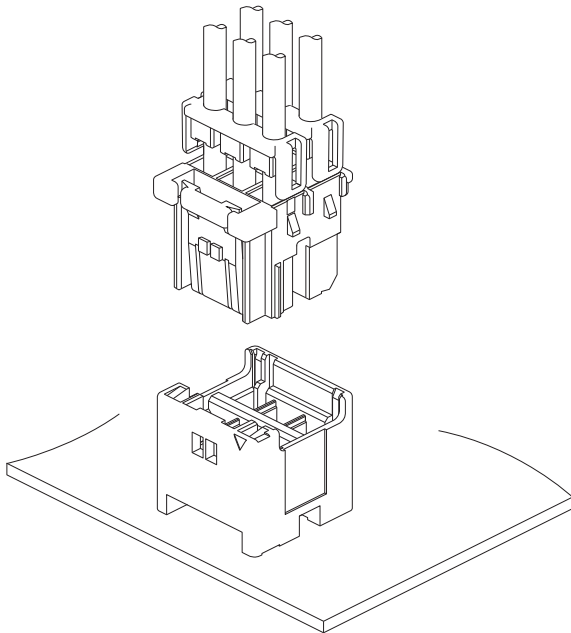


HYV CONNECTOR

5.0 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



This is a 5.0 mm pitch wire-to-board connector with a mechanism to prevent incomplete mating.

The box-shaped structure of the contacts, which prevents the influence of external force, enhances the safety of high-current circuit connections, and the four types of key patterns prevent incorrect mating when using more than one piece of the same circuit types in narrow areas.

- Keying structure
- Secure lock mechanism
- Inertia lock mechanism
- Retainer mountable type
- Suitable for potting process

Specifications

- Current rating: 10 A AC/DC (2 circuits/ AWG #16)

※ The following table shows the rated current when applying current for all circuits in each combination of the number of circuits and the wire to be used.

No. of circuits	Wire size (AWG)			
	#16	#18	#20	#22
2	10	7	5	3
3	9	7	5	3
4	9	7	5	3
6	8	7	5	3

Unit: A

Note) Notes on parallel branching current:

Do not branch to the multiple circuits in parallel current which exceeds the rated current, as it may cause problems such as imbalance when applying current.

If it is unavoidable that branch in parallel is necessary, design the circuits while suppressing the unbalanced current and proving the sufficient margin to the rated current.

- Voltage rating: 300 V AC/DC
- Temperature range: -30°C to +105°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:
 - There shall be no breakdown or flashover while applying 1,500 VAC for one minute.
- Applicable wire range:
 - Conductor size 21 type/ AWG #22 to AWG #18
 - 41 type/ AWG #18 to AWG #16
 - Insulation O.D. 21 type/ φ 1.8 mm to φ 2.7 mm
 - 41 type/ φ 2.3 mm to φ 3.0 mm
(φ 2.9 mm max. upon using a retainer)
- Applicable PC board thickness: 1.6 mm
- * Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
- * RoHS2 compliance
- * Dimensional unit: mm
- * Contact JST for details.

Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

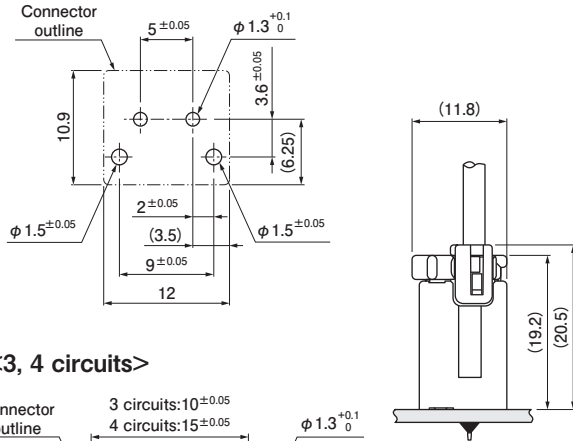
- * Specifications registered to overseas standards may differ from the general specifications listed above.

