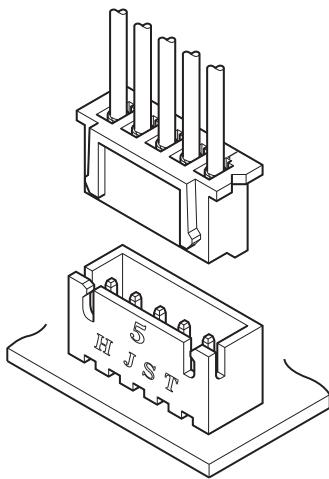


XH CONNECTOR

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./ φ 0.9 mm to φ 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

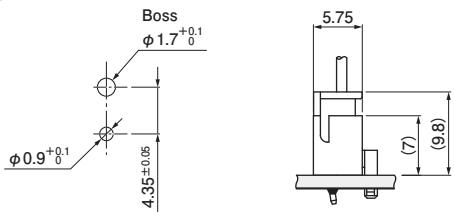
For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

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

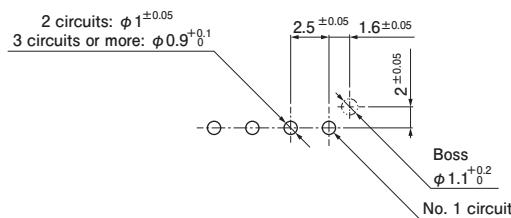
PC board layout and Assembly layout

Top entry type

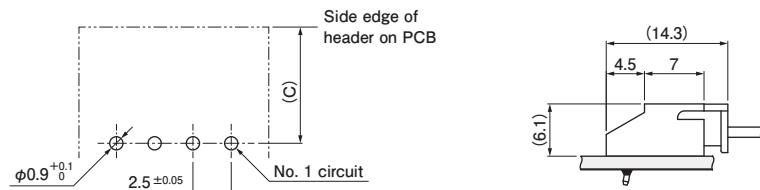
<Single circuit>



<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 ± 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.

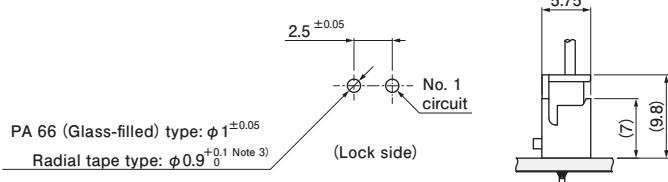
When using PCB made of hard material composed of fiberglass cloth, please consider a larger hole diameter.

The above dimensions are reference values. Please contact JST for details.

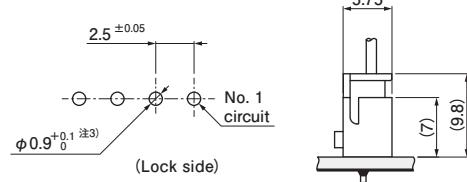
PC board layout and Assembly layout/ PA 66 (Glass-filled) type, Radial tape type

Top entry type

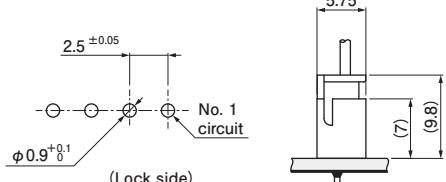
<2 circuits>



<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 ± 0.05 and shall not accumulate.

3. Radial tape style packaging conforms to PCB hole diameter specifications on the automatic insertion machine.

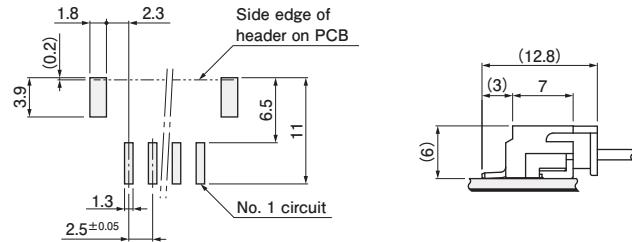
4. Hole dimensions differ depending on the type of PCB and PCB drilling method.

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

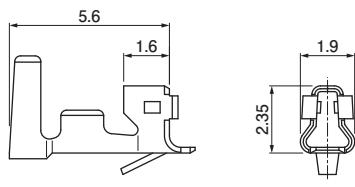
Side entry type



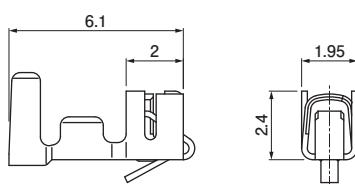
Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
 2. Tolerance for the PCB pattern pitch shall be ± 0.05 and shall not accumulate.
 3. The above dimensions are reference values. Please contact JST for details.

