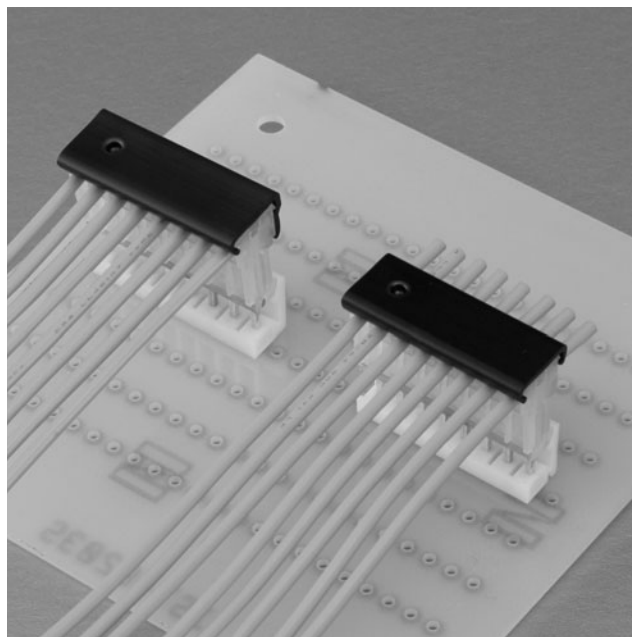
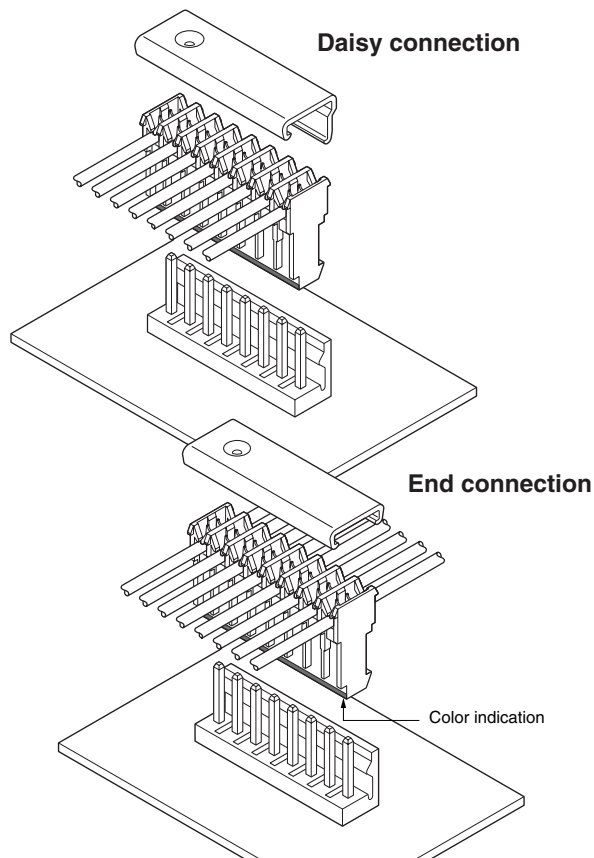


# VR CONNECTOR

Disconnectable Insulation displacement connectors



**This 3.96mm 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: 7A AC, DC (AWG #18)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20 mΩ max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/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 2.1mm
- Applicable PC board thickness: 0.8 to 1.6mm
- \* Compliant with RoHS.
- \* 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.

**Note:**

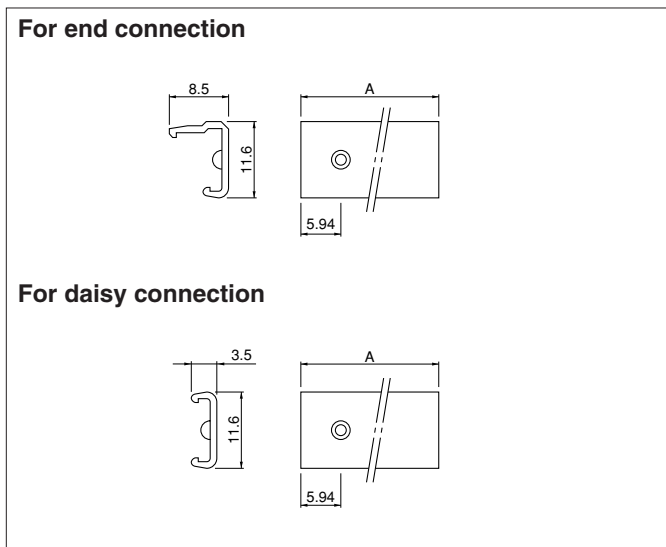
Do not branch in parallel current which exceeds the rated current. If branched in parallel, current imbalance or other problems may develop. If it is absolutely necessary to branch a large current in parallel, design the circuits without causing imbalance and provide an extra margin for each circuit.