HYV CONNECTOR

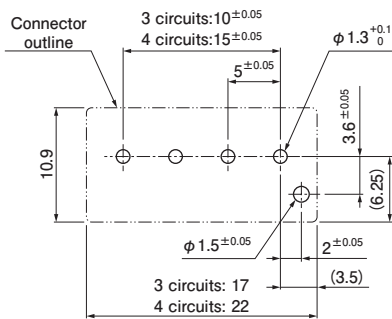
PC board layout and Assembly layout

Single-row

<2 circuits>

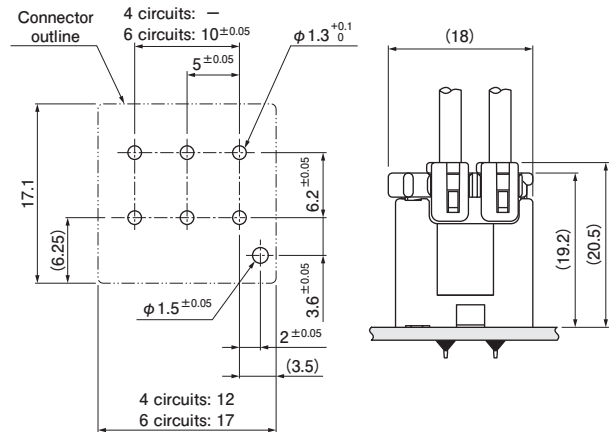


<3, 4 circuits>



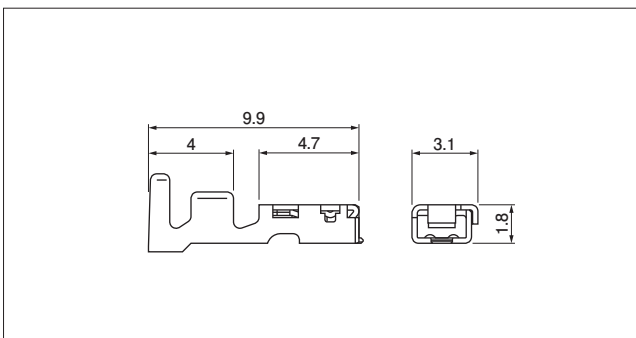
Dual-row

<4, 6 circuits>



- Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.
 2. Tolerance for the PCB hole pitch shall be ± 0.05 , and shall not accumulate more than ± 0.05 .
 3. Hole dimensions differ according to the type of PC board and piercing method.
 The above dimensions are reference values. Please contact JST for details.

Socket contact



Model No.	Applicable wire range		Q'ty/ reel	
	Conductor size	AWG (mm ²)		Insulation O.D. (mm)
SHYVF-21T-M0.5	#22 to #18	(0.33 to 0.83)	1.8 to 2.7	4,000
SHYVF-41T-M0.5	#18 to #16	(0.83 to 1.25)	2.3 to 3.0	3,000

Material and Surface finish, etc.

Copper alloy, tin-plated

Note: The insulation O.D. of the applicable wire shall be $\phi 2.9$ mm max. upon using a retainer of 41-barrel contact.

Crimping machine

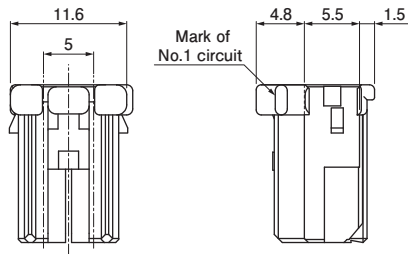
Contact	Crimping machine	Applicator	Crimp applicator with dies
SHYVF-21T-M0.5	AP-K2N	MKS-L	APLMK SHYVF21-05
SHYVF-41T-M0.5			APLMK SHYVF41-05

Note: Contact JST for fully automatic crimping applicator.

