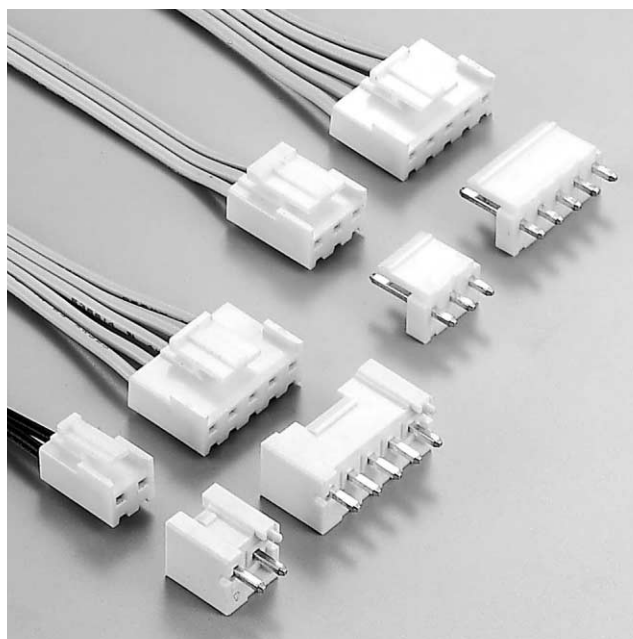
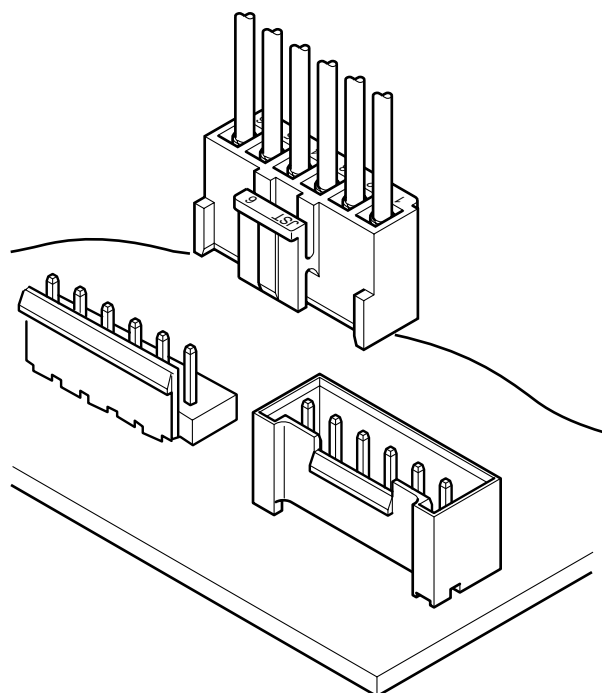


# VH CONNECTOR

Disconnectable Crimp style connectors



**This small, field-proven connector for printed circuit boards is reliable and has a large current carrying capacity. It can be used with a wide variety of signal, power supply, and output circuits that appear in consumer electronic products.**



## Features

### • Proven box contact

This connector was developed with the same box-shaped contact design used successfully in the NH connectors. The reliable VH connector can be used in a wide variety of applications, from low-voltage, low-current signal circuits to power supply circuits having a relatively large capacity.

### • Compact connector with a large capacity

Even though this connector has a large current carrying capacity (10A), it is compact, with a mounting height of 16.5mm (.650").

### • Secure contact and mounting

The housing has a lock mechanism which prevents the connector from coming loose due to vibration. The mechanism also prevents misinsertion (misalignment or reverse insertion).

## Specifications

- Current rating: 10A AC, DC (AWG#16)
- Voltage rating: 250V AC, DC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/10m Ω max.  
After environmental testing/20m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6mm(.063")

*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 such a large current in parallel, be sure to use contacts made of phosphor bronze. Design the circuits without causing imbalance and provide an extra margin for each circuit.*

\* Contact JST if Lead-Free product is required.

