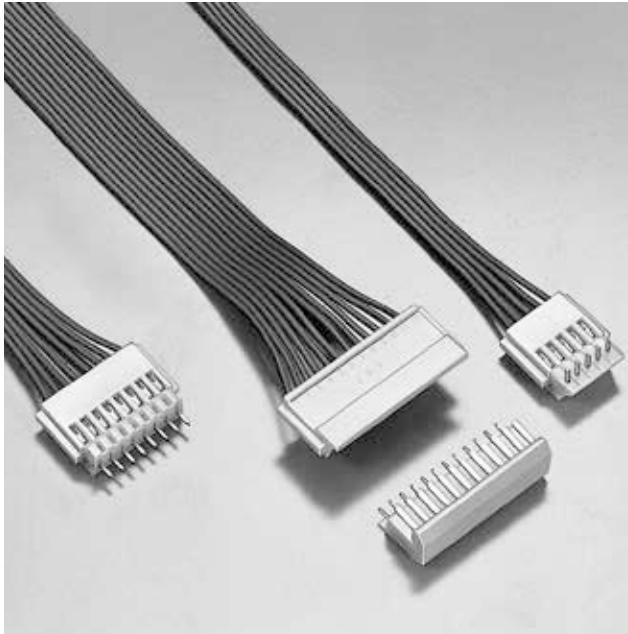
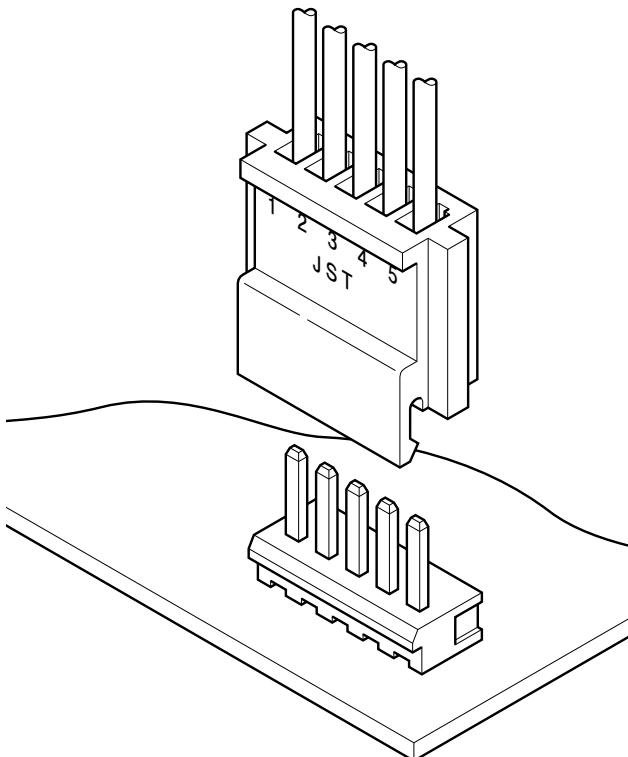


# NH CONNECTOR

Disconnectable Crimp style connectors



This 2.5 mm pitch connector is used to connect wires to printed circuit boards. The header is available in three configurations: top, side, and bottom entry. This allows the wires to be perpendicular or parallel to the printed circuit board in any direction.



## Features

### • Superior folded beam construction

- (1) This sturdy construction withstands repeated stress, resists permanent deformation, and offers a very long service life.
- (2) High reliability is ensured whether the contact pressure is high or low.
- (3) This contact design has a large tolerance for variations in mating post thickness and resists deformation when pried.

### • Double-sided contact

- (1) The receptacle contact has a protected entry which eliminates contact damage caused by mismatching.
- (2) It provides high contact pressure, is free from abnormal stress, and maintains continuity at all times.
- (3) It has an extremely long service life due to its folded beam design.

### • Wide, sturdy post

The post has a large cross-sectional area to resist prying during insertion into printed circuit boards and mating with connector housings.

### • Molded-in header

The posts are molded into the insulator to provide stability when mounted on printed circuit boards. This also prevents flux from entering the connector during soldering.