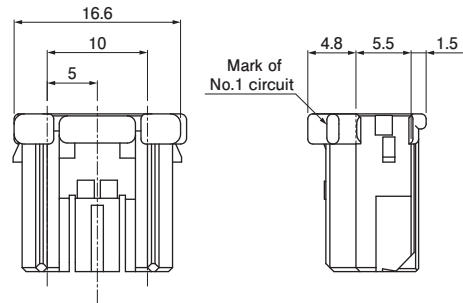
Socket housing

Single-row

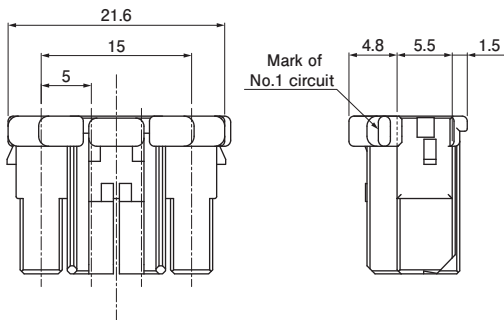
<2 circuits>



<3 circuits>

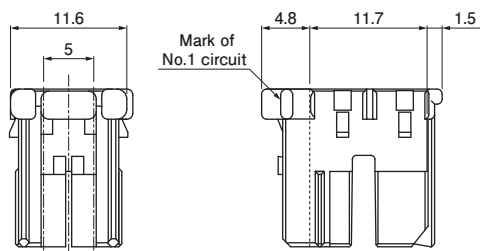


<4 circuits>

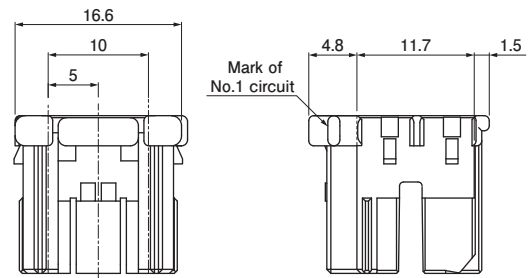


Dual-row

<4 circuits>



<6 circuits>



Type	No. of circuits	Model No.	Q'ty/bag
Single-row	2	HYVRP-02V-A-S	1,000
	3	HYVRP-03V-A-S	1,000
	4	HYVRP-04V-A-S	600
Dual-row	4	HYVRP-04V-W-A-S	600
	6	HYVRP-06V-W-A-S	600

Material and Surface finish, etc.

PA 66 (Glass-filled), natural

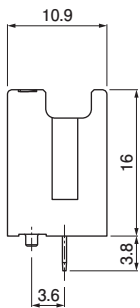
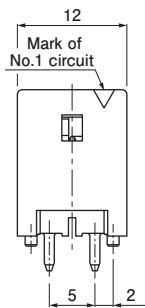
Note: 1. Contact JST for key patterns.

2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

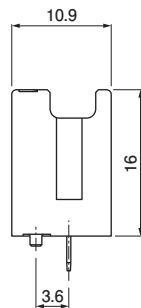
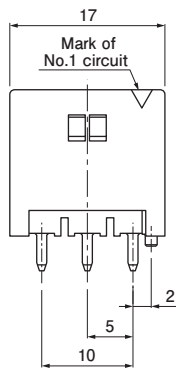
Header

Single-row

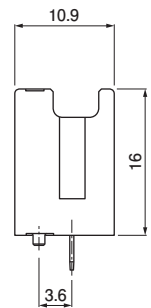
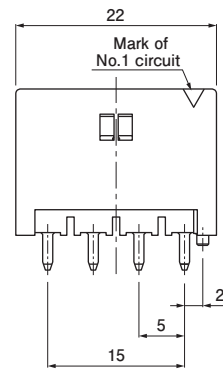
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<3 circuits>

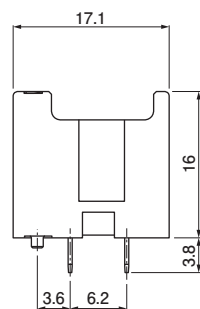
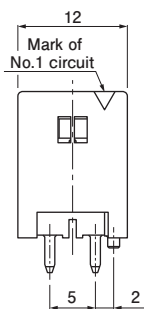


<4 circuits>

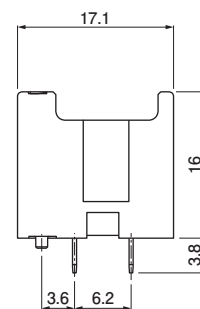
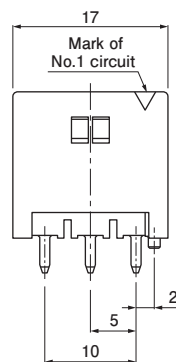