\* Temperature Range:

The aforementioned temperature range of this connector is described in JST Standard Product Specification. Maximum temperature registered in UL is 105°C.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

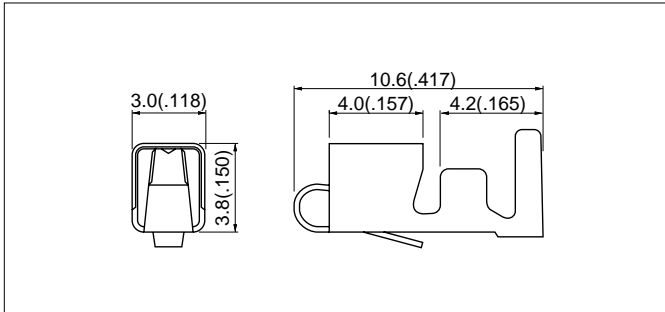
## Standards

Ⓜ Recognized E60389

Ⓢ Certified LR20812

⚠ R75122

## Contact



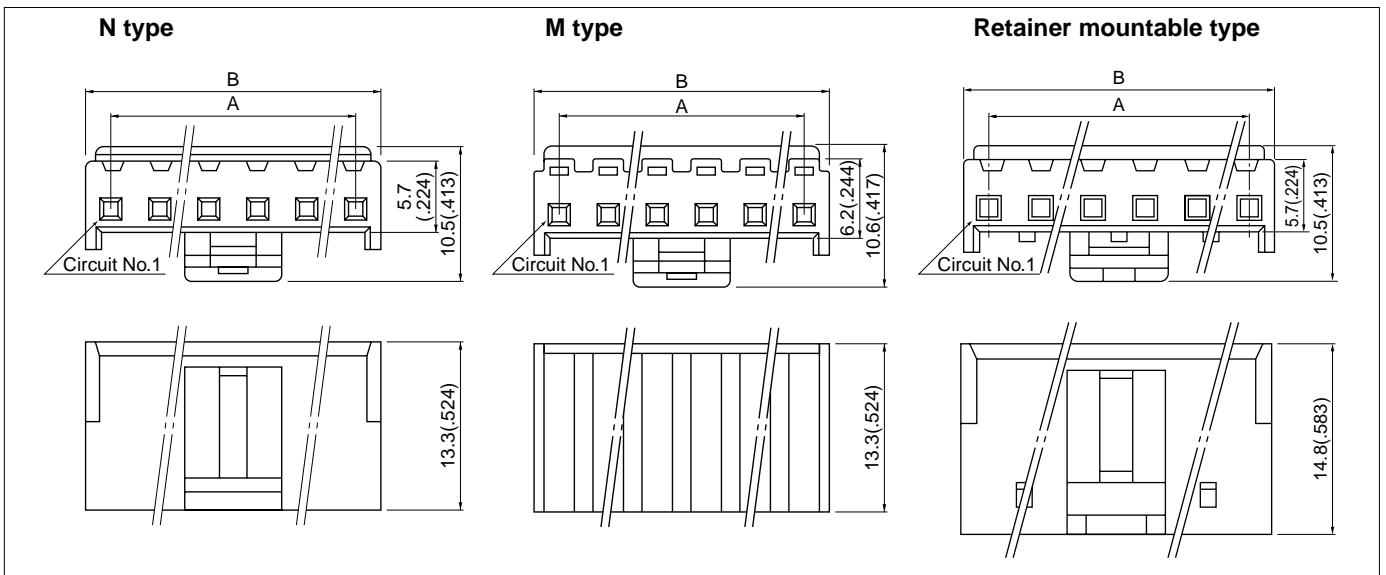
| Model No.           | Applicable wire |          |                           | Q'ty / reel |
|---------------------|-----------------|----------|---------------------------|-------------|
|                     | mm <sup>2</sup> | AWG #    | Insulation O.D. mm(in.)   |             |
| <b>SVH-21T-P1.1</b> | 0.33 to 0.83    | 22 to 18 | 1.7 to 3.0 (.067 to .118) | 4,500       |
| <b>SVH-41T-P1.1</b> | 0.5 to 1.25     | 20 to 16 | 1.7 to 3.0 (.067 to .118) | 3,500       |

### Material and Finish

Phosphor bronze, tin-plated

- Note: 1. Contact JST if you require contacts made of brass.  
 2. When using retainer mountable type housing, applicable wire's insulation O. D. shall be 1.7 to 2.2mm (.067" to .087").