## Standards

Recognized E60389

Certified LR20812

## Cover



Cir- cuits	Model No.		Dimensions A (mm)	Q'ty / box
	For end connection	For daisy connection		
2	<b>VRC-02E</b>	<b>VRC-02D</b>	7.92	1,000
3	<b>VRC-03E</b>	<b>VRC-03D</b>	11.88	1,000
4	<b>VRC-04E</b>	<b>VRC-04D</b>	15.84	500
5	<b>VRC-05E</b>	<b>VRC-05D</b>	19.80	500
6	<b>VRC-06E</b>	<b>VRC-06D</b>	23.76	500
8	<b>VRC-08E</b>	<b>VRC-08D</b>	31.68	250
9	<b>VRC-09E</b>	<b>VRC-09D</b>	35.64	250
10	<b>VRC-10E</b>	<b>VRC-10D</b>	39.60	200
12	<b>VRC-12E</b>	<b>VRC-12D</b>	47.52	200
15	<b>VRC-15E</b>	<b>VRC-15D</b>	59.40	200

### Material

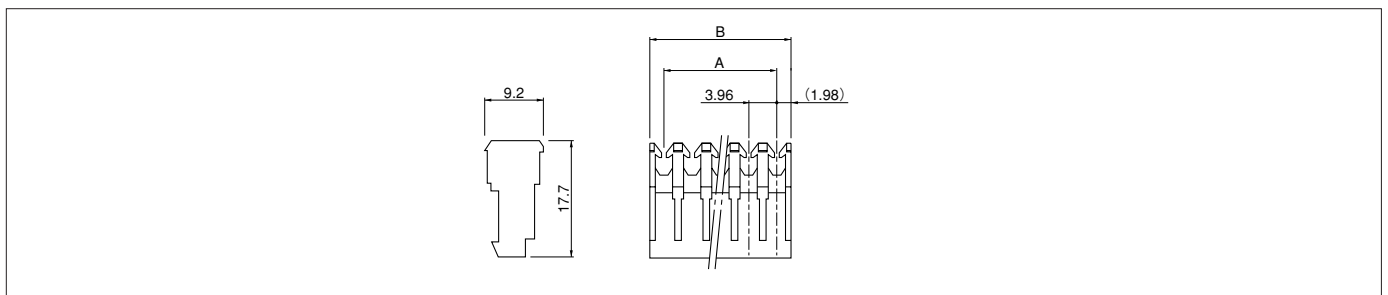
Polyvinyl chloride, UL94V-0 (black)

### RoHS compliance

Note:

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

## Receptacle



Cir- cuits	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	<b>02VR-6S</b>	<b>02VR-4K</b>	<b>02VR-2R</b>	<b>02VR-AN</b>	<b>02VR-BO</b>	3.96	7.92	2,000
3	<b>03VR-6S</b>	<b>03VR-4K</b>	<b>03VR-2R</b>	<b>03VR-AN</b>	<b>03VR-BO</b>	7.92	11.88	1,000
4	<b>04VR-6S</b>	<b>04VR-4K</b>	<b>04VR-2R</b>	<b>04VR-AN</b>	<b>04VR-BO</b>	11.88	15.84	1,000
5	<b>05VR-6S</b>	<b>05VR-4K</b>	<b>05VR-2R</b>	<b>05VR-AN</b>	<b>05VR-BO</b>	15.84	19.80	1,000
6	<b>06VR-6S</b>	<b>06VR-4K</b>	<b>06VR-2R</b>	<b>06VR-AN</b>	<b>06VR-BO</b>	19.80	23.76	1,000
8	<b>08VR-6S</b>	<b>08VR-4K</b>	<b>08VR-2R</b>	<b>08VR-AN</b>	<b>08VR-BO</b>	27.72	31.68	500
9	<b>09VR-6S</b>	<b>09VR-4K</b>	<b>09VR-2R</b>	<b>09VR-AN</b>	<b>09VR-BO</b>	31.68	35.64	500
10	<b>10VR-6S</b>	<b>10VR-4K</b>	<b>10VR-2R</b>	<b>10VR-AN</b>	<b>10VR-BO</b>	35.64	39.60	500
12	<b>12VR-6S</b>	<b>12VR-4K</b>	<b>12VR-2R</b>	<b>12VR-AN</b>	<b>12VR-BO</b>	43.56	47.52	250
15	<b>15VR-6S</b>	<b>15VR-4K</b>	<b>15VR-2R</b>	<b>15VR-AN</b>	<b>15VR-BO</b>	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.

