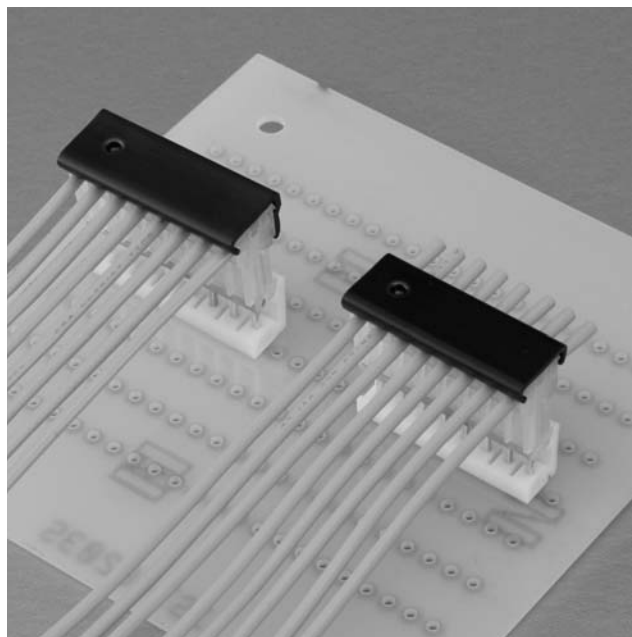
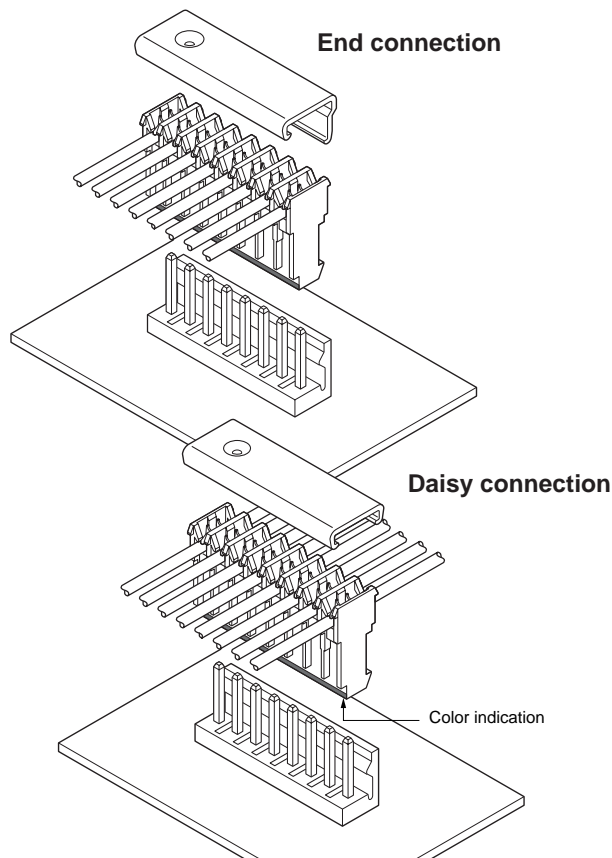


VR CONNECTOR

Disconnectable Insulation displacement connectors



This 3.96 mm pitch insulation displacement connector is used with printed circuit boards. Since the connector can accommodate 18 AWG wires and has a large pitch, it is ideal for connecting power supply circuits.



Features

• Twin U-slot insulation displacement section

The insulation displacement section connected to each wire consists of two tin-plated slots (twin U-slots), which ensures reliable connection.

• Two types of connections

This receptacle can be used for both daisy chain (through) connections and end connections. The end connections can be made from either direction.