## Housing



| Circuits | Model No.      |               |                         | Dimensions mm(in.) |              | Q'ty / bag |
|----------|----------------|---------------|-------------------------|--------------------|--------------|------------|
|          | N type         | M type        | Retainer mountable type | A                  | B            |            |
| 2        | <b>VHR-2N</b>  | <b>VHR-2M</b> | <b>VHRR-2N</b>          | 3.96( .156)        | 7.86( .309)  | 1,000      |
| 3        | <b>VHR-3N</b>  | <b>VHR-3M</b> | <b>VHRR-3N</b>          | 7.92( .312)        | 11.82( .465) | 1,000      |
| 4        | <b>VHR-4N</b>  | <b>VHR-4M</b> | —                       | 11.88( .468)       | 15.78( .621) | 1,000      |
| 5        | <b>VHR-5N</b>  | <b>VHR-5M</b> | <b>VHRR-5N</b>          | 15.84( .624)       | 19.74( .777) | 1,000      |
| 6        | <b>VHR-6N</b>  | <b>VHR-6M</b> | —                       | 19.80( .780)       | 23.70( .933) | 500        |
| 7        | <b>VHR-7N</b>  | <b>VHR-7M</b> | <b>VHRR-7N</b>          | 23.76( .935)       | 27.66(1.089) | 500        |
| 8        | <b>VHR-8N</b>  | —             | <b>VHRR-8N</b>          | 27.72(1.091)       | 31.62(1.245) | 500        |
| 9        | <b>VHR-9N</b>  | <b>VHR-9M</b> | <b>VHRR-9N</b>          | 31.68(1.247)       | 35.58(1.401) | 500        |
| 10       | <b>VHR-10N</b> | —             | —                       | 35.64(1.403)       | 39.54(1.557) | 500        |
| 11       | <b>VHR-11N</b> | —             | —                       | 39.60(1.559)       | 43.50(1.713) | 500        |

### Material

Nylon 6, UL94V-0, natural (white)

- Note: 1. Models identified as VHR-( ) M incorporate measures to prevent electric shock and are thus safer in regard to high voltages.  
 2. The applicable housing for 2-circuits shrouded header is "VHR-2N" only. "VHRR-2N" is not applicable.  
 3. Models VHR-11N and VHRR-( )N are not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **VHR-2N-oo**

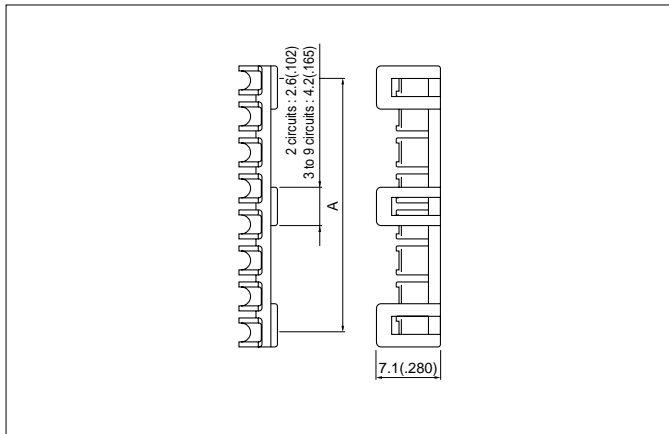
(blank)...natural (white)