## Specifications

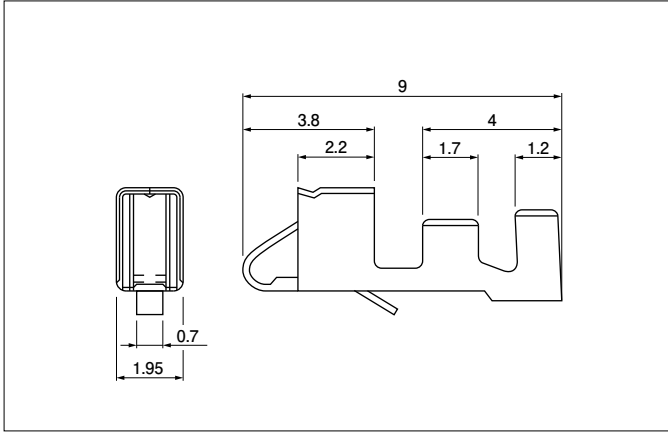
- Current rating: 3 A AC/DC (AWG #22)
  - Voltage rating: 250 V AC/DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/ 15 mΩ max.  
After environmental tests/ 20 mΩ max.
  - Insulation resistance: 500 MΩ min.
  - Withstanding voltage: 1,500 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
- Certified LR20812
- J50168090

# NH CONNECTOR

## Contact



| Model No.      | Applicable wire |          |                      | Q'ty/<br>reel |
|----------------|-----------------|----------|----------------------|---------------|
|                | mm <sup>2</sup> | AWG #    | Insulation O.D. (mm) |               |
| SHF-001T-0.8BS | 0.08 to 0.33    | 28 to 22 | 1.2 to 1.7           | 5,000         |
| SHF-002T-0.8BS | 0.05 to 0.08    | 30 to 28 | 0.9 to 1.2           |               |

### Material and Finish

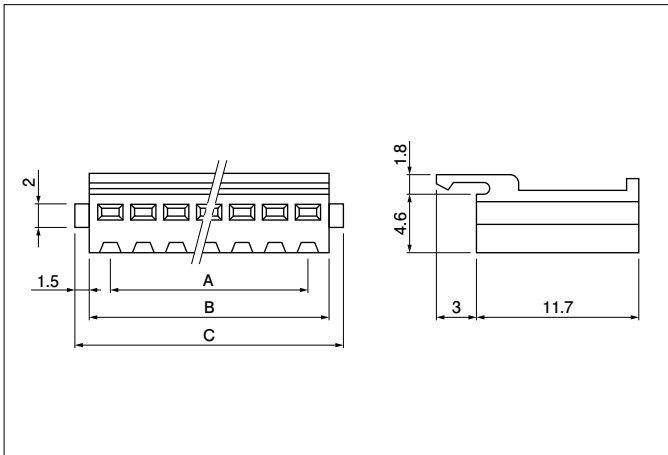
Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

Note:

1. Contact JST for gold-plated products.
2. Also contact JST if you require shielded wires, thin wires or other special wires.
3. Contact JST for brass products.