Specifications

- Current rating: 7 A AC, DC (AWG #18)
 - 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: UL1007(Contact JST for details regarding other UL wires.)
AWG #26, #24, #22, #20, #18
Conductor construction/
AWG #26 to #22: 7 strands, tin-coated
AWG #20: 7 and 26 strands, tin-coated
AWG #18: 34 and 43 strands
Insulation O.D./1.3 to 2.1 mm
 - Applicable PC board thickness: 0.8 to 1.6 mm
- * Temperature Range:
The aforementioned temperature range of this connector is described in JST Standard Product Specification.
- * 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:

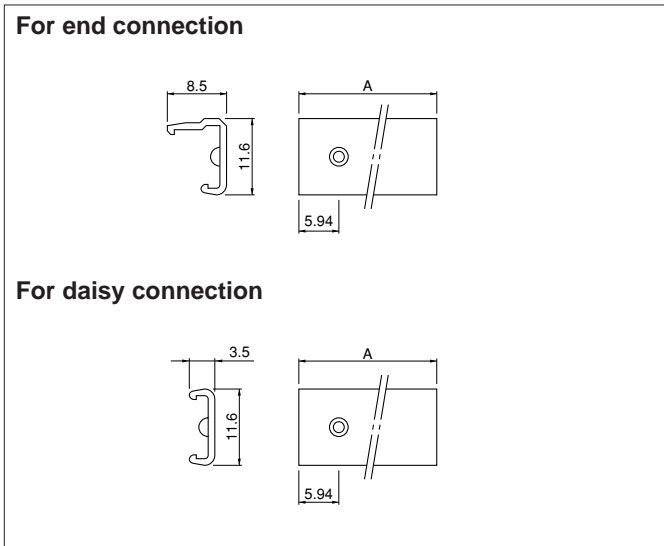
Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch a large current in parallel, design the circuits without causing imbalance and provide an extra margin for each circuit.

Standards

Recognized E60389

Certified LR20812

Cover



| Circuits | Model No. | | Dimensions A (mm) | Q'ty/box |
|----------|--------------------|----------------------|-------------------|----------|
| | For end connection | For daisy connection | | |
| 2 | VRC-02E | VRC-02D | 7.92 | 1,000 |
| 3 | VRC-03E | VRC-03D | 11.88 | 1,000 |
| 4 | VRC-04E | VRC-04D | 15.84 | 500 |
| 5 | VRC-05E | VRC-05D | 19.80 | 500 |
| 6 | VRC-06E | VRC-06D | 23.76 | 500 |
| 8 | VRC-08E | VRC-08D | 31.68 | 250 |
| 12 | — | VRC-12D | 47.52 | 200 |

Material

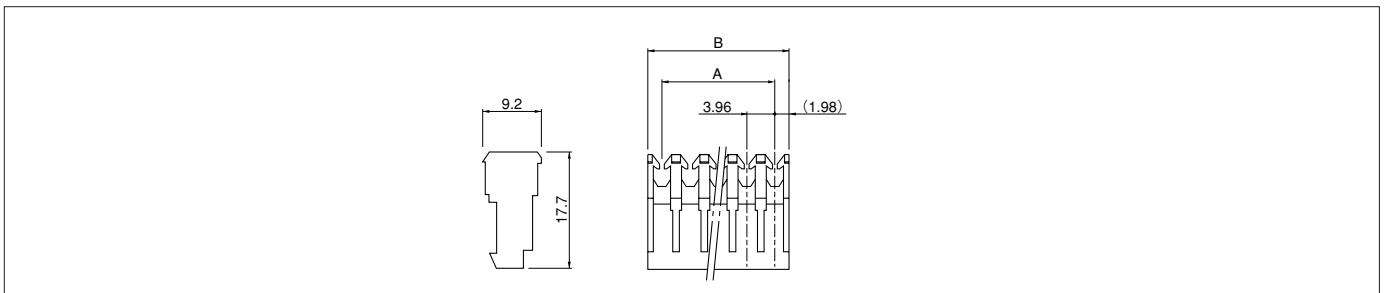
Polyvinyl chloride, UL94V-0 (black)

RoHS compliance

Note:

