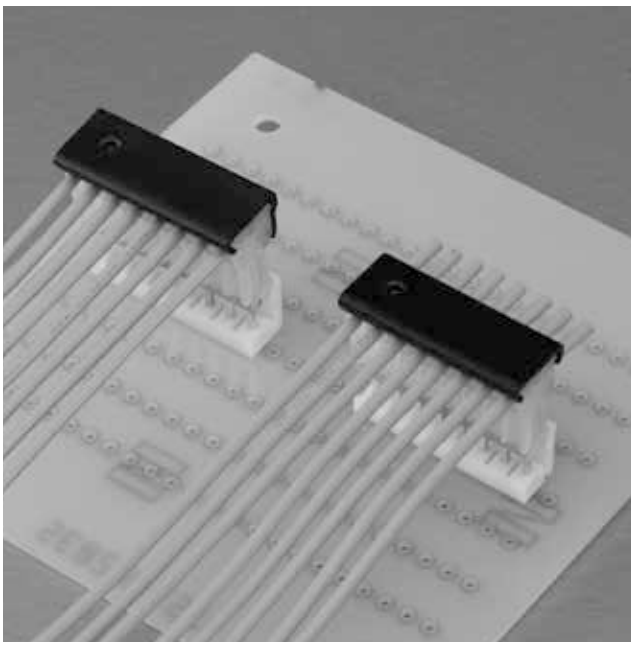
JST

IDC

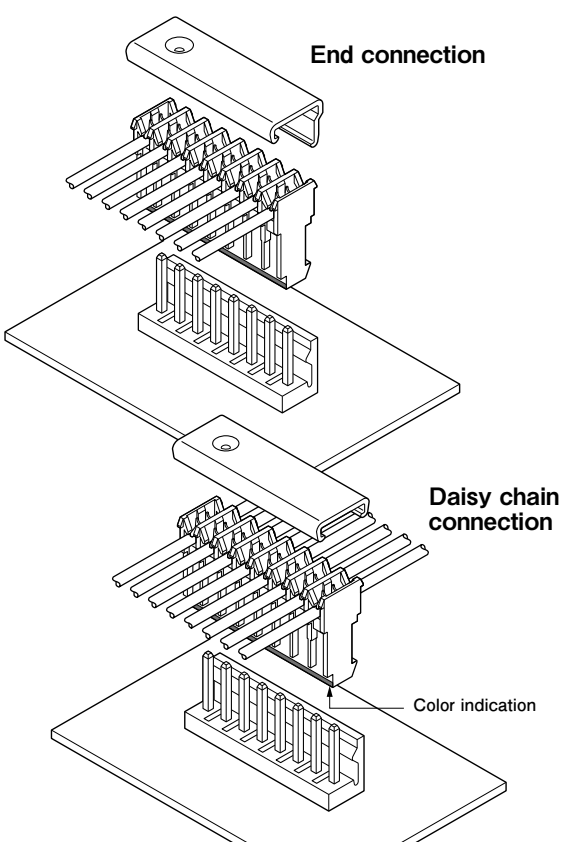
3.96 mm pitch

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 socket 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℃ to +85℃
  (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 to AWG #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

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.

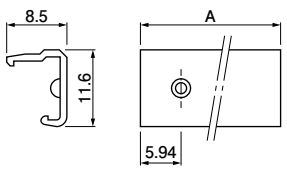
* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).
* RoHS2 compliance
* Dimensional unit: mm
* Contact JST for details.

Standards

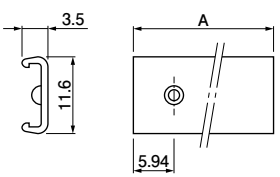
Recognized E60389
Certified LR20812

Cover

For end connection



For daisy chain connection

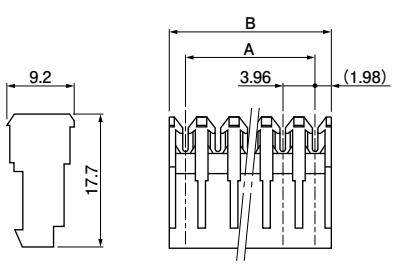


No. of circuits	Model No.		Dimensions A (mm)	Q'ty/box
	For end connection	For daisy chain connection		
2	**VRC-02E**	**VRC-02D**	7.92	1,000
3	**VRC-03E**	**VRC-03D**	11.88	1,000
4	**VRC-04E**	**VRC-04D**	15.84	500
5	**VRC-05E**	**VRC-05D**	19.80	500
6	**VRC-06E**	**VRC-06D**	23.76	500
12	—	**VRC-12D**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

Material and Finish
Polyvinyl chloride, UL94V-0 (black)

RoHS2 compliance This product displays (LF) on a label.
Note:
1. As for the requirement of the cover, contact JST due to the environmental issues (use of PVC) and operating temperature.
2. The use of this cover in dusty environments prevents adhesion of dust.