## Housing



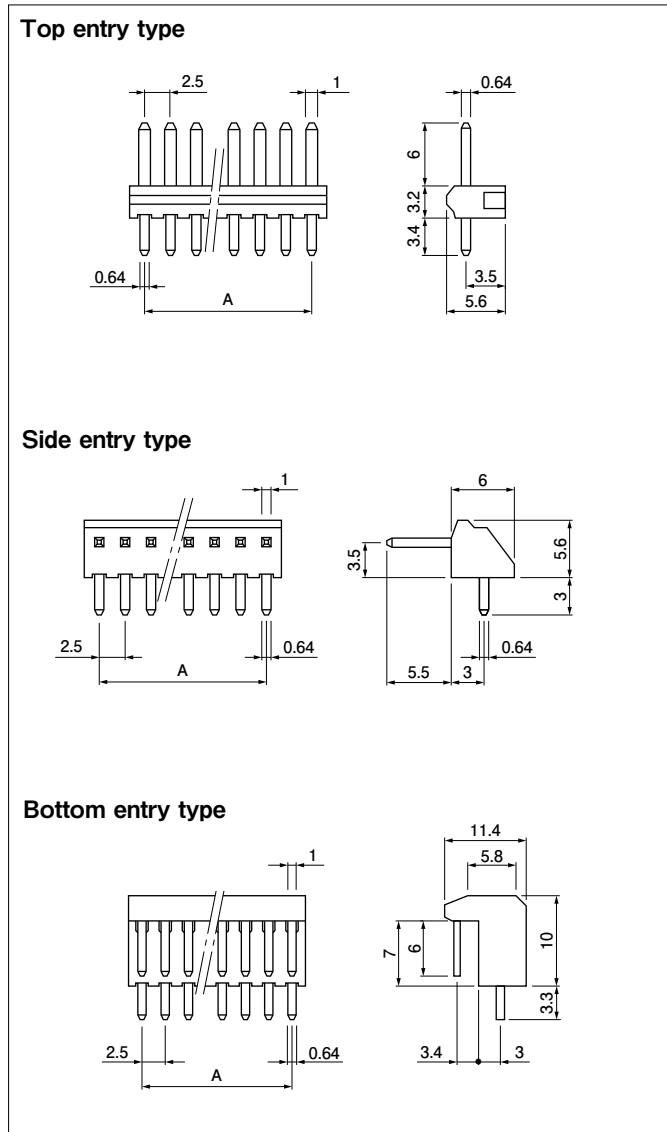
| No. of circuits | Model No.   | Dimensions (mm) |      |      | Q'ty/<br>bag |
|-----------------|-------------|-----------------|------|------|--------------|
|                 |             | A               | B    | C    |              |
| 2               | H2P-SHF-AA  | 2.5             | 5.7  | 8.7  | 1,000        |
| 3               | H3P-SHF-AA  | 5.0             | 8.2  | 11.2 | 1,000        |
| 4               | H4P-SHF-AA  | 7.5             | 10.7 | 13.7 | 1,000        |
| 5               | H5P-SHF-AA  | 10.0            | 13.2 | 16.2 | 1,000        |
| 6               | H6P-SHF-AA  | 12.5            | 15.7 | 18.7 | 1,000        |
| 7               | H7P-SHF-AA  | 15.0            | 18.2 | 21.2 | 500          |
| 8               | H8P-SHF-AA  | 17.5            | 20.7 | 23.7 | 500          |
| 9               | H9P-SHF-AA  | 20.0            | 23.2 | 26.2 | 500          |
| 10              | H10P-SHF-AA | 22.5            | 25.7 | 28.7 | 500          |
| 11              | H11P-SHF-AA | 25.0            | 28.2 | 31.2 | 500          |
| 12              | H12P-SHF-AA | 27.5            | 30.7 | 33.7 | 500          |
| 13              | H13P-SHF-AA | 30.0            | 33.2 | 36.2 | 500          |
| 14              | H14P-SHF-AA | 32.5            | 35.7 | 38.7 | 500          |
| 15              | H15P-SHF-AA | 35.0            | 38.2 | 41.2 | 200          |
| 16              | H16P-SHF-AA | 37.5            | 40.7 | 43.7 | 200          |
| 18              | H18P-SHF-AA | 42.5            | 45.7 | 48.7 | 200          |
| 20              | H20P-SHF-AA | 47.5            | 50.7 | 53.7 | 200          |
| 21              | H21P-SHF-AA | 50.0            | 53.2 | 56.2 | 200          |
| 22              | H22P-SHF-AA | 52.5            | 55.7 | 58.7 | 200          |
| 24              | H24P-SHF-AA | 57.5            | 60.7 | 63.7 | 200          |
| 25              | H25P-SHF-AA | 60.0            | 63.2 | 66.2 | 200          |

### Material and Finish

PA 6, UL94V-0, natural (white)