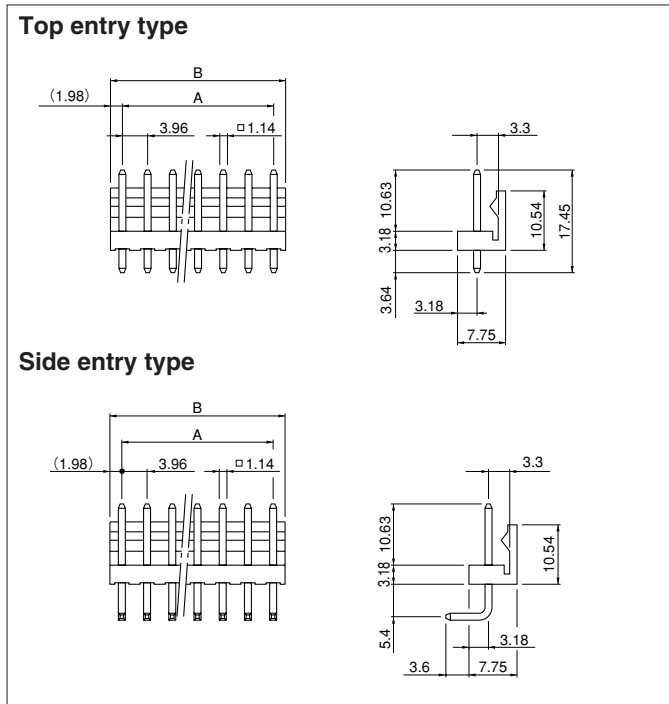
<For reference> As the color identification, the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

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, TR...tomato red E...blue  
M...green

# VR CONNECTOR

## Locking header (Friction lock header)



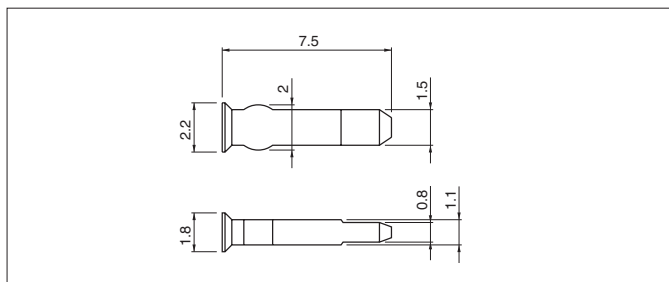
Circuits	Model No.		Dimensions (mm)		Q'ty / box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	B 2P-VR	B 2PS-VR	3.96	7.92	1,000	250
3	B 3P-VR	B 3PS-VR	7.92	11.88	500	250
4	B 4P-VR	B 4PS-VR	11.88	15.84	250	250
5	B 5P-VR	B 5PS-VR	15.84	19.80	250	250
6	B 6P-VR	B 6PS-VR	19.80	23.76	250	100
8	B 8P-VR	B 8PS-VR	27.72	31.68	200	100
9	B 9P-VR	B 9PS-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



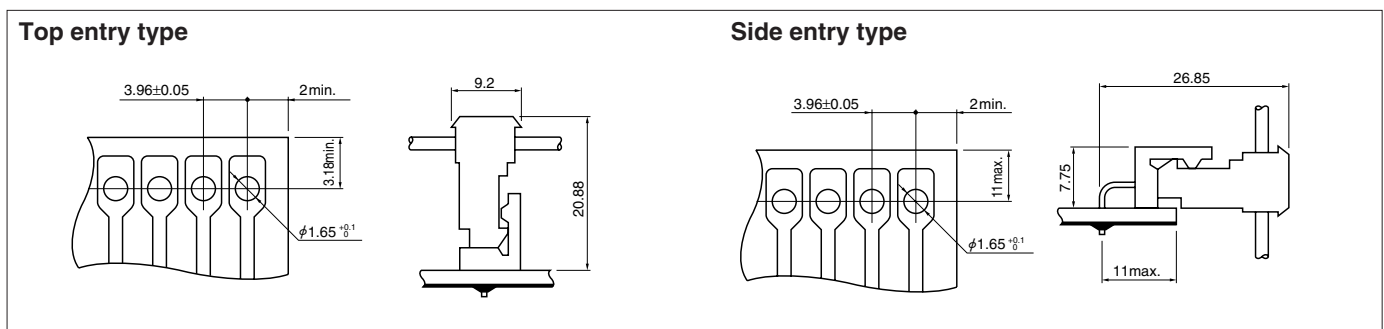
Model No.	Q'ty / bag
PK-VR	5,000

### 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:  $\pm 0.05\text{mm}$  for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.