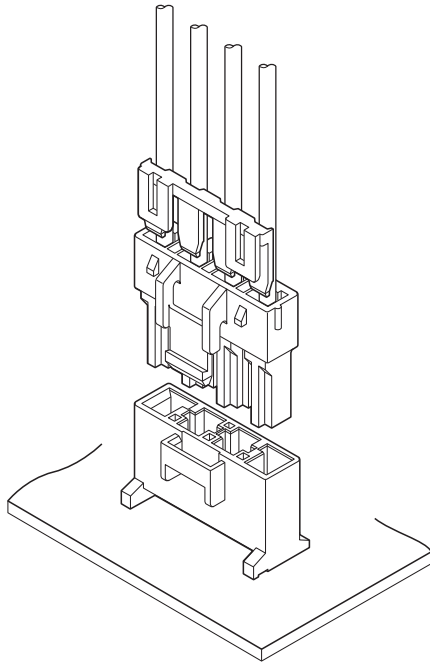


VYH CONNECTOR

6.5 mm pitch/Wire-to-board connector/Disconnectable Crimp style connectors



This VYH connector is designed for wire-to-board 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
- :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 | 8 | 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.

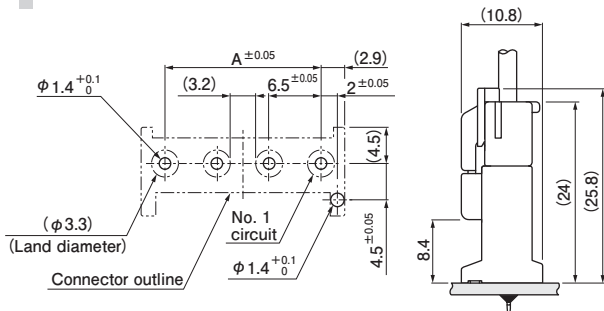
If it is unavoidable that branch in parallel is necessary, design the circuits while suppressing the unbalanced current and proving the sufficient margin to the rated current.

- 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 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/ 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.

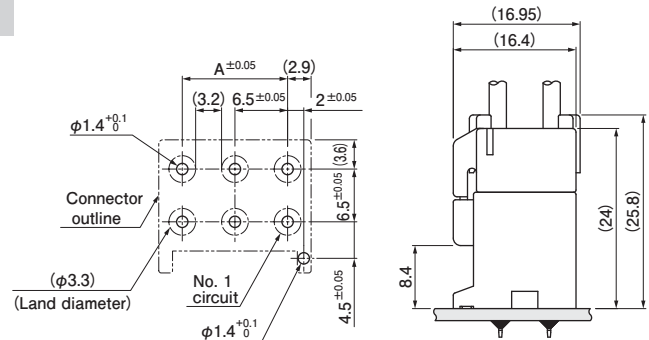
VYH CONNECTOR

PC board layout and Assembly layout

Single-row type



Dual-row type

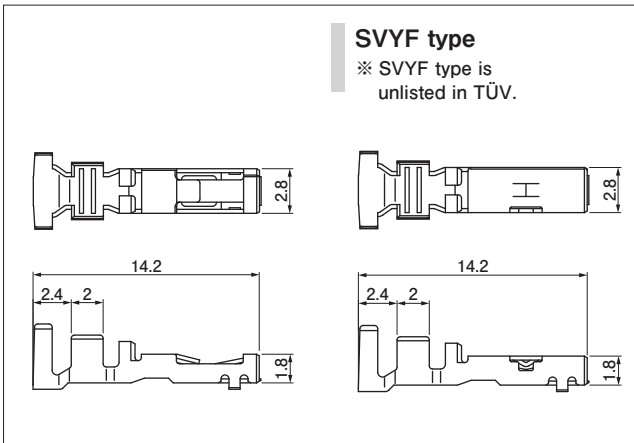


- Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.
 2. Dimension A: See "Header" section on page 3.
 3. Tolerance of pitch for the hole size on PCB is ± 0.05 and shall not be cumulative over than ± 0.05 .
 4. Hole dimensions differ according to the type of PC board and piercing method.
 Please contact JST for details as the dimensions shown in the above figure are reference values.

Socket contact

SVYF type

※ SVYF type is unlisted in TÜV.



| Model No. | Applicable wire range | | Q'ty/ reel |
|----------------------|--|-------------------------|---------------|
| | Conductor size AWG (mm ²) | Insulation O.D. (mm) | |
| 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 Finish