BK...black R...red BL...blue M...green D...orange Y...yellow

PK...pink H...gray

# VH CONNECTOR

## Retainer



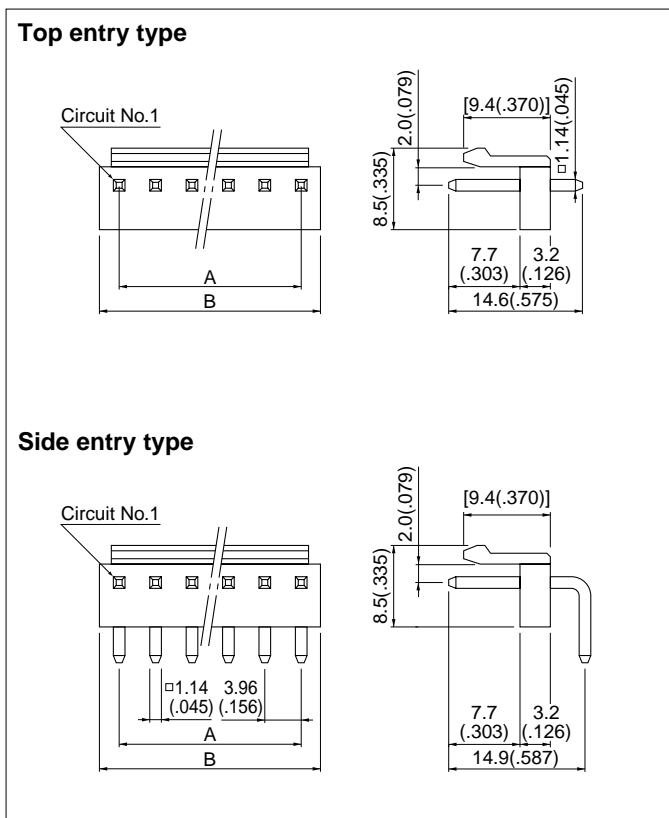
| Circuits | Model No.     | A            | Q'ty / bag |
|----------|---------------|--------------|------------|
| 2        | <b>VHS-2V</b> | 3.70( .146)  | 1,000      |
| 3        | <b>VHS-3V</b> | 7.52( .296)  | 1,000      |
| 5        | <b>VHS-5V</b> | 15.44( .608) | 1,000      |
| 7        | <b>VHS-7V</b> | 23.36( .920) | 1,000      |
| 8        | <b>VHS-8V</b> | 27.32(1.076) | 1,000      |
| 9        | <b>VHS-9V</b> | 31.28(1.231) | 1,000      |

### Material

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

Note: Not TÜV approved.

## Locking header



| Circuits | Model No.      |                 | Dimensions mm(in.) |              | Q'ty / box     |                 |
|----------|----------------|-----------------|--------------------|--------------|----------------|-----------------|
|          | Top entry type | Side entry type | A                  | B            | Top entry type | Side entry type |
| 2        | <b>B 2P-VH</b> | <b>B 2PS-VH</b> | 3.96( .156)        | 7.86( .309)  | 1,000          | 1,000           |
| 3        | <b>B 3P-VH</b> | <b>B 3PS-VH</b> | 7.92( .312)        | 11.82( .465) | 1,000          | 500             |
| 4        | <b>B 4P-VH</b> | <b>B 4PS-VH</b> | 11.88( .468)       | 15.78( .621) | 500            | 500             |
| 5        | <b>B 5P-VH</b> | <b>B 5PS-VH</b> | 15.84( .624)       | 19.74( .777) | 500            | 250             |
| 6        | <b>B 6P-VH</b> | <b>B 6PS-VH</b> | 19.80( .780)       | 23.70( .933) | 250            | 250             |
| 7        | <b>B 7P-VH</b> | <b>B 7PS-VH</b> | 23.76( .935)       | 27.66(1.089) | 250            | 250             |
| 8        | <b>B 8P-VH</b> | <b>B 8PS-VH</b> | 27.72(1.091)       | 31.62(1.245) | 200            | 200             |
| 9        | <b>B 9P-VH</b> | <b>B 9PS-VH</b> | 31.68(1.247)       | 35.58(1.401) | 200            | 200             |
| 10       | <b>B10P-VH</b> | <b>B10PS-VH</b> | 35.64(1.403)       | 39.54(1.557) | 200            | 200             |

### Material and Finish

Post: Brass, copper-undercoated, tin/lead-plated  
Wafer: Nylon 66, UL94V-0, natural (white)

Note: Headers with a reduced number of posts are also available.  
Contact JST for details.

<For reference> As the color identification,  
the following alphabet shall be put in the underlined part.  
For availability, delivery and minimum order quantity, contact JST.