1. The use of this cover keeps the terminated part from dust.
2. Contact JST if cover is required.

Receptacle



| Circuits | Model No. | | | | | Dimensions (mm) | | Q'ty/bag |
|----------|-------------------------|-----------------|----------------|-----------------|------------------|-----------------|-------|----------|
| | AWG #26 (natural/white) | AWG #24 (black) | AWG #22 (red) | AWG #20 (brown) | AWG #18 (orange) | A | B | |
| 2 | 02VR-6S | 02VR-4K | 02VR-2R | 02VR-AN | 02VR-BO | 3.96 | 7.92 | 2,000 |
| 3 | 03VR-6S | 03VR-4K | 03VR-2R | 03VR-AN | 03VR-BO | 7.92 | 11.88 | 1,000 |
| 4 | 04VR-6S | 04VR-4K | 04VR-2R | 04VR-AN | 04VR-BO | 11.88 | 15.84 | 1,000 |
| 5 | 05VR-6S | 05VR-4K | 05VR-2R | 05VR-AN | 05VR-BO | 15.84 | 19.80 | 1,000 |
| 6 | 06VR-6S | 06VR-4K | 06VR-2R | 06VR-AN | 06VR-BO | 19.80 | 23.76 | 1,000 |
| 8 | 08VR-6S | 08VR-4K | 08VR-2R | 08VR-AN | 08VR-BO | 27.72 | 31.68 | 500 |
| 9 | 09VR-6S | 09VR-4K | 09VR-2R | 09VR-AN | 09VR-BO | 31.68 | 35.64 | 500 |
| 10 | 10VR-6S | 10VR-4K | 10VR-2R | 10VR-AN | 10VR-BO | 35.64 | 39.60 | 500 |
| 12 | 12VR-6S | 12VR-4K | 12VR-2R | 12VR-AN | 12VR-BO | 43.56 | 47.52 | 250 |
| 15 | 15VR-6S | 15VR-4K | 15VR-2R | 15VR-AN | 15VR-BO | 55.44 | 59.40 | 250 |

Material and Finish

Contact: Brass, Copper-undercoated, tin-plated (reflow treatment)
Housing: PA 66, UL94V-2

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

Note:

1. In addition to mating with the VR headers, the VR receptacle will also mate with VH and VS headers.
2. Color indication is shown by a line on each receptacle.

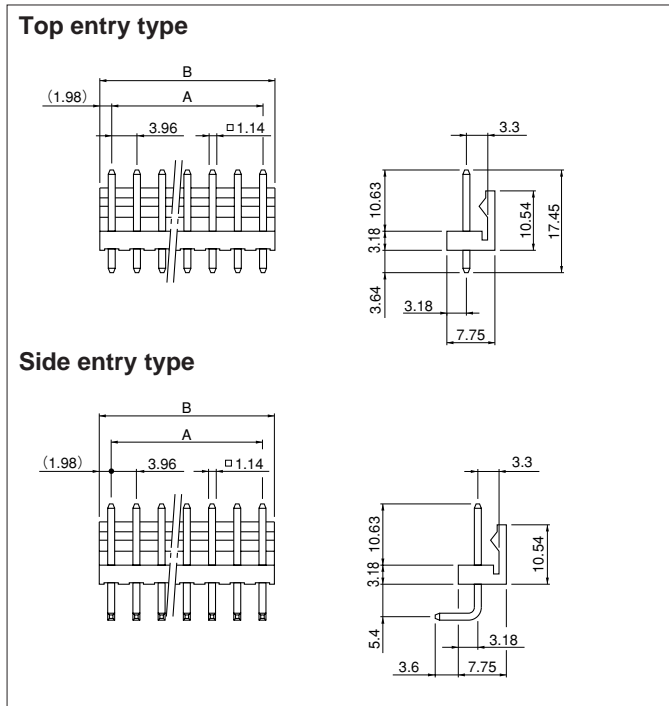
<For reference> As the color identification, the following alphabet shall be put in the underlined part.
For availability, delivery and minimum order quantity, contact JST.

ex. **02VR-6S**

Standard color: AWG #26: S...natural (white), AWG #24: K...black, AWG #22: R...red, AWG #20: N...brown, AWG #18: O...orange
Others: TR...tomato red E...blue M...green

