This small, field-proven connector for printed circuit boards is reliable and has a large current carrying capacity. It can be used with a wide variety of signal, power supply, and output circuits that appear in consumer electronic products.

- Proven box contact
- Compact connector with a large capacity
- Secure contact and mounting

Specifications

- Current rating: 10 A AC/DC (AWG #16)
- 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: 1,500 VAC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6 mm

Note:
Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, be sure to use contacts made of phosphor bronze. Design the circuits without causing imbalance and provide an extra margin for each circuit.

* 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.

PC board layout and Assembly layout

Locking header
Top entry type

Locking header
Side entry type

Locking header
Side entry type with PCB stabilizer

Shrouded header

Note: 1. The above figure is the figure viewed from soldering side.
2. Tolerances are non-cumulative: ± 0.05 mm for all centers.
3. Please consider the pattern layout design in case of applying the large current.
4. 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.
### Contact

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Applicable wire</th>
<th>Insulation O.D.</th>
<th>Q’ty/reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVH-21T-P1.1</td>
<td>0.33~0.63</td>
<td>0.22~0.18</td>
<td>1.7~3.0</td>
</tr>
<tr>
<td>SVH-41T-P1.1</td>
<td>0.5~1.25</td>
<td>0.20~0.16</td>
<td>1.7~3.0</td>
</tr>
</tbody>
</table>

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

#### RoHS2 compliance
- Note: When using retainer mountable type housing, applicable wire’s insulation O. D. shall be 1.7 to 2.2 mm.

### Housing

#### N type

- Model No.: VHR-
- Dimensions (mm): A: 3.96, B: 7.86
- Q’ty/bag: 1,000

#### M type

- Model No.: VHRR-
- Dimensions (mm): A: 11.88, B: 15.78
- Q’ty/bag: 1,000

#### Retainer mountable type

- Model No.: VHR-
- Dimensions (mm): A: 19.80, B: 23.70
- Q’ty/bag: 1,000

#### RoHS2 compliance
- PA 6, UL94V-0, natural (white)

### Retainer

- Model No.: VHS-
- Dimensions (mm): A: 7.0
- Q’ty/bag: 1,000

#### RoHS2 compliance
- Glass-filled PA 66, UL94V-0, natural (ivory)
**VH CONNECTOR**

### Locking header

#### Top entry type

![Top entry type diagram]

#### Side entry type

![Side entry type diagram]

#### Top entry type of PBT

![Top entry type of PBT diagram]

#### Side entry type with PCB stabilizer

![Side entry type with PCB stabilizer diagram]

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q’ty/box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2P-VH</td>
<td>3.96</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3P-VH</td>
<td>7.92</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4P-VH</td>
<td>11.88</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5P-VH</td>
<td>15.84</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6P-VH</td>
<td>19.80</td>
<td>500</td>
</tr>
<tr>
<td>7</td>
<td>B7P-VH</td>
<td>23.76</td>
<td>250</td>
</tr>
<tr>
<td>8</td>
<td>B8P-VH</td>
<td>27.72</td>
<td>250</td>
</tr>
<tr>
<td>9</td>
<td>B9P-VH</td>
<td>31.68</td>
<td>200</td>
</tr>
<tr>
<td>10</td>
<td>B10P-VH</td>
<td>35.64</td>
<td>200</td>
</tr>
</tbody>
</table>

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)
Wafer: PBT: Glass-filled PBT, UL94V-0, natural (white)

#### RoHS2 compliance

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

---

### Top entry type of PBT

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q’ty/box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2P-VH-B</td>
<td>3.96</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3P-VH-B</td>
<td>7.92</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4P-VH-B</td>
<td>11.88</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5P-VH-B</td>
<td>15.84</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6P-VH-B</td>
<td>19.80</td>
<td>500</td>
</tr>
<tr>
<td>7</td>
<td>B7P-VH-B</td>
<td>23.76</td>
<td>250</td>
</tr>
<tr>
<td>8</td>
<td>B8P-VH-B</td>
<td>27.72</td>
<td>250</td>
</tr>
<tr>
<td>9</td>
<td>B9P-VH-B</td>
<td>31.68</td>
<td>200</td>
</tr>
<tr>
<td>10</td>
<td>B10P-VH-B</td>
<td>35.64</td>
<td>200</td>
</tr>
</tbody>
</table>