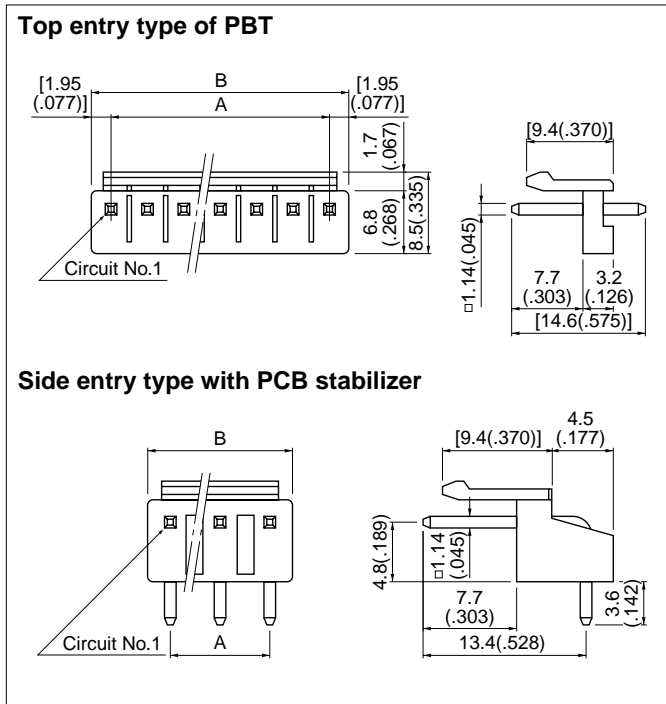
ex. **B2P(S)-VH-oo**

(blank)...natural (white)

BK...black R...red TR...tomato red BL...blue M...green

O...orange Y...yellow PK...pink H...gray

## Locking header



| Circuits | Model No.             |                                     | Dimensions mm(in.) |              | Q'ty / box     |                 |
|----------|-----------------------|-------------------------------------|--------------------|--------------|----------------|-----------------|
|          | Top entry type of PBT | Side entry type with PCB stabilizer | A                  | B            | Top entry type | Side entry type |
| 2        | <b>B 2P-VH-B</b>      | <b>S2P-VH</b>                       | 3.96( .156)        | 7.86( .309)  | 1,000          | 1,000           |
| 3        | <b>B 3P-VH-B</b>      | <b>S3P-VH</b>                       | 7.92( .312)        | 11.82( .465) | 500            | 500             |
| 4        | <b>B 4P-VH-B</b>      | <b>S4P-VH</b>                       | 11.88( .468)       | 15.78( .621) | 500            | 500             |
| 5        | <b>B 5P-VH-B</b>      | <b>S5P-VH</b>                       | 15.84( .624)       | 19.74( .777) | 250            | 250             |
| 6        | <b>B 6P-VH-B</b>      | —                                   | 19.80( .780)       | 23.70( .933) | 250            | —               |
| 7        | <b>B 7P-VH-B</b>      | <b>S7P-VH</b>                       | 23.76( .935)       | 27.66(1.089) | 250            | 250             |
| 8        | <b>B 8P-VH-B</b>      | —                                   | 27.72(1.091)       | 31.62(1.245) | 200            | —               |
| 9        | <b>B 9P-VH-B</b>      | —                                   | 31.68(1.247)       | 35.58(1.401) | 200            | —               |
| 10       | <b>B10P-VH-B</b>      | —                                   | 35.64(1.403)       | 39.54(1.557) | 200            | —               |
| 11       | <b>B11P-VH-B</b>      | —                                   | 39.60(1.559)       | 43.50(1.713) | —              | —               |

### Material and Finish

Post: Brass, copper-undercoated, tin/lead-plated  
 Wafer: Top entry type of PBT: Glass-filled PBT, UL94V-0, natural (ivory)  
 Side entry type with PCB stabilizer: Nylon 66, UL94V-0, natural (white)

Note : B11P-VH-B is not TÜV approved.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

