

# 2.0 mm pitch/Disconnectable Crimp style connectors



This is a 2.0 mm pitch, crimp style, dual-row, wire-to-board connector. It is designed to meet the demand for high-density and low-profile connection.

- Compact
- Reliable contacts
- Fully shrouded header

#### PC board layout and Assembly layout



Note: 1. The above figure is the figure viewed from 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. 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.



| Model No.      | Applica         | ble wire | Insulation O.D. | Q'ty/<br>reel |  |
|----------------|-----------------|----------|-----------------|---------------|--|
|                | mm <sup>2</sup> | AWG #    | (mm)            |               |  |
| SPHD-002T-P0.5 | 0.08~0.21       | 28~24    | 0.9~1.5         | 8,000         |  |
| SPHD-001T-P0.5 | 0.13~0.33       | 26~22    | 1.0~1.5         |               |  |
|                |                 |          |                 |               |  |

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS2 compliance

| Contact        | Crimping | Applicator       |                |                            |  |  |
|----------------|----------|------------------|----------------|----------------------------|--|--|
|                | machine  | Crimp applicator | Dies           | Crimp applicator with dies |  |  |
| SPHD-002T-P0.5 | AP-K2N   | MKS-L-10         | MK/SPHD-002-05 | APLMK SPHD002-05           |  |  |
| SPHD-001T-P0.5 |          |                  | MK/SPHD-001-05 | APLMK SPHD001-05           |  |  |

Note: Contact JST for fully automatic crimping applicator.

## **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 m $\Omega$  max. After environmental tests/ 20 m $\Omega$  max.
- Insulation resistance: 1,000 M $\Omega$  min.
- Withstanding voltage: 800 VAC/minute
- Applicable wire: AWG #28 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).

1.95 min.

min.

:0.05

(11.8)

- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

## Standards -

Side entry type

φ0.7<sup>+0</sup>

Even number circuits

Odd number circuits

Circuit No.1

Recognized E60389

 $2^{\pm 0.05}$ 

# **PHD CONNECTOR**

## Housing



| No. of   | Madel Ne  | Dimens | Q'ty |       |
|----------|-----------|--------|------|-------|
| circuits | Model No. | A      | В    | bag   |
| 8        | PHDR-08VS | 6.0    | 9.9  | 1,000 |
| 10       | PHDR-10VS | 8.0    | 11.9 | 1,000 |
| 12       | PHDR-12VS | 10.0   | 13.9 | 1,000 |
| 14       | PHDR-14VS | 12.0   | 15.9 | 1,000 |
| 16       | PHDR-16VS | 14.0   | 17.9 | 1,00  |
| 18       | PHDR-18VS | 16.0   | 19.9 | 1,00  |
| 20       | PHDR-20VS | 18.0   | 21.9 | 1,00  |
| 22       | PHDR-22VS | 20.0   | 23.9 | 1,00  |
| 24       | PHDR-24VS | 22.0   | 25.9 | 1,00  |
| 26       | PHDR-26VS | 24.0   | 27.9 | 1,00  |
| 28       | PHDR-28VS | 26.0   | 29.9 | 1,00  |
| 30       | PHDR-30VS | 28.0   | 31.9 | 1,00  |
| 32       | PHDR-32VS | 30.0   | 33.9 | 1,00  |
| 34       | PHDR-34VS | 32.0   | 35.9 | 1,00  |

Material and Finish

PA 66, UL94V-0, natural (white)

**RoHS2** compliance

### Shrouded header



| No. of circuits | Model No.          |                    |                   |                    | Dimensions |      | Q'ty/box          |                    |
|-----------------|--------------------|--------------------|-------------------|--------------------|------------|------|-------------------|--------------------|
|                 | Glass-filled nylon |                    | Nylon             |                    | (mm)       |      | Q ty/box          |                    |
|                 | Top entry<br>type  | Side entry<br>type | Top entry<br>type | Side entry<br>type | А          | в    | Top entry<br>type | Side entry<br>type |
| 8               | B8B-PHDSS          | S8B-PHDSS          | _                 | —                  | 6.0        | 9.9  | 500               | 500                |
| 10              | B10B-PHDSS         | S10B-PHDSS         | B10B-PHDSS-B      | S10B-PHDSS-B       | 8.0        | 11.9 | 500               | 500                |
| 12              | B12B-PHDSS         | S12B-PHDSS         | B12B-PHDSS-B      | S12B-PHDSS-B       | 10.0       | 13.9 | 500               | 500                |
| 14              | B14B-PHDSS         | S14B-PHDSS         | B14B-PHDSS-B      | S14B-PHDSS-B       | 12.0       | 15.9 | 500               | 250                |
| 16              | B16B-PHDSS         | S16B-PHDSS         | B16B-PHDSS-B      | S16B-PHDSS-B       | 14.0       | 17.9 | 500               | 250                |
| 18              | B18B-PHDSS         | S18B-PHDSS         | B18B-PHDSS-B      | S18B-PHDSS-B       | 16.0       | 19.9 | 500               | 250                |
| 20              | B20B-PHDSS         | S20B-PHDSS         | B20B-PHDSS-B      | S20B-PHDSS-B       | 18.0       | 21.9 | 250               | 250                |
| 22              | B22B-PHDSS         | S22B-PHDSS         | B22B-PHDSS-B      | S22B-PHDSS-B       | 20.0       | 23.9 | 250               | 250                |
| 24              | B24B-PHDSS         | S24B-PHDSS         | B24B-PHDSS-B      | S24B-PHDSS-B       | 22.0       | 25.9 | 250               | 200                |
| 26              | B26B-PHDSS         | S26B-PHDSS         | B26B-PHDSS-B      | S26B-PHDSS-B       | 24.0       | 27.9 | 250               | 200                |
| 28              | B28B-PHDSS         | S28B-PHDSS         | B28B-PHDSS-B      | S28B-PHDSS-B       | 26.0       | 29.9 | 250               | 200                |
| 30              | B30B-PHDSS         | S30B-PHDSS         | B30B-PHDSS-B      | S30B-PHDSS-B       | 28.0       | 31.9 | 250               | 200                |
| 32              | B32B-PHDSS         | S32B-PHDSS         | B32B-PHDSS-B      | S32B-PHDSS-B       | 30.0       | 33.9 | 250               | 200                |
| 34              | B34B-PHDSS         | S34B-PHDSS         | B34B-PHDSS-B      | S34B-PHDSS-B       | 32.0       | 35.9 | 250               | 200                |

# Material and Finish

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

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

# **PHD CONNECTOR**

#### Model number allocation





#### Header (Nylon product with glass-filled)



#### Housing



#### Header (Nylon product)