Contact

Shape A



Shape B



| Shape | Model No. | Applicable wire range | | Q'ty/reel |
|-------|----------------|--|-------------------------|-----------|
| | | Conductor size AWG (mm ²) | 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.

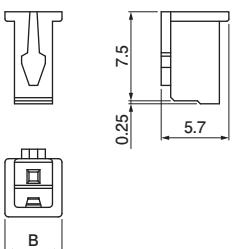
Crimping machine

| 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 |

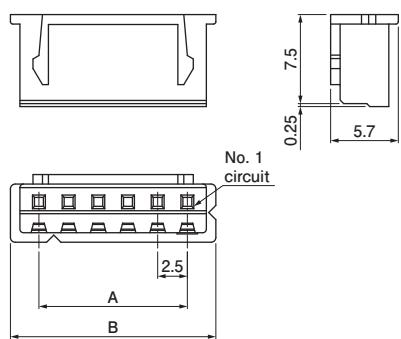
Note: Contact JST for fully automatic crimping applicator.

Housing

<Single circuit>

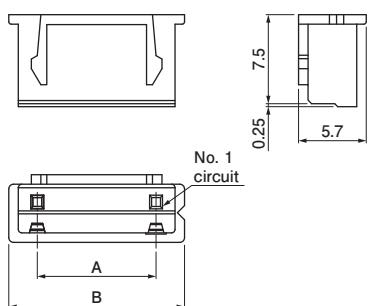


<2 to 16, 20 circuits>

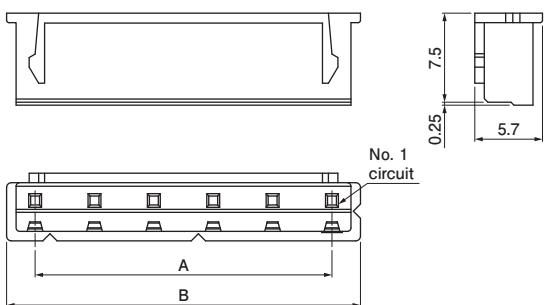


Plugged up hole

<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 |

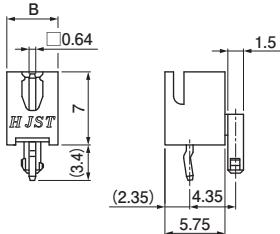
Material and Surface finish, etc.

PA 6, natural (white)

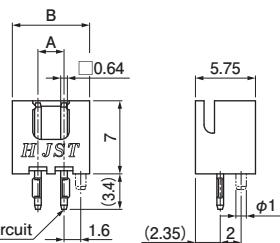
- Note: 1. XHP-2(10.0)-U means the 2-circuits housing with 10.0 mm pitch, and 3-circuits of 5-circuits are filled with the resin.
 2. XHP-6(5.0)-U means the 6-circuits housing with 5.0 mm pitch and each even number circuit is filled with the resin.
 3. For flame retardant grade of resin material used,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

Header

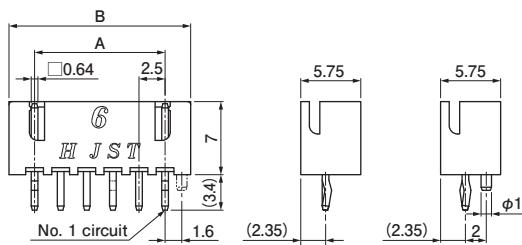
Top entry type <Single circuit>



<2 circuits>

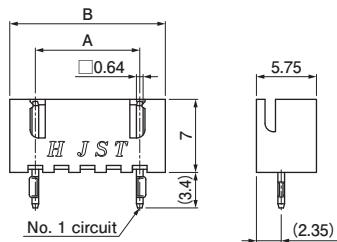


<3 circuits or more>



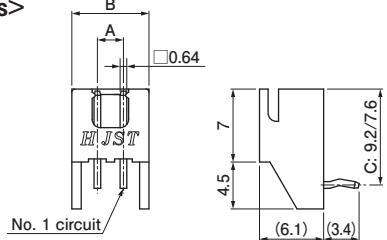
Top entry type, plugged up hole

<2 circuits, 10 mm pitch>

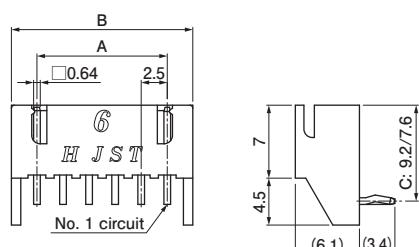


Side entry type

<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 Note2) | — | 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)

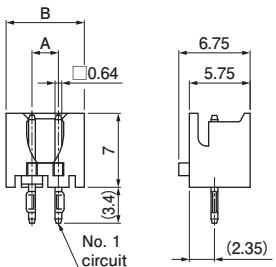
Note: 1. This product displays (LF)(SN) on a label.