VR CONNECTOR

Locking header (Friction lock header)



| Cir- cuits | Model No. | | Dimensions (mm) | | Q'ty/box | |
|---------------|----------------------|-----------------------|-----------------|-------|----------------------|-----------------------|
| | Top entry type | Side entry type | A | B | Top entry type | Side entry type |
| 2 | B2P-VR | B2PS-VR | 3.96 | 7.92 | 1,000 | 250 |
| 3 | B3P-VR | B3PS-VR | 7.92 | 11.88 | 500 | 250 |
| 4 | B4P-VR | B4PS-VR | 11.88 | 15.84 | 250 | 250 |
| 5 | B5P-VR | B5PS-VR | 15.84 | 19.80 | 250 | 250 |
| 6 | B6P-VR | B6PS-VR | 19.80 | 23.76 | 250 | 100 |
| 8 | B8P-VR | B8PS-VR | 27.72 | 31.68 | 200 | 100 |
| 9 | B9P-VR | B9PS-VR | 31.68 | 35.64 | 100 | 100 |
| 10 | B10P-VR | B10PS-VR | 35.64 | 39.60 | 100 | 100 |
| 12 | B12P-VR-P | B12PS-VR-P | 43.56 | 47.52 | 100 | 100 |
| 15 | B15P-VR-P | B15PS-VR-P | 55.44 | 59.40 | 100 | 100 |

Material and Finish

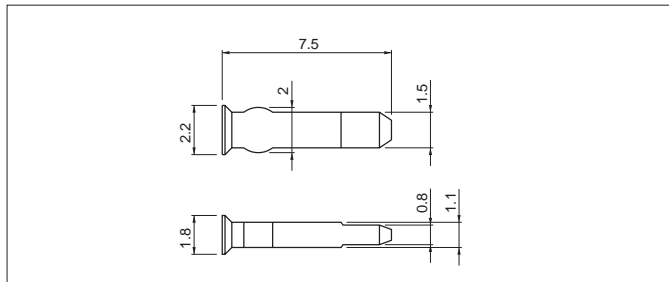
Post: Brass, copper-undercoated, tin-plated (reflow treatment)

Wafer: 2 to 10 circuits / PA 66, UL94V-0, natural (white)

12 and 15 circuits / PBT, UL94V-0, natural (white)

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

Polarizing key



| Model No. | Q'ty/bag |
|--------------|----------|
| PK-VR | 5,000 |

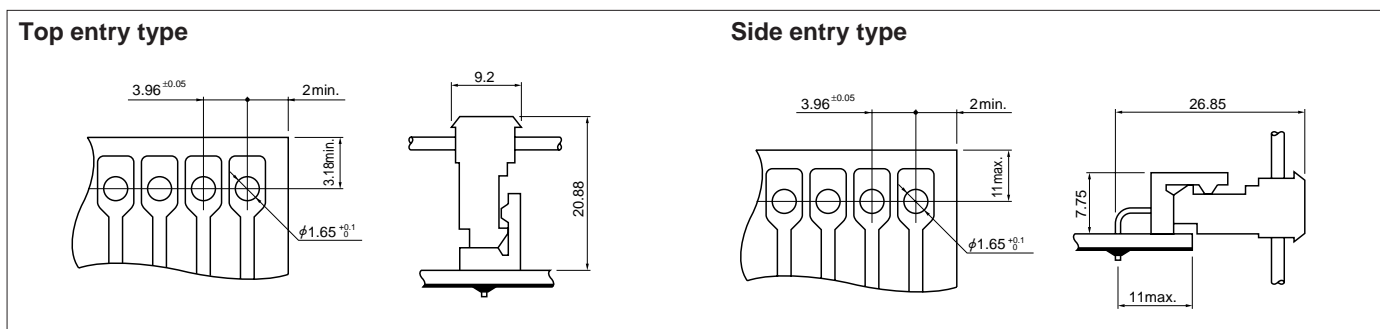
Material

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

RoHS compliance

Note: Not UL/CSA approved.

PC board layout (viewed from soldering side) and Assembly layout



Note:

1. Tolerances are non-cumulative: ± 0.05 mm for all centers.

2. 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.