### RoHS2 compliance

## Header



| No. of circuits | Model No.      |                 |                   | Dimensions A (mm) | Q'ty/box       |                 |                   |
|-----------------|----------------|-----------------|-------------------|-------------------|----------------|-----------------|-------------------|
|                 | Top entry type | Side entry type | Bottom entry type |                   | Top entry type | Side entry type | Bottom entry type |
| 2               | B2P-SHF-1AA    | BS2P-SHF-1AA    | BE2P-SHF-1AA      | 2.5               | 1,000          | 1,000           | 250               |
| 3               | B3P-SHF-1AA    | BS3P-SHF-1AA    | BE3P-SHF-1AA      | 5.0               | 1,000          | 1,000           | 250               |
| 4               | B4P-SHF-1AA    | BS4P-SHF-1AA    | BE4P-SHF-1AA      | 7.5               | 1,000          | 500             | 250               |
| 5               | B5P-SHF-1AA    | BS5P-SHF-1AA    | BE5P-SHF-1AA      | 10.0              | 1,000          | 500             | 250               |
| 6               | B6P-SHF-1AA    | BS6P-SHF-1AA    | BE6P-SHF-1AA      | 12.5              | 500            | 500             | 150               |
| 7               | B7P-SHF-1AA    | BS7P-SHF-1AA    | BE7P-SHF-1AA      | 15.0              | 500            | 500             | 150               |
| 8               | B8P-SHF-1AA    | BS8P-SHF-1AA    | BE8P-SHF-1AA      | 17.5              | 500            | 500             | 150               |
| 9               | B9P-SHF-1AA    | BS9P-SHF-1AA    | BE9P-SHF-1AA      | 20.0              | 500            | 500             | 150               |
| 10              | B10P-SHF-1AA   | BS10P-SHF-1AA   | BE10P-SHF-1AA     | 22.5              | 250            | 250             | 100               |
| 11              | B11P-SHF-1AA   | BS11P-SHF-1AA   | BE11P-SHF-1AA     | 25.0              | 250            | 250             | 100               |
| 12              | B12P-SHF-1AA   | BS12P-SHF-1AA   | BE12P-SHF-1AA     | 27.5              | 250            | 200             | 100               |
| 13              | B13P-SHF-1AA   | BS13P-SHF-1AA   | BE13P-SHF-1AA     | 30.0              | 250            | 200             | 100               |
| 14              | B14P-SHF-1AA   | BS14P-SHF-1AA   | BE14P-SHF-1AA     | 32.5              | 250            | 200             | 50                |
| 15              | B15P-SHF-1AA   | BS15P-SHF-1AA   | BE15P-SHF-1AA     | 35.0              | 250            | 200             | 50                |
| 16              | B16P-SHF-1AA   | BS16P-SHF-1AA   | —                 | 37.5              | 250            | 200             | —                 |
| 17              | B17P-SHF-1AA   | —               | —                 | 40.0              | 200            | —               | —                 |
| 18              | B18P-SHF-1AA   | BS18P-SHF-1AA   | —                 | 42.5              | 200            | 200             | —                 |
| 19              | B19P-SHF-1AA   | —               | —                 | 45.0              | 250            | —               | —                 |
| 20              | B20P-SHF-1AA   | BS20P-SHF-1AA   | —                 | 47.5              | 250            | 200             | —                 |
| 21              | B21P-SHF-1AA   | BS21P-SHF-1AA   | —                 | 50.0              | 250            | 200             | —                 |
| 22              | B22P-SHF-1AA   | BS22P-SHF-1AA   | —                 | 52.5              | 250            | 200             | —                 |
| 23              | B23P-SHF-1AA   | —               | —                 | 55.0              | 250            | —               | —                 |
| 24              | B24P-SHF-1AA   | BS24P-SHF-1AA   | —                 | 57.5              | 250            | 200             | —                 |
| 25              | B25P-SHF-1AA   | BS25P-SHF-1AA   | —                 | 60.0              | 250            | 200             | —                 |