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

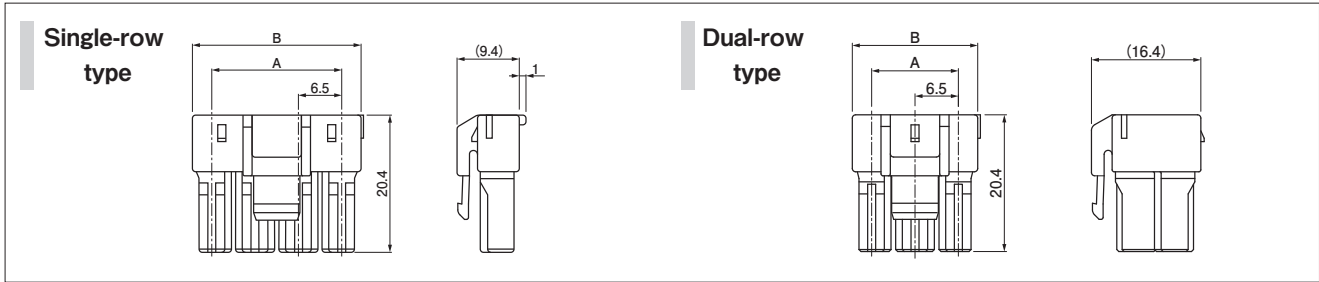
Crimping machine

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



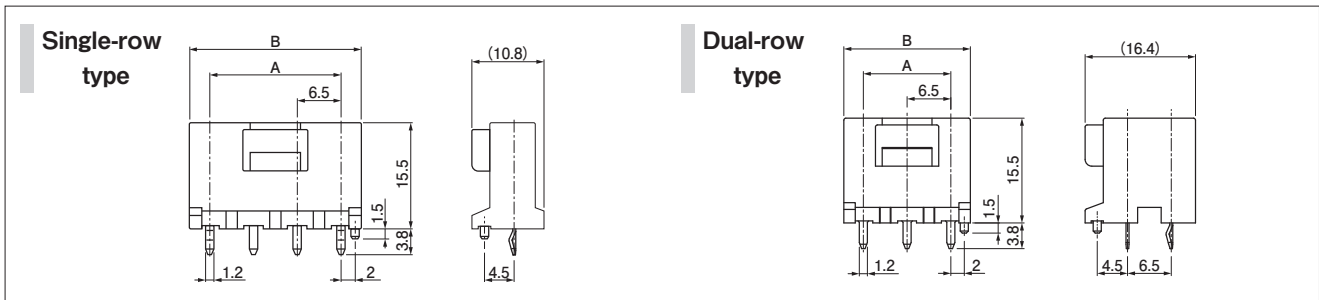
| Type | No. of circuits | Model No. | Dimensions (mm) | | Q'ty/bag |
|-----------------|-----------------|-----------|-----------------|------|----------|
| | | | A | B | |
| Single-row type | 2 | VYHP-02V | 6.5 | 12.3 | 400 |
| | 3 | VYHP-03V | 13.0 | 18.8 | 300 |
| | 4 | VYHP-04V | 19.5 | 25.3 | 200 |
| Dual-row type | 4 | VYHP-04VD | 6.5 | 12.3 | 200 |
| | 6 | VYHP-06VD | 13.0 | 18.8 | 150 |

Material and Finish

PA 66, UL94V-0, natural (white)

RoHS2 compliance

Header



| Type | No. of circuits | Model No. | Dimensions (mm) | | Q'ty/box |
|-----------------|-----------------|----------------|-----------------|------|----------|
| | | | A | B | |
| 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 Finish

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.

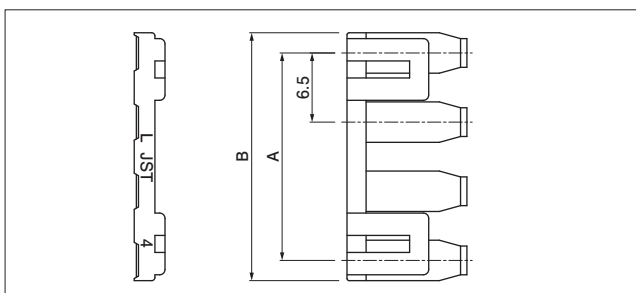
| Type | No. of circuits | Model No. | Dimensions (mm) | | Q'ty/box |
|-----------------|-----------------|-----------------|-----------------|------|----------|
| | | | A | B | |
| Single-row type | 2 | B02B-VYHSK-M-1 | 6.5 | 12.3 | 600 |
| | 3 | B03B-VYHSK-M-1 | 13.0 | 18.8 | 360 |
| | 4 | B04B-VYHSK-M-1 | 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 Finish

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 circuits | Model No. | Dimensions (mm) | | Q'ty/bag |
|-----------------|------------|-----------------|------|----------|
| | | A | B | |
| 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 Finish

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

RoHS2 compliance
Note: Retainer is unlisted in TÜV.

VYH CONNECTOR

Model number allocation

Socket contact

S Y F - 01 T - P 0.5 A

Supply form: Strip form

Series name

Type: Socket

Applicable wire range: 01...AWG #26 to #20
41...AWG #20 to #16
61...AWG #18 to #14

Surface finish: Tin-plated

Material: Copper alloy

Applicable post size

Supplementary symbol

Socket contact (SVYF type)

S VY F - 41 T - P 0.5 A -13.5

Supply form: Strip form

Series name

Type: Socket

Applicable wire range:
41...AWG #20 to #16
61...AWG #18 to #14

Surface finish: Tin-plated

Material: Copper alloy

Applicable post size

Supplementary symbol

Supplementary symbol

Plug housing

VYH P - 02 V -

Series name

Type: Plug

No. of circuits

Flammability: UL94V-0

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

Color: Natural (White)

Header

B 02 B - VYHS K - -

Header type:
B...Top entry type

No. of circuits

Assembly product

Series name

Color: Natural
(PBT: White, PA: Ivory)

Clinch: Clinched

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

Resin material: Blank...PBT (Glass-filled)
M...PA 66 (Glass-filled)

Boss: Blank...Without boss, 1...With boss

Retainer

VYH S - 02 V - S

Series name

Type: Retainer

No. of circuits

Flammability: UL94V-0

Color: Natural (Ivory)