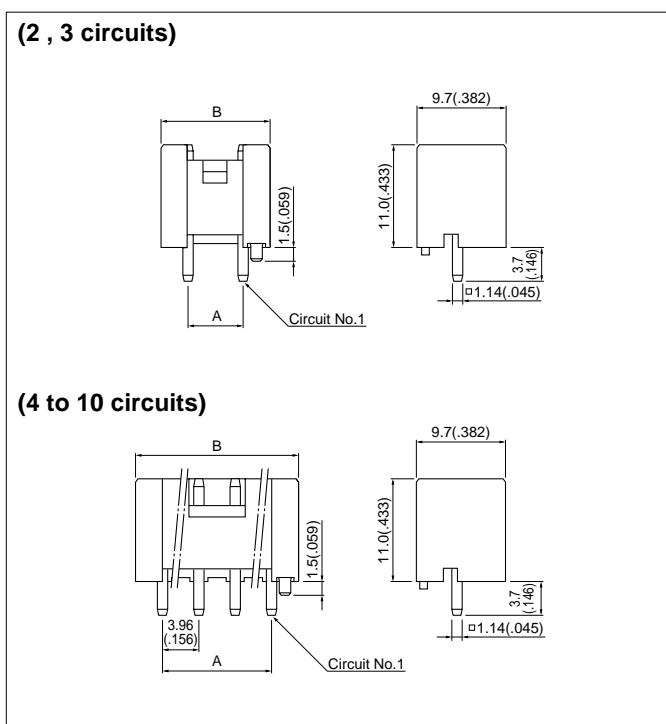
<Top entry type of PBT>

ex. **B2P-VH-B-oo**  
 (blank)...natural (ivory)  
 C...black R...red E...blue M...green Y...yellow

<Side entry type with PCB stabilizer>

ex. **S2P-VH-oo**  
 (blank)...natural (white)  
 BK...black R...red BL...blue Y...yellow M...green

## Shrouded header



| Circuits | Model No.           | Dimensions mm(in.) |              | Q'ty / box |
|----------|---------------------|--------------------|--------------|------------|
|          |                     | A                  | B            |            |
| 2        | <b>B 2P-VH-FB-B</b> | 3.96( .156)        | 9.80( .386)  | 250        |
| 3        | <b>B 3P-VH-FB-B</b> | 7.92( .312)        | 13.76( .542) | 200        |
| 4        | <b>B 4P-VH-FB-B</b> | 11.88( .468)       | 17.72( .698) | 150        |
| 5        | <b>B 5P-VH-FB-B</b> | 15.84( .624)       | 21.68( .854) | 200        |
| 6        | <b>B 6P-VH-FB-B</b> | 19.80( .780)       | 25.64(1.009) | 200        |
| 7        | <b>B 7P-VH-FB-B</b> | 23.76( .935)       | 29.60(1.165) | 100        |
| 8        | <b>B 8P-VH-FB-B</b> | 27.72(1.091)       | 33.56(1.321) | 100        |
| 9        | <b>B 9P-VH-FB-B</b> | 31.68(1.247)       | 37.52(1.477) | 100        |
| 10       | <b>B10P-VH-FB-B</b> | 35.64(1.403)       | 41.48(1.633) | 125        |

### Material and Finish

Post: Brass, copper-undercoated, tin/lead-plated  
 Wafer: Glass-filled PBT, UL94V-0, natural (white)