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).

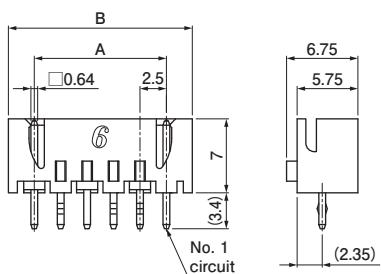
Header/ PA 66 (Glass-filled) type

Top entry type

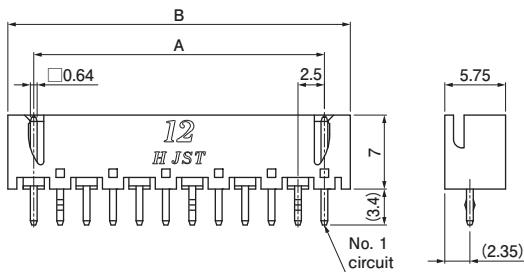
<2 circuits>



<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 |

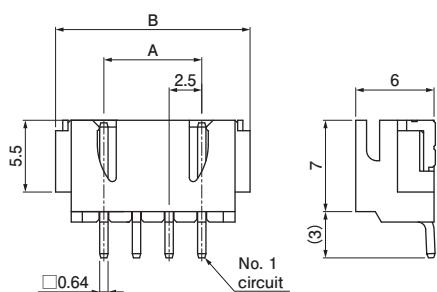
Material and Surface finish, etc.

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 | 800 |
| 4 | S4B-XH-SM4-TB | 7.5 | 15.0 | 800 |
| 6 | S6B-XH-SM4-TB | 12.5 | 20.0 | 800 |

Material and Surface finish, etc.

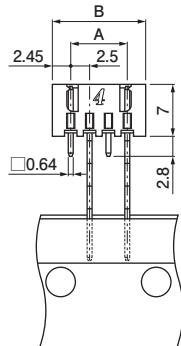
Post: Copper alloy, copper-undercoated, tin-plated
Wafer: Modified PA 6T, natural (ivory)
Solder tab: Brass, copper-undercoated, tin-plated

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

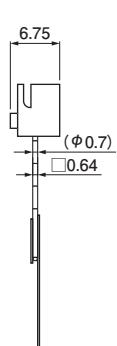
2. This product is supplied on embossed tape and reel packaging.
3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Header/ Radial tape type

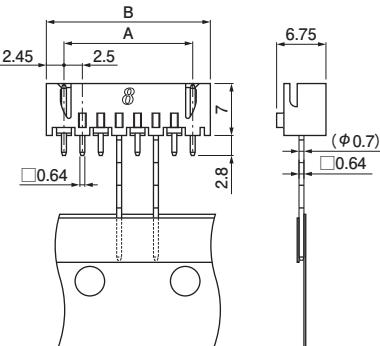
PA 66 type
<3, 4 circuits>



PA 66 (Glass-filled) type
<2 circuits>



<3 to 8 circuits>



| 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-2-TV4 | B3B-XH-2-TV4 | 5.0 | 9.9 | 1,000 |
| 4 | B4B-XH-2-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

