





4.0/8.0/12.0 mm pitch/Disconnectable Crimp style connectors



Low profile connectors with high withstanding voltage, designed for connecting liquid crystal display back light lamps to their starters.

- Low profile
- SMT configuration
- Applicable to special wires
- Headers with locating bosses
- Housing lock also serves as polarizing device

# Specifications

- Current rating: 1.0 A AC/DC (AWG #22)
- Voltage rating: 600 V AC/DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 10 m $\Omega$  max. After environmental tests/ 20 m $\Omega$  max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 1,800 VAC/minute
- Applicable wire: AWG #28 to #22
- \* 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

- N° Recognized E60389
- GF Certified LR20812

### PC board layout (viewed from component side)

### SMT type

4 mm pitch/ 2-circuit





# 8 mm pitch/ 2-circuit with boss

## 8 mm pitch/





8<sup>±0.1</sup> 1 min. 1 min

4 mm pitch/ 3-circuit with plugged up hole



# Through-hole type



12<sup>±0.1</sup>

12 mm pitch/ 2-circuit

4 mm pitch/ 4-circuit



8<sup>±0.1</sup> 1 min. 4<sup>±0.1</sup> 1 min. 4<sup>±0.1</sup>

0.2

 $1.5^{\pm 0}$ 

Ē

4 mm pitch/ 3-circuit

# 4 mm pitch/ 4-circuit with post removed



Note: 1. Tolerances are for pattern non-cumulative:  $\pm$  0.05 mm for all centers. Tolerance for hole size is  $\pm$  0.1.

2. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as guideline. Contact JST for details.

# **BH CONNECTOR**

### Contact



| Model No.     | Applicable wire |               | Insulation O.D. (mm)    | Q'tv/         |  |
|---------------|-----------------|---------------|-------------------------|---------------|--|
| Model No.     | mm <sup>2</sup> | AWG #         | Insulation O.D. (IIIII) | Q'ty∕<br>reel |  |
| SBH-001T-P0.5 | 0.08 to 0.33    | 28 to 22      | 1.6 to 2.4              | 4,000         |  |
|               | Materia         | al and Finish |                         |               |  |

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS2 compliance

Note: Wire conductor shall be an annealed copper stranded wire with tin coating.

| <b>a</b>      | Crimping |                  | Applicator      |                            |
|---------------|----------|------------------|-----------------|----------------------------|
| Contact       | machine  | Crimp applicator | Dies            | Crimp applicator with dies |
| SBH-001T-P0.5 | AP-K2N   | MKS-L            | MK/SBH/M-001-05 | APLMK SBH/M001-05          |
|               |          |                  |                 |                            |

Note: Contact JST for fully automatic crimping applicator.

### Housing



| No. of Pitch  |          | Model No.        | Dimensi | Q'ty∕ |       |
|---------------|----------|------------------|---------|-------|-------|
| circuits (mm) | (mm)     | Model No.        | А       | В     | bag   |
|               | 4        | BHR-02VS-1       | 4.0     | 9.8   | 1,000 |
|               | 8        | BHR-03VS-1       | 8.0     | 13.8  | 1,000 |
| 2             | Note1) 8 | BHR-02(8.0)VS-1N | 8.0     | 13.8  | 1,000 |
|               | 12       | BHR-04VS-1       | 12.0    | 17.8  | 1,000 |
| 3             | 4        | BHR-03VS-1       | 8.0     | 13.8  | 1,000 |
|               | Note2) 4 | BHR-03(4-3)VS-1N | 12.0    | 17.8  | 1,000 |
| 4             | 4        | BHR-04VS-1       | 12.0    | 17.8  | 1,000 |
| 5             | 4        | BHR-05VS-1       | 16.0    | 21.8  | 1,000 |

Material and Finish

PA 66, UL94V-0, natural (white)

#### **RoHS2** compliance

Note: 1. 2-circuit 8.0 mm pitch plugged up with resin. 2. The 3'rd circuit of 4-circuit 4.0 mm pitch housing is plugged up with the resin.

### Header (Through-hole type)



| No. of circuits | Pitch (mm) | Model No.  | Q'ty/tray     |
|-----------------|------------|--|---------------|
| 2               | 8          | S02(8.0)B-BHS  | 1,000         |
|                 |            | Material and Finish  |               |
|                 |            | oy, copper-undercoated, tin-plated (reflo<br>4V-0, natural (ivory) | ow treatment) |

**RoHS2 compliance** This product displays (LF)(SN) on a label. Note: The applicable housing is "BHR-02(8.0)VS-1N" only.

# **BH CONNECTOR**



4. Header with ribs for preventing pried insertion

- 5. 5-circuit 4.0 mm pitch header with the 3'rd post removed
- 6. The products listed above are supplied on embossed tape.
- 7. Products with bosses supplied in loose piece are also available. Contact JST for details.

Contact JST for other circuits headers with ribs for preventing pried insertion.

# **BH CONNECTOR**

#### Model number allocation





#### Housing



#### Header (Through-hole type)



#### Header (SMT type)

| moved<br>noved |          |                |                |
|----------------|----------|----------------|----------------|
|                |          |                |                |
|                |          |                |                |
|                |          |                |                |
|                |          |                |                |
|                |          |                |                |
| lugged up      | o hole   |                |                |
| •              | lugged u | lugged up hole | lugged up hole |

#### Housing



#### Housing



#### Header (SMT type)

| Shape of assembled product:<br>SM···SMT side entry type   |                 |               |        |             |  |
|---|-----------------|---------------|--------|-------------|--|
| No. of circuits: 2, 3, 4  |                 |               |        |             |  |
| Pitch: 4.0 mm, 8.0 mm, 12 mm  |                 |               |        |             |  |
| Part name: Header   |                 |               |        |             |  |
| Series name   |                 |               |        |             |  |
| Color: SNatural (Ivory)   |                 |               |        |             |  |
| Shape: 1Without boss, NoneWith bo<br>1NWithout boss, Header with<br>1RWithout boss, Header with | olugged up hole | e (2-circuit, | 8.0 mm | pitch only) |  |