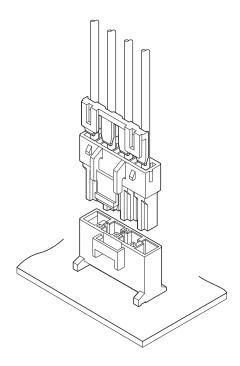


# VYH CONNECTOR

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



This is a 6.5 mm pitch wire-to-board connector designed for high-current applications.

Retainers are recommended to prevent incomplete insertion or accidental disconnection of contacts, providing a secure and reliable connection for high-current circuits.

- Capable of carrying a maximum current of 15 A.
- Equipped with a keying feature to prevent misinsertion.
- Housing lance system
- Retainer compatible

# Specifications

- Current rating: 15 A AC/DC (2 circuits/ AWG #14)
- \* 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.

							Unit: A
No. of	Wire size (AWG)						
circuits	#14	#16	#18	#20	#22	#24	#26
2	15	10	7	5	4	3	2
3	14	9	6	4	4	3	2
4	13	9	6	4	4	3	2
6	12	8	5	3	3	2	2

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

- Voltage rating: 300 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 M $\Omega$  min.
- Withstanding voltage:

There shall be no breakdown or flashover while applying 1,500 VAC for one minute.

• Applicable wire range:

Conductor size/ AWG #26 to AWG #14 Insulation O.D./  $\phi$  1.3 mm to  $\phi$  3.6 mm

- 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).

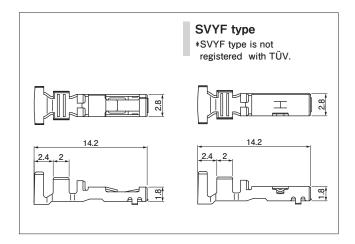
\* Specifications registered to overseas standards may differ from the general specifications listed above.

# PC board layout and Assembly layout

#### **Dual-row type** Single-row type (16.95)(10.8) (16.4) <u>A</u>±0.05 A ±0.05 (2.9)(3.2) 6.5±0.05 2<sup>±0.05</sup> (3.2) $\Phi 1.4^{+0.1}_{0}$ $\phi 1.4^{+0.1}$ <del>(</del>\$)--(\$) (<del>0</del>) (25.8) (25.8) Connector (24) outline $(\phi 3.3)$ circuit (Land diameter) $\phi$ 1.4 $^{+0}_{0}$ $(\phi 3.3)$ Connector outline (Land diameter) circuit $\phi 1.4^{+0.1}_{0}$

- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
  - 2. Dimensions A: See "Header" section on page 3.
  - 3. Tolerance for the PCB hole pitch shall be  $\pm$  0.05, and shall not accumulate more than  $\pm$  0.05.
  - Hole dimensions differ depending on the type of PCB and PCB drilling method.
    The above dimensions are for reference only.
    Please contact JST for further details.

## Socket contact



	Applicable wire range			
Model No.	Conductor size AWG (mm²)	Insulation O.D. (mm)	Q'ty/ reel	
SYF-01T-P0.5A	#26 to #20 (0.13 to 0.5)	1.3 to 2.5	4,000	
SYF-41T-P0.5A	#20 to #16 (0.5 to 1.25)	2.0 to 3.4	4,000	
SYF-61T-P0.5A	#18 to #14 (0.75 to 2.0)	2.1 to 3.4	2,000	
*SVYF-41T-P0.5A-13.5	#20 to #16 (0.5 to 1.25)	2.0 to 3.4	3,000	
*SVYF-61T-P0.5A	#18 to #14 (0.75 to 2.0)	2.1 to 3.6	2,000	

## Material and Surface finish, etc

Copper alloy, tin-plated

- Note: 1. The SVYF type is a dedicated crimp contact for VYH connectors, specifically developed to enhance resistance to stress due to prying and torsion.
  - 2. Retainers cannot be used with AWG #16 crimped wire using size 41 and 61 barrel contacts.

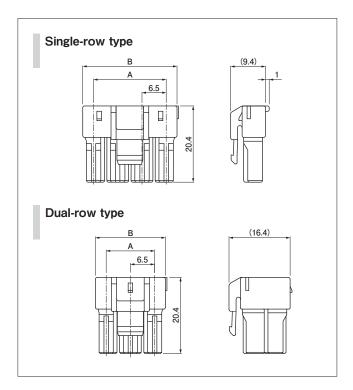
## Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies					
SYF-01T-P0.5A			APLMK SYF/M01-05					
SYF-41T-P0.5A	AP-K2N	MKS-L	APLMK SYF/M41-05					
SYF-61T-P0.5A			APLMK SYF/M61-05					
SVYF-41T-P0.5A-13.5			APLMK SVYF41-05-13.5					
SVYF-61T-P0.5A			APLMK SYF/M61-05					

Note: Contact JST for fully automatic crimping applicator.