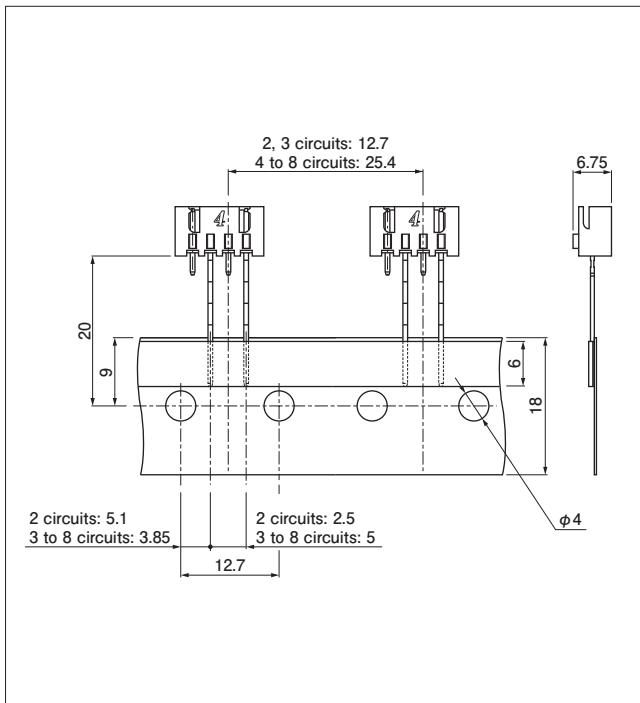
Wafer: PA 66 type/ PA 66, natural (white)

PA 66 (Glass-filled) type/ PA 66 (Glass-filled), natural (ivory)

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

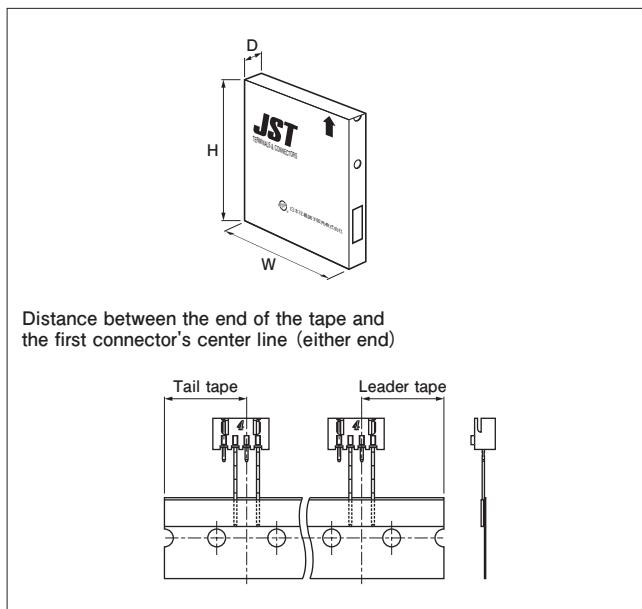
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

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 |
| | 4 to 8 circuits |

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

Model number allocation

Contact

| | | | | |
|---|-----------------|--------------|------------|--|
| S | XH - 001 | T - P | 0.6 | |
| 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

XH P - 5 -

Model number allocation

Housing/ Plugged up hole

XH P - 2 (10.0) - U

Series name
Type: Plug
No. of circuits
Pitch
Sub model number

Header

B 5 B - XH - A - U -

Header type: B···Top entry type
S···Side entry type
No. of circuits
Assembly product
Series name
Clinched (Kinked) / Not clinched: Clinched
Presence of boss: No indication···Without boss
M···With boss
Color: No indication···Natural (White), BK···Black, R···Red,
E···Blue, Y···Yellow, L···Lemon yellow, M···Green,
N···Brown, FY···Fluorescent yellow, D···Orange

Header/ Plugged up hole

B 2 (10.0) B - XH - A - U -

Header type: Top entry type
No. of circuits
Pitch
Assembly product
Series name
Clinched (Kinked) / Not clinched: Clinched
Sub model number
Color: No indication···Natural (White), R···Red, E···Blue

Header/ PA 66 (Glass-filled) type

B 5 B - XH - 2 -

Header type: Top entry type
No. of circuits
Assembly product
Series name
Housing material: PA 66 (Glass-filled)
Color: No indication···Natural (Ivory), C···Black, R···Red,
E···Blue, Y···Yellow, M···Green

Header/ SMT type

S 3 B - XH - SM 4 - TB

Header type: Side entry type
No. of circuits
Assembly product
Series name
Termination style: SMT
Product version number
Color: No indication···Natural (Ivory), M···Green
Packaging style: Embossed taping

Header/ Radial tape type

B 3 B - XH - 2 - T V4 -

Header type: Top entry type
No. of circuits
Assembly product
Series name
Housing material: No indication···PA 66
2···PA 66 (Glass-filled)
Packaging style: Radial tape
Radial tape lead style: Partially rounded rectangular leads
Color: PA 66 type
No indication···Natural (White), BK···Black,
R···Red, E···Blue, Y···Yellow, M···Green
PA 66 (Glass-filled) type
No indication···Natural (Ivory), C···Black,
R···Red, E···Blue, Y···Yellow, M···Green