14.9</td>
<td>500</td>
</tr>
</tbody>
</table>

**Material and Finish**

Post: Brass, copper-undercoated, tin-plated (reflow treatment)

Water: TV4 type/PA 66, UL94V-0, natural (white)

2-TV4 type/Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance**

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

<For reference> As the color identification, the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST.

ex. B2B-XH-2-TV4-oo

(blank)…natural (TV4 type/white, 2-TV4 type/ivory)

C…black (glass-filled)   BK…black   R…red   E…blue   Y…yellow   M…green

**Taping specification**

Note: Conforms to JIS C 0806.
### Packaging specifications of through-hole type shrouded header

<table>
<thead>
<tr>
<th>Package type</th>
<th>Flat pack (zig zag folded)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance between folds</td>
<td>24 indexing holes per fold (304.8mm)</td>
</tr>
<tr>
<td>Box size</td>
<td>316(W)×45(D)×330(H)mm</td>
</tr>
<tr>
<td>Distance between the end of the tape and the first connector’s center line (either end)</td>
<td>19.05mm</td>
</tr>
</tbody>
</table>

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

### Taping specifications of SMT type shrouded header

#### (3 to 4 circuits)

<table>
<thead>
<tr>
<th>Feeding direction</th>
<th>4.0±0.1</th>
<th>2.0±0.1</th>
<th>2.0±0.1</th>
<th>2.0±0.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover tape leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connector mounting part</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead part</td>
<td>10mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrier tape</td>
<td></td>
<td>16.0±0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>24.0</td>
<td>25.5</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Qty / reel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### (6 circuits)

<table>
<thead>
<tr>
<th>Feeding direction</th>
<th>4.0±0.1</th>
<th>2.0±0.1</th>
<th>2.0±0.1</th>
<th>2.0±0.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover tape leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connector mounting part</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lead part</td>
<td>10mm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrier tape</td>
<td></td>
<td>16.0±0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>24.0</td>
<td>33.5</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Qty / reel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. Specifications conform to JIS C 0806. The tape width, connector recess dimensions, etc. are determined by the number of circuits and external shape of the connector to be loaded.
2. Specifications are subject to change without prior notice.

### Reel dimensions (mm)

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Qty / reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 4</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>500</td>
</tr>
</tbody>
</table>

### Table

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Taping dimensions (mm)</th>
<th>Reel dimensions (mm)</th>
<th>Qty / reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>S</td>
<td>W</td>
<td>W1</td>
</tr>
<tr>
<td>3, 4</td>
<td>11.5</td>
<td>24.0</td>
<td>25.5</td>
</tr>
<tr>
<td>6</td>
<td>14.2</td>
<td>28.4</td>
<td>32.0</td>
</tr>
</tbody>
</table>