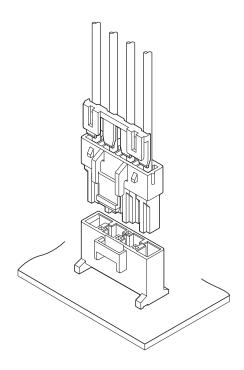


# VYH CONNECTOR

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



This VYH connector is designed for wire-toboard 6.5 mm pitch connector corresponding to large current. Retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safely.

- High current of up to 15 A can be applied.
- With key to prevent incorrect insertion
- Housing lance system
- · Retainer mountable type

## Standards

Recognized E 60389

(F: :Certified LR 70035705

△ :R9351103

# 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 circuits	Wire size (AWG)							
	#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	R	5	3	3	2	2	

Note) Notes on parallel branching current:

Do not branch to the multiple circuits in parallel current which is 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: -25°C to +85°C

(including temperature rise in applying electrical current)

· Contact resistance:

Initial value/  $10 \text{ m}\Omega$  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 #14
- · Applicable PC board thickness: 1.6 mm
- \* 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.

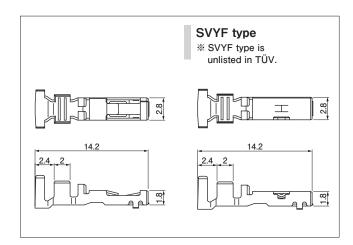
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# PC board layout and Assembly layout

#### Single-row type **Dual-row type** (16.95) (16.4)(10.8) (2.9)6.5<sup>±0.05</sup> $\Phi 1.4^{+0.1}_{0}$ (3.2) 2 ±0.05 $\phi 1.4^{+0.1}$ (<del>(</del>) (25.8) Connector (25.8) (54) (24) outline No. 1 $(\phi 3.3)$ (Land diameter) $(\phi 3.3)$ φ1.4<sup>+0.1</sup> Connector outline (Land diameter) $\phi 1.4^{+0.1}$

- Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.
  - 2. Dimension 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.
  - 4. 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



	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

#### RoHS2 compliance

Note: 1. SVYF type contact was developed only for VYH connector in order to improve the prevention of prying.

Retainers can not be used for 41-barrel crimped with AWG #16 and for 61-barrel contacts.

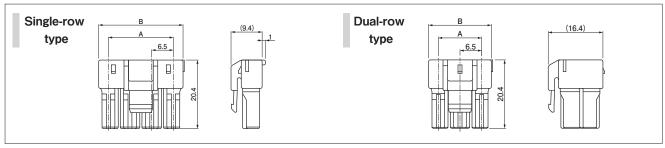
## Crimping machine

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



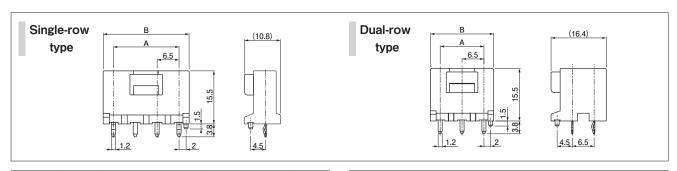
Type	No. of circuits	Model No.	Dimensio	Q'ty/bag	
			Α	В	G ty/Dag
Single-row type	2	VYHP-02V	6.5	12.3	400
	3	VYHP-03V	13.0	18.8	300
	4	VYHP-04V	19.5	25.3	200
Dual-row type	4	VYHP-04VD	6.5	12.3	200
	6	VYHP-06VD	13.0	18.8	150

Material and Surface finish, etc

PA 66, UL94V-0, natural (white)

RoHS2 compliance

## Header



Type	No. of circuits	Model No.	Dimension	Q'ty/box	
Type		woder No.	Α	В	Q ty/box
Single-row type	2	B02B-VYHSK-1	6.5	12.3	600
	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 Wafer: PBT (Glass-filled), UL94V-0, natural (white)

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

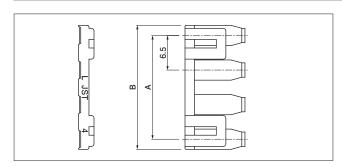
Type	No. of circuits	Model No.	Dimensio	Q'ty/box	
Type		woder No.	Α	В	Q ty/box
Single-row type	2	B02B-VYHSK-M-1	6.5	12.3	600
	3	B03B-VYHSK-M-1	13.0	18.8	360
	4	B04B-VYHSK-M-1	19.5	25.3	300
Dual-row type	4	B04B-VYHSK-DM-1	6.5	12.3	300
	6	B06B-VYHSK-DM-1	13.0	18.8	180

Material and Surface finish, etc

Post: Copper alloy, copper-undercoated, tin-plated Wafer: PA 66 (Glass-filled), UL94V-0, natural (ivory)

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

## Retainer



No. of	Model No.	Dimensio	O'tu/baa	
circuits		Α	В	Q'ty/bag
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

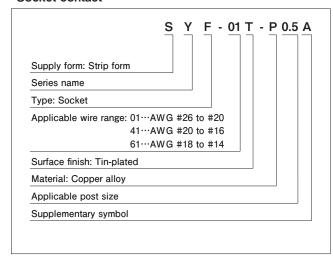
PA 66 (Glass-filled), UL94V-0, natural (ivory)

RoHS2 compliance

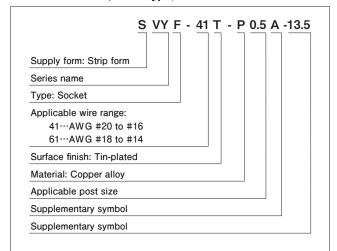
Note: Retainer is unlisted in TÜV.

## Model number allocation

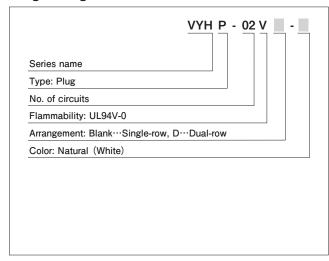
#### Socket contact



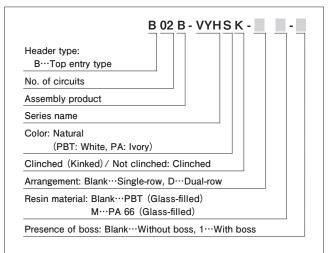
## Socket contact (SVYF type)



## Plug housing



## Header



## Retainer