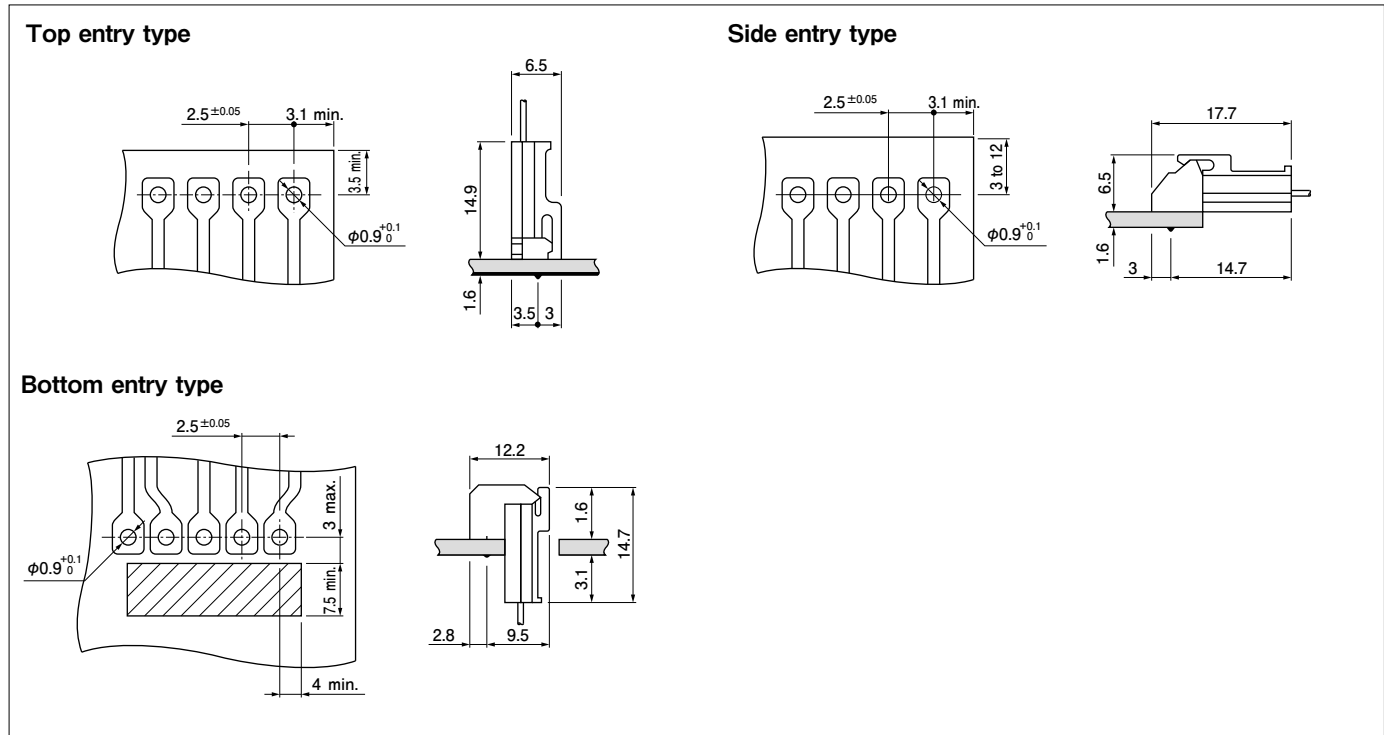
### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
 Wafer: PA 66, UL94V-0, natural (white) for the top and side entry types  
 PA 6, UL94V-0, natural (white) for the bottom entry type

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

# NH CONNECTOR

## PC board layout and Assembly layout



Note: 1. The above figure is the figure viewed from the connector soldering side.

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

3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Model number allocation

### Contact

| S HF - 001 T - 0.8 BS                             |  |
|---|--|
| Form: S...Strip form, B...Loose piece             |  |
| Series name                                       |  |
| Applicable wire range: 001...AWG #28 to #22       |  |
| 002...AWG #30 to #28                              |  |
| Surface finish: T...Tin-plated (reflow treatment) |  |
| Terminal size                                     |  |
| Material: BS...Phosphor bronze, SS...Brass        |  |

### Housing

| H2P - SHF - AA -   |  |
|--|--|
| No. of circuits: 2 to 16, 18, 20 to 22, 24, 25                     |  |
| Part name: Plug  |  |
| Series name  |  |
| Supplementary symbol   |  |
| Color: None...Natural (White), K...Black, R...Red, TR...Tomato red |  |
| E...Blue, M...Green, O...Orange, N...Brown                         |  |

### Header

| B 3P - SHF - 1AA - -  |  |
|---|--|
| Shape of assembled product:   |  |
| B...Top entry type  |  |
| BS...Side entry type  |  |
| BE...Bottom type  |  |
| No. of circuits:  |  |
| Top entry type...2 to 25  |  |
| Side entry type...2 to 16, 18, 20 to 22, 24, 25                     |  |
| Bottom type...2 to 15   |  |
| Series name   |  |
| Flammability: 1AA...UL94V-0   |  |
| Indication of clinch: None...Straight pin, K...Clinched             |  |
| Color: None...Natural (White), BK...Black, R...Red, TR...Tomato red |  |
| E...Blue, M...Green, O...Orange, N...Brown                          |  |

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

## Crimping machine, Applicator

| Contact        | Crimping machine | Crimp applicator | Dies           | Crimp applicator with dies |
|----------------|------------------|------------------|----------------|----------------------------|
| SHF-001T-0.8BS | AP-K2N           | MKS-L            | MK/SHF-001-08S | APLMK SHF001-08S           |
| SHF-002T-0.8BS |                  |                  | MK/SHF-002-08S | APLMK SHF002-08S           |

Note: Contact JST for fully automatic crimping applicator.