Dual-row

<4 circuits>



<6 circuits>



Type	No. of circuits	Model No.	Q'ty/box
Single-row	2	B02B-HYVSS-A-1	150
	3	B03B-HYVSS-A-1	100
	4	B04B-HYVSS-A-1	100
Dual-row	4	B04B-HYVSS-A-1W	100
	6	B06B-HYVSS-A-1W	50

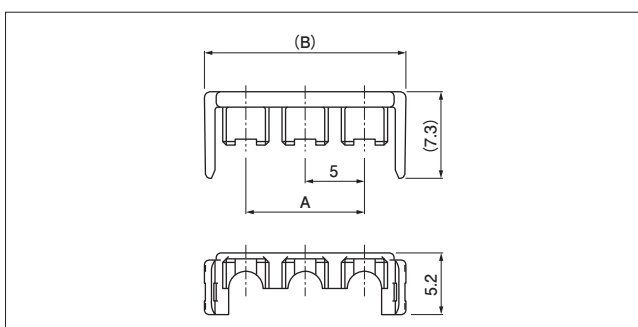
Material and Surface finish, etc.

Press post: Copper alloy, copper-undercoated, tin-plated
Wafer: PA 66 (Glass-filled)

Note: 1. Contact JST for key patterns.

2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Retainer



No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
2	HYVS-02V	—	12.0	2,000
3	HYVS-03V	10.0	17.0	2,000
4	HYVS-04V	15.0	22.0	1,000

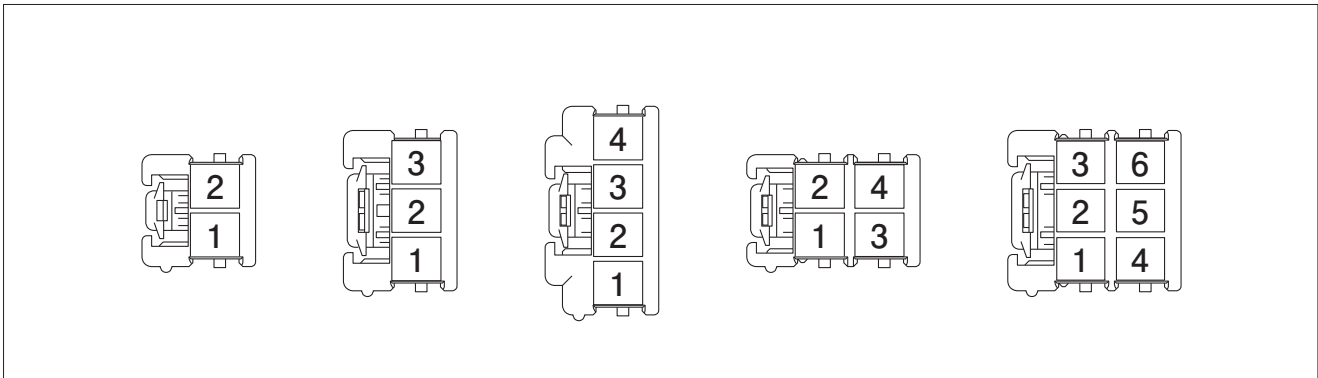
Material and Surface finish, etc.

PA 66 (Glass-filled), natural

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

HYV CONNECTOR

Housing position location numbers



Model number allocation

Socket contact

S HYV F - 21 T - M 0.5

Supply form: Strip form

Series name

Type: Socket

Applicable wire range:
 21...AWG #22 to AWG #18
 41...AWG #18 to AWG #16

Surface finish: Tin-plated

Material: Copper alloy

Applicable post size

Socket housing

HYV RP - 02 V - ■ - A - S

Series name

Type: Plug (Retainer mountable type)

No. of circuits

Auxiliary symbol

Arrangement: Blank...Single-row, W...Dual-row

Key pattern: Key pattern A

Color: Natural

Header

B 02 B - HYV S S - A - 1 ■

Header type: Top entry type

No. of circuits

Assembly product

Series name

Color: Natural

Clinched (Kinked)/ Not clinched: Straight

Key pattern: Key pattern A

Presence of boss: With boss

Arrangement: Blank...Single-row, W...Dual-row

Retainer

HYV S - 02 V

Series name

Type: Retainer

No. of circuits

Auxiliary symbol