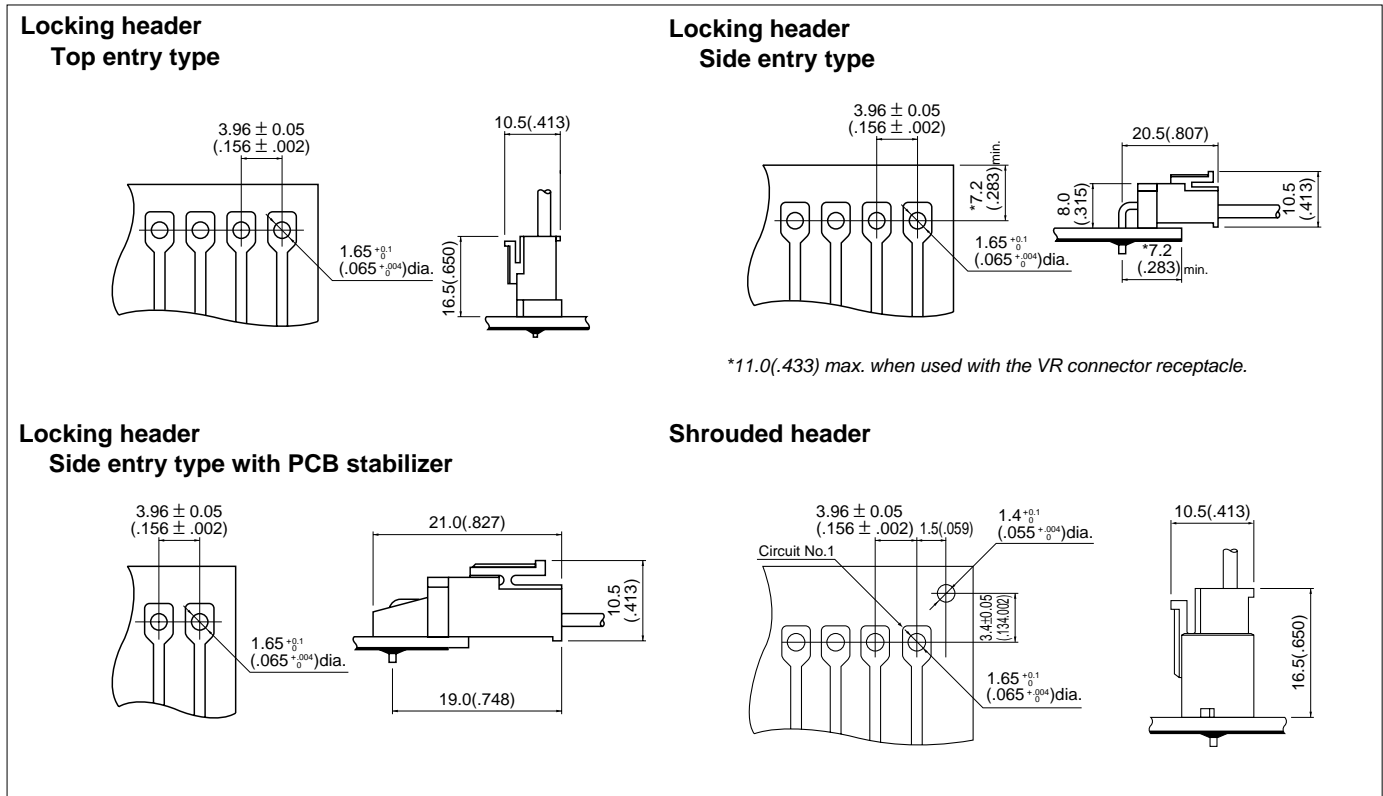
Note : The applicable housing for 2-circuits shrouded header is "VHR-2N" only. "VHRR-2N" is not applicable.

<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B2P-VH-FB-B-oo**  
 (blank)...natural (white)  
 R...red C...black E...blue M...green Y...yellow O...orange  
 H...gray PK...pink

# VH CONNECTOR

## PC board layout (viewed from soldering side) and Assembly layout



Note:  
 1. Tolerances are non-cumulative: ±0.05mm(±.002) for all centers.  
 2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Applicator for the semi-automatic press AP-K2N

| Contact      | Crimp applicator MKS-L |                      | Compact crimp applicator MKS-LS |                      | Strip-crimp applicator MKS-SC |
|--------------|------------------------|----------------------|---------------------------------|----------------------|-------------------------------|
|              | with safety cover      | without safety cover | with safety cover               | without safety cover | with safety cover             |
| SVH-21T-P1.1 | APLMK SVH21-11         | APLNC SVH21-11       | -                               | -                    | APLSC SVH21-11                |
| SVT-41T-P1.1 | APLMK SVT41-11         | APLNC SVT41-11       | -                               | -                    | -                             |

单击下面可查看定价，库存，交付和生命周期等信息

[>>JST\(日本压着端子製造株式会社\)](#)