This VL connector is designed for wire-to-wire and wire-to-board 6.2mm pitch connector corresponding to large current. Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safety.

- Housing lances for contact retention
- Secondary retainer
- Suited for large current
- Two kinds of connections

Specifications
- Current rating: 20 A AC, DC (Refer to the table below.)
- Voltage rating: 600 V AC, DC
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 7 mΩ max. After environmental tests/ 10 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 2,000 VAC/minute
- Applicable wire: AWG #22 to #12
- Applicable PC board thickness: 1.6 mm
  * Refer to “General Instruction and Notice when using Terminals and Connectors” at the end of this catalog.
  * Contact JST for details.
  * Compliant with RoHS.

Note: The current rating differs depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.

<table>
<thead>
<tr>
<th>Current unit (A)</th>
<th>#12</th>
<th>#14</th>
<th>#16</th>
<th>#18</th>
<th>#20</th>
<th>#22</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
<td>14</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>13</td>
<td>9</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
<td>12</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>14</td>
<td>11</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Do not branch in parallel current which exceeds the rated current (eg. more than 17A in the case of 3 circuits with AWG #12). If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch such a large current in parallel, design the circuits without causing any imbalance and provide an extra margin for each circuit.

Standards
- Recognized E60389
- Certified LR20812
- R9351103

<2, 3, Single-row 4 circuits>  
<4, 6, 8, 12 circuits>

Note: 1. The above figure is the figure viewed from soldering side.
2. Tolerances are non-cumulative: ±0.05mm for all centers.
3. 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>Contact</th>
<th>Crimping machine</th>
<th>Applicator</th>
<th>Dies</th>
<th>Crimp applicator with dies</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVF-61T-P2.0</td>
<td>MKS-L</td>
<td>MK/SVF-M-61-20</td>
<td>AP/LMK SVF-M61-20</td>
<td></td>
</tr>
</tbody>
</table>

### Housing (Inner-housing lock)

#### <2 circuits>

#### <3 circuits>

#### <4 circuits>

#### <6 circuits>

#### <8 circuits>

#### <12 circuits>

### Material and Finish

- **Material:** PA 66, UL94V-0, natural (white)
- **Phosphor bronze, tin-plated (reflow treatment)**

### RoHS compliance

Note: "Marked product is not TÜV approved."
### VL CONNECTOR

#### Housing (Outer-housing lock)

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Qty / bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>VLP-02V-1</td>
<td>500</td>
</tr>
<tr>
<td>3</td>
<td>VLP-03V-1</td>
<td>500</td>
</tr>
<tr>
<td>4</td>
<td>VLP-04V-1</td>
<td>500</td>
</tr>
<tr>
<td>4 (Single-row)</td>
<td>VLP-04VN-1</td>
<td>500</td>
</tr>
<tr>
<td>6</td>
<td>VLP-06V-1</td>
<td>500</td>
</tr>
<tr>
<td>8</td>
<td>VLP-08V-1</td>
<td>200</td>
</tr>
<tr>
<td>12</td>
<td>VLP-12V-1</td>
<td>100</td>
</tr>
</tbody>
</table>

**Material**

PA 66, UL94V-0, natural (white)

**RoHS compliance**
**VL CONNECTOR**

### Retainer

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Q'ty / bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4 circuits</td>
<td>VLS-02V</td>
<td>1,000</td>
</tr>
<tr>
<td>3, 6 circuits</td>
<td>VLS-03V</td>
<td>1,000</td>
</tr>
<tr>
<td>4 (single-row)</td>
<td>VLS-08V</td>
<td>1,000</td>
</tr>
<tr>
<td>12 circuits</td>
<td>VLS-12V</td>
<td>1,000</td>
</tr>
</tbody>
</table>

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

**RoHS compliance**

### Shrouded header

<table>
<thead>
<tr>
<th>Circuits</th>
<th>Model No.</th>
<th>Dimensions (mm)</th>
<th>Q'ty / box</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3 circuits</td>
<td>B02P-VL</td>
<td>A: 6.2 B: 13.4</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>B03P-VL</td>
<td>A: 6.2 B: 13.4</td>
<td>100</td>
</tr>
<tr>
<td>4 (single-row)</td>
<td>B04P-VL</td>
<td>A: 6.2 B: 13.4</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>B06P-VL</td>
<td>A: 12.4 B: 19.6</td>
<td>50</td>
</tr>
<tr>
<td>8</td>
<td>B08P-VL</td>
<td>A: 18.6 B: 26.2</td>
<td>50</td>
</tr>
<tr>
<td>12</td>
<td>B12P-VL</td>
<td>A: 31.0 B: 38.6</td>
<td>35</td>
</tr>
</tbody>
</table>

**Material and Finish**
Post: Copper-alloy, tin-plated (reflow treatment)
Wafer: PA 66, UL94V-0, natural (white)

**RoHS compliance**
Contact position location numbers

### Inner-housing lock
- **<2 circuits>**
- **<3 circuits>**
- **<4 circuits>**
- **<6 circuits>**
- **<8 circuits>**
- **<12 circuits>**

### Outer-housing lock
- **<2 circuits>**
- **<3 circuits>**
- **<4 circuits>**
- **<Single-row 4 circuits>**
- **<6 circuits>**
- **<8 circuits>**
- **<12 circuits>**