This is a thin, low-profile 2.0mm pitch connector 8.0mm in height after mounting and 4.5mm 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: 2A AC, DC (AWG #24)
- Voltage rating: 100V 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: 800V AC/minute
- Applicable wire: AWG #32 to #24
- Applicable PC board thickness: 0.8 to 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
- R75087

**PC board layout and Assembly layout**

*(Through-hole type (viewed from soldering side) )* 

**Top entry type**

**Side entry type**

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) )* 

**SM4 type**

**Top entry type**

**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.
PH CONNECTOR

Contact

<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 – 0.22</td>
<td>30 – 24</td>
</tr>
<tr>
<td>SPH-002T-P0.5L</td>
<td>0.08 – 0.22</td>
<td>28 – 24</td>
</tr>
<tr>
<td>SPH-004T-P0.5S</td>
<td>0.032 – 0.08</td>
<td>32 – 28</td>
</tr>
</tbody>
</table>

Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

RoHS 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. The crimp height is different from the standard.
3. Contact JST for details.

Housing

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.


blank…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…vivid yellow DPK…dark pink

RoHS compliance

Through-hole type shrouded header


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…vivid yellow (blank)…ivory


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…vivid yellow (blank)…ivory
PH CONNECTOR

Through-hole type shrouded header (Low insertion force type)

**Material and Finish**

- **Post:** Copper alloy, copper-undercoated, tin-plated (reflow treatment)
- **Wafer:** PA 66, UL94V-0, gray
- **Solder tab:** Brass, copper-undercoated, tin-plated (reflow treatment)

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

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

ex. **B2B-PH-KL-oo** (blank)…gray  R…red  E…blue  S…natural (white)

SMT type shrouded header

**Material and Finish**

- **Post:** Copper alloy, copper-undercoated, tin-plated (reflow treatment)
- **Water:** PA 66, UL94V-0, natural (ivory)

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

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

ex. **B2B-PH-SM4-oo** (blank)…natural (ivory)

R…red  E…blue  M…green  L…lemon yellow  K…black  DPK…dark pink
Taping specifications

<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></td>
<td>F</td>
<td>S</td>
<td>W</td>
</tr>
<tr>
<td>Top entry type (2 to 6 circuits)</td>
<td>7.5</td>
<td>–</td>
<td>16.0</td>
</tr>
<tr>
<td>Top entry type (7 to 16 circuits)</td>
<td>11.5</td>
<td>–</td>
<td>24.0</td>
</tr>
<tr>
<td>Side entry type (2 to 6 circuits)</td>
<td>14.2</td>
<td>28.4</td>
<td>32.0</td>
</tr>
<tr>
<td>Side entry type (7 to 15 circuits)</td>
<td>20.2</td>
<td>40.4</td>
<td>44.0</td>
</tr>
</tbody>
</table>

Note:
1. Specifications conform to JIS C 0806. The tape width, connector mounting recess square hole 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.