# **VYH CONNECTOR**

## Plug housing



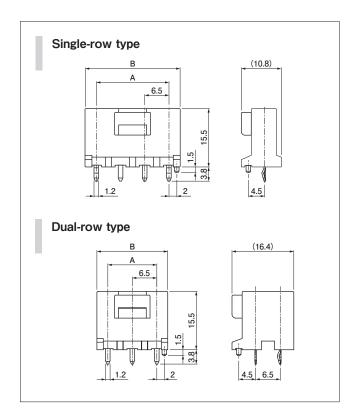
Type	No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
туре		woder no.	Α	В	Q ty/bag
0: 1	2	VYHP-02V	6.5	12.3	400
Single-row type	3	VYHP-03V	13.0	18.8	300
1,00	4	VYHP-04V	19.5	25.3	200
Dual-row type	4	VYHP-04VD	6.5	12.3	200
	6	VYHP-06VD	13.0	18.8	150

#### Material and Surface finish, etc

PA 66, natural (white)

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).

## Header



Tuna	No. of circuits	Madal Na	Dimensions (mm)		Q'ty/box
Туре		Model No.	Α	В	Q ty/box
0'1	2	B02B-VYHSK-1	6.5	12.3	600
Single-row type	3	B03B-VYHSK-1	13.0	18.8	360
	4	B04B-VYHSK-1	19.5	25.3	300
Dual-row type	4	B04B-VYHSK-D-1	6.5	12.3	300
	6	B06B-VYHSK-D-1	13.0	18.8	180

## Material and Surface finish, etc

Post: Copper alloy, copper-undercoated, tin-plated Base housing: PBT (Glass-filled), natural (white)

Note: 1. This product displays (LF) (SN) on a label.

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).

T	No. of circuits	Madel No	Dimensio	O'tu /b ov	
Type		Model No.	Α	В	Q'ty/box
0' 1	2	B02B-VYHSK-M-1	6.5	12.3	600
Single-row type	3	B03B-VYHSK-M-1	13.0	18.8	360
1,00	4	B04B-VYHSK-M-1	19.5	25.3	300
Dual-row type	4	B04B-VYHSK-DM-1	6.5	12.3	300
	6	B06B-VYHSK-DM-1	13.0	18.8	180

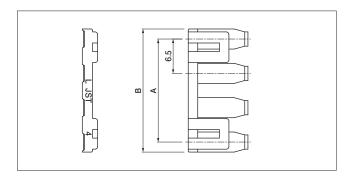
Material and Surface finish, etc

Post: Copper alloy, copper-undercoated, tin-plated Base housing: PA 66 (Glass-filled), natural (ivory)

Note: 1. This product displays (LF) (SN) on a label.

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	No. of	Model No.	Dimensio	Q'ty/bag	
circuits		woder No.	Α		В
	2	VYHS-02V-S	6.5	10.3	4,000
	3	VYHS-03V-S	13.0	16.8	3,000
	4	VYHS-04V-S	19.5	23.3	2,000

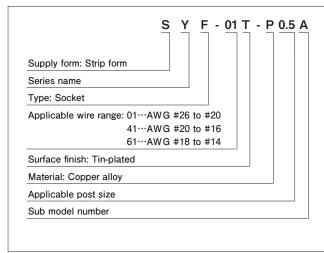
Material and Surface finish, etc

PA 66 (Glass-filled), natural (ivory)

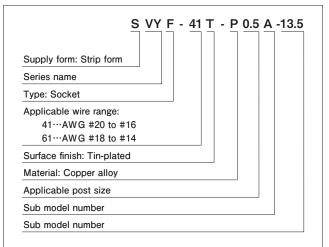
Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Model number allocation

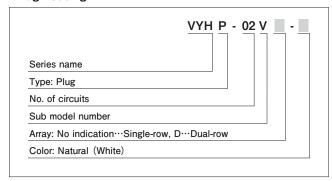
#### Socket contact



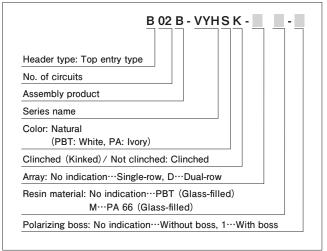
### Socket contact (SVYF type)



## Plug housing



# Header



## Retainer

