VH CONNECTOR

3.96mm pitch/Disconnectable Crimp style connectors

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. 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.

* Refer to “General Instruction and Notice when using Terminals and Connectors” at the end of this catalog.
* Contact JST for details.
* Compliant with RoHS.

Standards

- Recognized E60389
- Certified LR20812
- R75122

Note:
1. The above figure is the figure viewed from soldering side.
2. Tolerances are non-cumulative: ±0.05mm 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.
**VH CONNECTOR**

### Contact

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Applicable wire</th>
<th>Insulation O.D. (mm)</th>
<th>Q'ty / reel</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVH-21T-P1.1</td>
<td>0.33—0.83</td>
<td>22—18</td>
<td>1.7—3.0</td>
</tr>
<tr>
<td>SVH-41T-P1.1</td>
<td>0.5 — 1.25</td>
<td>20—16</td>
<td>1.7—3.0</td>
</tr>
</tbody>
</table>

**Material and Finish**

Phosphor bronze, tin-plated (reflow treatment)

**RoHS compliance**

Note: 1. Contact JST for brass products.
2. When using retainer mountable type housing, applicable wire's insulation O.D. shall be 1.7 to 2.2 mm.

### Housing

#### N type

![N type Housing Diagram]

#### M type

![M type Housing Diagram]

#### Retainer mountable type

![Retainer mountable type Housing Diagram]

**Note:**
1. Models identified as VHR-(    ) M incorporate measures to prevent electric shock and are thus safer in regard to high voltages.
2. The applicable housing for 2 circuits shrouded header is "VHR-2N" only. "VHR-R-2N" is not applicable.

(*) N / M type ; 1,000 Retainer mountable type ; 500

<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. VHR-2N-oo

(blank)...natural (white)  
BK...black  
R...red  
BL...blue  
M...green  
D...orange  
Y...yellow  
PK...pink  
H...gray

### RoHS compliance

**Retainer**

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>A</th>
<th>Q'ty / bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>VHS-2V</td>
<td>3.7</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>VHS-3V</td>
<td>7.52</td>
<td>1,000</td>
</tr>
<tr>
<td>5</td>
<td>VHS-5V</td>
<td>15.44</td>
<td>1,000</td>
</tr>
<tr>
<td>7</td>
<td>VHS-7V</td>
<td>23.36</td>
<td>1,000</td>
</tr>
<tr>
<td>8</td>
<td>VHS-8V</td>
<td>27.32</td>
<td>1,000</td>
</tr>
<tr>
<td>9</td>
<td>VHS-9V</td>
<td>31.28</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**Material**

Glass-filled PA 66, UL94V-0, natural (ivory)

**RoHS compliance**

Note: *Strip-crimp applicator*
VH CONNECTOR

**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)

**RoHS compliance**
- This product displays (LF)(SN) on a label.
- Note: Headers with a reduced number of posts are also available.
- Contact JST for details.

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(S)-VH-oo
  - (blank)...natural (white)
  - BK...black R...red TR...tomato red BL...blue M...green
  - O...orange Y...yellow PK...pink H...gray

**Top entry type of PBT**
- Circuit No.1

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Qty / box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2P-VH-B</td>
<td>3.96 7.86</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>B3P-VH-B</td>
<td>7.92 11.82</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>B4P-VH-B</td>
<td>11.88 15.78</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>B5P-VH-B</td>
<td>15.84 19.74</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>B6P-VH-B</td>
<td>19.80 23.70</td>
<td>500</td>
</tr>
<tr>
<td>7</td>
<td>B7P-VH-B</td>
<td>23.76 27.66</td>
<td>500</td>
</tr>
<tr>
<td>8</td>
<td>B8P-VH-B</td>
<td>27.72 31.62</td>
<td>500</td>
</tr>
<tr>
<td>9</td>
<td>B9P-VH-B</td>
<td>31.68 35.58</td>
<td>500</td>
</tr>
<tr>
<td>10</td>
<td>B10P-VH-B</td>
<td>35.64 39.54</td>
<td>500</td>
</tr>
</tbody>
</table>

**Side entry type with PCB stabilizer**
- Circuit No.1

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Qty / box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>S2P-VH-B</td>
<td>3.96 7.86</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>S3P-VH-B</td>
<td>7.92 11.82</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>S4P-VH-B</td>
<td>11.88 15.78</td>
<td>500</td>
</tr>
<tr>
<td>5</td>
<td>S5P-VH-B</td>
<td>15.84 19.74</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>S6P-VH-B</td>
<td>19.80 23.70</td>
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<td>7</td>
<td>S7P-VH-B</td>
<td>23.76 27.66</td>
<td>500</td>
</tr>
<tr>
<td>8</td>
<td>S8P-VH-B</td>
<td>27.72 31.62</td>
<td>500</td>
</tr>
<tr>
<td>9</td>
<td>S9P-VH-B</td>
<td>31.68 35.58</td>
<td>500</td>
</tr>
<tr>
<td>10</td>
<td>S10P-VH-B</td>
<td>35.64 39.54</td>
<td>500</td>
</tr>
</tbody>
</table>

**RoHS compliance**
- This product displays (LF)(SN) on a label.
- Contact JST for details.

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

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

<Side entry type with PCB stabilizer>
  ex. S2P-VH-oo
  - (blank)...natural (white)
  - BK...black R...red BL...blue M...green Y...yellow
**VH CONNECTOR**

**Shrouded header**

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Qty / box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>B2P-VH-FB-B</td>
<td>A: 3.96 B: 9.80</td>
<td>250</td>
</tr>
<tr>
<td>3</td>
<td>B3P-VH-FB-B</td>
<td>A: 7.92 B: 13.76</td>
<td>200</td>
</tr>
<tr>
<td>4</td>
<td>B4P-VH-FB-B</td>
<td>A: 11.88 B: 17.72</td>
<td>150</td>
</tr>
<tr>
<td>5</td>
<td>B5P-VH-FB-B</td>
<td>A: 15.84 B: 21.68</td>
<td>200</td>
</tr>
<tr>
<td>6</td>
<td>B6P-VH-FB-B</td>
<td>A: 19.80 B: 25.64</td>
<td>200</td>
</tr>
<tr>
<td>7</td>
<td>B7P-VH-FB-B</td>
<td>A: 23.76 B: 29.60</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>B8P-VH-FB-B</td>
<td>A: 27.72 B: 33.56</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>B9P-VH-FB-B</td>
<td>A: 31.68 B: 37.52</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>B10P-VH-FB-B</td>
<td>A: 35.64 B: 41.48</td>
<td>125</td>
</tr>
</tbody>
</table>

**Material and Finish**

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

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