PH CONNECTOR
2.0 mm pitch/Disconnectable Crimp style connectors

This is a thin, low-profile 2.0 mm pitch connector 8.0 mm in height after mounting and 4.5 mm in width. It is designed to meet the demand for high-density connection of internal wires to printed circuit boards. It is compact, highly reliable and low in cost.

- Reliable contact
- Fully shrouded header
- Printed circuit board retention mechanism
- Surface mount model (SMT)

Specifications

- Current rating: 2 A AC/DC (AWG #24)
- Voltage rating: 100 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: 800 VAC/minute
- Applicable wire: AWG #32 to #24
- Applicable PC board thickness: 0.8 to 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
- R75087

PC board layout and Assembly layout

(Through-hole type)

Top entry type

Side entry type

Note: 1. The above figure is the figure viewed from the soldering side.
2. Tolerances are non-cumulative: ± 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.

(SMT type)

SM4 type

Top entry type

Side entry type

Note: 1. The above figure is the figure viewed from the connector mounting side.
2. Tolerances are non-cumulative: ± 0.05 mm for all centers.
3. The dimensions above should serve as a guideline. Contact JST for details.
PH CONNECTOR

Contact

![Contact Diagram]

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Applicable wire</th>
<th>Q'ty/reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPH-002T-P0.5S</td>
<td>0.05 to 0.22</td>
<td>8,000</td>
</tr>
<tr>
<td>SPH-002T-P0.5L</td>
<td>0.08 to 0.22</td>
<td>10,000</td>
</tr>
<tr>
<td>SPH-004T-P0.5S</td>
<td>0.032 to 0.08</td>
<td></td>
</tr>
</tbody>
</table>

Material and Finish
- Phosphor bronze, tin-plated (reflow treatment)

RoHS2 compliance
- Note: 1. Contact JST for gold-plated products.
- 2. SPH-002T-P0.5L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration.
- 3. The crimp height is different from the standard.

Contact

<table>
<thead>
<tr>
<th>Model No.</th>
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<th>Q'ty/reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHR-2</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-3</td>
<td>0.08 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-4</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-5</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-6</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-7</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-8</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-9</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-10</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-11</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-12</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
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<tr>
<td>PHR-13</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
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<tr>
<td>PHR-14</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-15</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
<tr>
<td>PHR-16</td>
<td>0.05 to 0.22</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Material and Finish
- PA 66, UL94V-0, natural (white)

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

Housing

![Housing Diagram]

Header

![Header Diagram]

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.
PH CONNECTOR

Header (Low insertion force type)

Top entry type
(2 circuits)

Side entry type
(3 circuits or more)

Material and Finish
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
Wafer: PA 66, UL94V-0, gray

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

Header (SMT type)

Top entry type

Side entry type

Material and Finish
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
Wafer: PA 66, UL94V-0, natural (ivory)
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

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

Note: Contact JST for the top entry type headers with suction cap.
PH CONNECTOR

Model number allocation

Contact

S PH - 002 T - P 0.5 S

Form: S…Strip form
Series name
Applicable wire range:
Normal type 002—AWG #30 to #24
004—AWG #32 to #26
Low insertion force type 002—AWG #28 to #24
Surface finish: T—Tin-plated (reflow treatment)
Material: P—Phosphor bronze
Terminal size
Type name: S—Normal type, L—Low insertion force type

Housing

PH R - 2 -

Series name
Part name: Receptacle
No. of circuits: 2 to 16
Color: None—Natural (White), BK—Black, R—Red, TR—Tomato red, BL—Blue, Y—Yellow, L—Lemon yellow, M—Green, D—Orange, N—Brown, P—Purple, PK—Pink, H—Gray, LE—Light blue, FY—Fluorescent yellow, DPK—Dark pink

Header

B 2 B - PH - K - S

Shape of assembled product:
B—Top entry type, S—Side entry type
No. of circuits: Top and side entry types—2 to 16
Part name: Header
Series name
Indication of clinch: K—Clinched
Color: S—Natural (White), K—Black, R—Red, TR—Tomato red, E—Blue, Y—Yellow, L—Lemon yellow, M—Green, D—Orange, N—Brown, P—Purple, PK—Pink, H—Gray, LE—Light blue, FY—Fluorescent yellow, None—Ivory

Header (Low insertion force type)

B 2 B - PH - KL -

Shape of assembled product:
B—Top entry type, S—Side entry type
No. of circuits: Top and side entry types—2 to 16
Part name: Header
Series name
Indication of clinch: K—Clinched
Type name: L—Low insertion force type
Color: None—Gray, R—Red, E—Blue, S—Natural (White)

Header (SMT type)

B 2 B - PH - SM4-—-TB

Shape of assembled product:
B—Top entry type, S—Side entry type
No. of circuits:
Top entry type—2 to 16
Side entry type—2 to 15
Part name: Header
Series name
SMT specification: SM4—with solder tab
Color: None—Natural (Ivory), R—Red, E—Blue, M—Green, L—Lemon yellow, K—Black, DPK—Dark pink
Packaging style: TB—Embossed-taping
Suction tape: None—Without suction tape, T—With suction tape

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