Socket



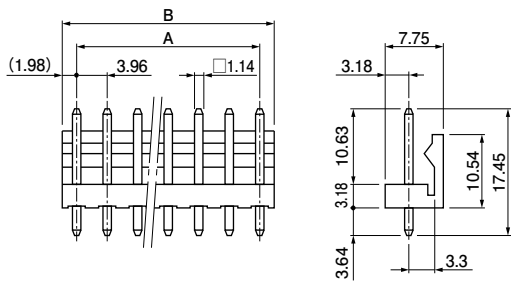
No. of circuits	Model No.					Dimensions (mm)		Q'ty/bag
	AWG #26 (natural/white)	AWG #24 (black)	AWG #22 (red)	AWG #20 (brown)	AWG #18 (orange)	A	B	
2	**02VR-6S**	**02VR-4K**	**02VR-2R**	**02VR-AN**	**02VR-BO**	3.96	7.92	2,000
3	**03VR-6S**	**03VR-4K**	**03VR-2R**	**03VR-AN**	**03VR-BO**	7.92	11.88	1,000
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

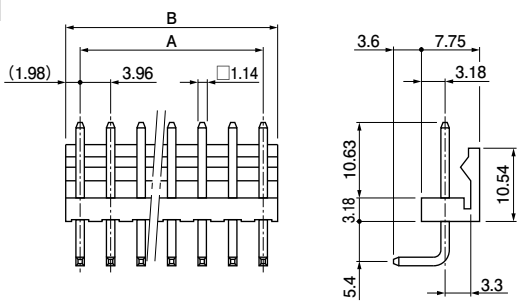
RoHS2 compliance This product displays (LF)(SN) on a label.
Note:
1. In addition to mating with the VR headers, the VR socket will also mate with VH and VS headers.
2. Color indication is shown by a line on each socket.

Header (Friction lock type header)

Top entry type



Side entry type



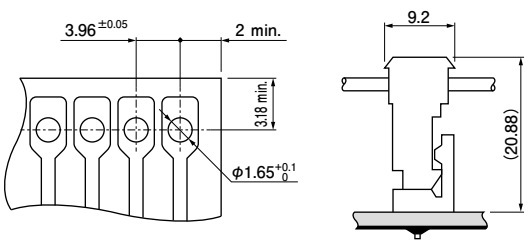
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	B2P-VR	B2PS-VR	3.96	7.92	1,000	250
3	B3P-VR	B3PS-VR	7.92	11.88	500	250
4	B4P-VR	B4PS-VR	11.88	15.84	250	250
5	B5P-VR	B5PS-VR	15.84	19.80	250	250
6	B6P-VR	B6PS-VR	19.80	23.76	250	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)

RoHS2 compliance This product displays (LF)(SN) on a label.

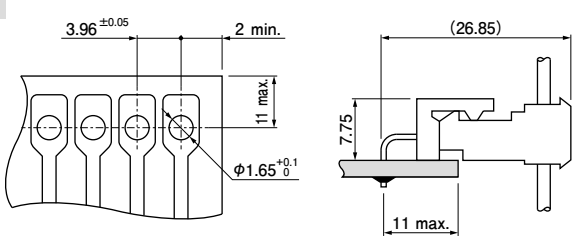
PC board layout and Assembly layout

Top entry type



Soldering side

Side entry type

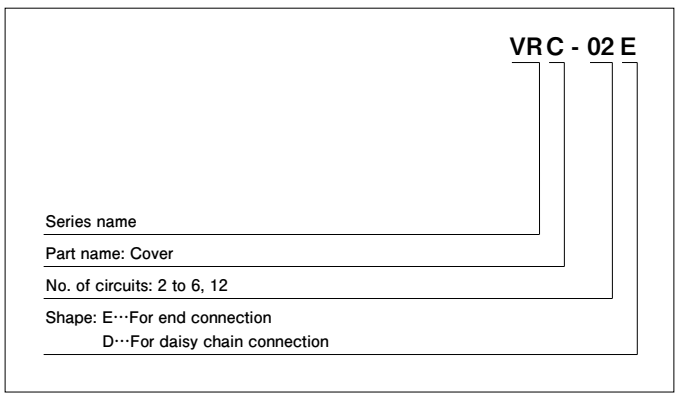


Soldering side

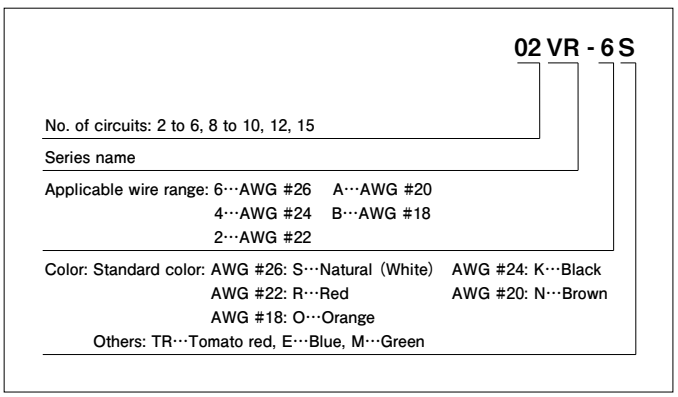
Note:
1. Tolerances are non-cumulative: ± 0.05 mm for all centers.
2. Hole dimensions differ according to the type of PC board and piercing method.
   The dimensions described in the above figure should be given as reference. Contact JST for details.

Model number allocation

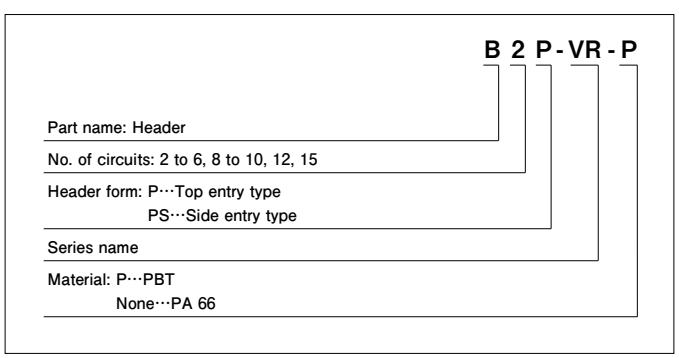
Cover



Socket



Header



Note: Depending on the colors, it may take some time for delivery.