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)
Wafer: PBT: Glass-filled PBT, UL94V-0, natural (white)

#### RoHS2 compliance

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

---

### Side entry type with PCB stabilizer

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q’ty/box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2P-VH</td>
<td>7.86</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3P-VH</td>
<td>11.82</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4P-VH</td>
<td>15.78</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5P-VH</td>
<td>19.74</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6P-VH</td>
<td>23.70</td>
<td>250</td>
</tr>
<tr>
<td>7</td>
<td>B7P-VH</td>
<td>27.66</td>
<td>250</td>
</tr>
<tr>
<td>8</td>
<td>B8P-VH</td>
<td>31.62</td>
<td>200</td>
</tr>
<tr>
<td>9</td>
<td>B9P-VH</td>
<td>35.58</td>
<td>200</td>
</tr>
<tr>
<td>10</td>
<td>B10P-VH</td>
<td>39.54</td>
<td>100</td>
</tr>
</tbody>
</table>

#### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)
Wafer: Top entry type of PBT: Glass-filled PBT, UL94V-0, natural (white)
Side entry type with PCB stabilizer: PA 66, UL94V-0, natural (white)

#### RoHS2 compliance

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

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### Contact JST for Glow Wire compliant connectors.

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

---

For reference:

- As the color identification, the following alphabet shall be put in the underlined part.
- ex. B2P(VH)-oo
  - (blank)…natural (white)
  - BK…black R…red TR…tomato red BL…blue M…green Y…yellow PK…pink H…gray

---

RoHS2 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.
- ex. B2P(VH)-B-oo
  - (blank)…natural (white)
  - C…black R…red E…blue M…green Y…yellow

---

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

---

For reference:

- As the color identification, the following alphabet shall be put in the underlined part.
- ex. S2P-VH-oo
  - (blank)…natural (white)
  - BK…black R…red BL…blue M…green Y…yellow

---

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

Shrouded header

<2, 3 circuits>

<4 to 10 circuits>

Post-omitted Header

1) When giving the polarity to the product by removing the post (N-1)th circuit
   However, since the product that the 2nd post of 3-circuit connector is omitted doesn’t have polarity, select 3).

   B1 P2 -VH
   *1: No. of circuits (No. of posts)
   *2: Circuit No. of used original header

   e.g.)
   Circuit No. 1 2 3 4 5 6 7
   Circuit (post) O O O O X O
   Model No. B6P7-VH

   O: With circuit (post) X: Without circuit (post)

2) When giving the polarity to the product by removing the post in 2nd circuit
   However, since the product that the 2nd post of 3-circuit connector is omitted doesn’t have polarity, select 3).

   B1 P2 -VH-L

   e.g.)
   Circuit No. 1 2 3 4 5 6 7
   Circuit (post) O X O O O O
   Model No. B6P7-VH-L

3) When the pitch is set again
   1. When setting two times of pitch with omitting every other one post
      However, posts shall be inserted in No.1-circuit and No. N-circuit.

   B1 P2 -VH

   e.g.)
   Circuit No. 1 2 3 4 5 6 7
   Circuit (post) O X O O X O
   Model No. B4P7-VH

2. When setting three times of pitch with omitting every other two posts
   However, posts shall be inserted in No.1-circuit and No. N-circuit.

   B1 P2 -VH

   e.g.)
   Circuit No. 1 2 3 4 5 6 7
   Circuit (post) O X X O X X O
   Model No. B3P7-VH

3. When setting four times of pitch with omitting every other three posts
   However, posts shall be inserted in No.1-circuit and No. N-circuit.

   B1 P2 -VH

   e.g.)
   Circuit No. 1 2 3 4 5 6 7 8 9
   Circuit (post) O X X X X X X X O
   Model No. B3P9-VH

Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)
Wafer: Glass-filled PBT, UL94V-0, natural (white)
RoHS2 compliance This product displays (LF)/(SN) on a label.
Note: The applicable housing for 2 circuits shrouded header is "VHR-2N" only.
"VHRR-2N" is not applicable.

<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.
ex. B2P-VH-FB-B-oo-
    (blank)...natural (white)
    C...black R...red E...blue M...green O...orange Y...yellow
    PK...pink H...gray

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