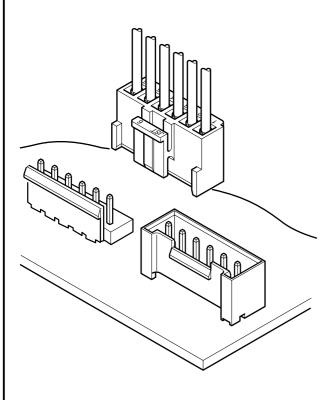


Disconnectable Crimp style connectors



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  $\Omega$  max.

After environmental testing/20m  $\Omega$  max.

• Insulation resistance: 1,000M  $\Omega$  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.

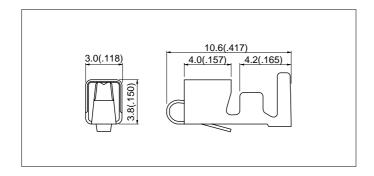
#### Standards -

Recognized E60389

Certified LR20812

A R75122

#### Contact -



		O!: /		
Model No.	mm²	AWG #	Insulation O.D. mm(in.)	Q'ty / reel
SVH-21T-P1.1	0.33 to 0.83	22 to 18	1.7 to 3.0 (.067 to .118)	4,500
SVH-41T-P1.1	0.5 to 1.25	20 to 16	1.7 to 3.0 (.067 to .118)	3,500

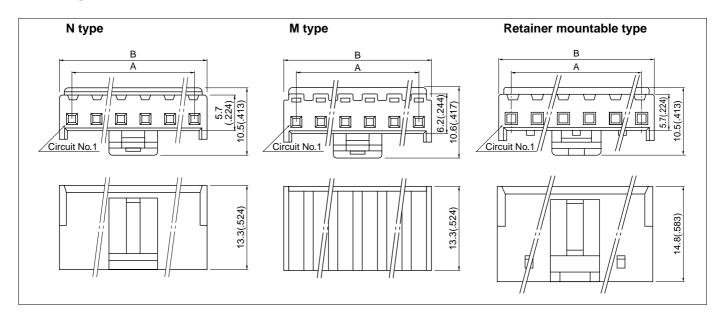
Material and Finish

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 -



Cir-	Model No.			Dimension			
cuits	N type	M type	Retainer mountable type	Α	В	Q'ty / bag	
2	VHR-2N	VHR-2M	VHRR-2N	3.96( .156)	7.86( .309)	1,000	
3	VHR-3N	VHR-3M	VHRR-3N	7.92( .312)	11.82( .465)	1,000	
4	VHR-4N	VHR-4M	-	11.88( .468)	15.78( .621)	1,000	
5	VHR-5N	VHR-5M	VHRR-5N	15.84( .624)	19.74( .777)	1,000	
6	VHR-6N	VHR-6M	-	19.80( .780)	23.70( .933)	500	
7	VHR-7N	VHR-7M	VHRR-7N	23.76( .935)	27.66(1.089)	500	
8	VHR- 8N	_	VHRR-8N	27.72(1.091)	31.62(1.245)	500	
9	VHR- 9N	VHR-9M	VHRR-9N	31.68(1.247)	35.58(1.401)	500	
10	VHR-10N	-	-	35.64(1.403)	39.54(1.557)	500	
11	VHR-11N	_	_	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.
  - 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.

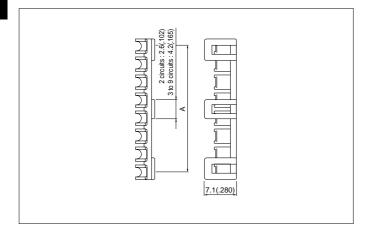
For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

#### ex. VHR-2N-oo

(blank)...natural (white)

BK...black R...red BL...blue M...green D...orange Y...yellow PK...pink H...gray

#### Retainer -



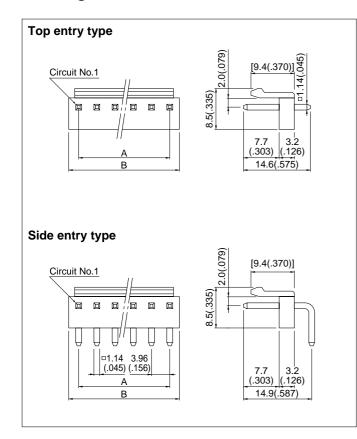
Circuits	Model No.	A	Q'ty / bag	
2	VHS-2V	3.70( .146)	1,000	
3	VHS-3V	7.52( .296)	1,000	
5	VHS-5V	15.44( .608)	1,000	
7	VHS-7V	23.36( .920)	1,000	
8	VHS-8V	27.32(1.076)	1,000	
9	VHS-9V	31.28(1.231)	1,000	

Material

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

Note: Not TÜV approved.

# Locking header -



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

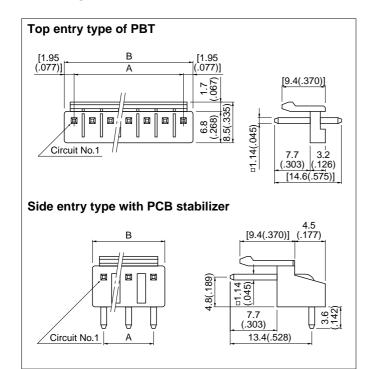
the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

#### 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 -



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

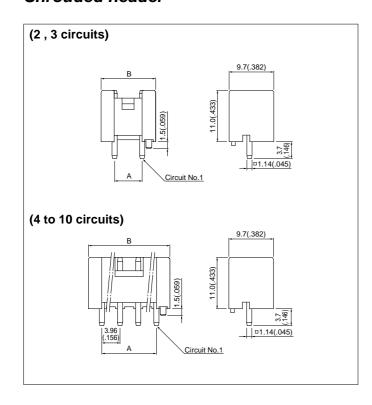
<Side entry type with PCB stabilizer>

### ex. S2P-VH-<u>oo</u>

(blank)...natural (white)

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

### Shrouded header



Circuits	Model No.	Dimension	Q'ty / box	
Circuits	Wodel No.	Α	В	Q ty / box
2	B 2P-VH-FB-B	3.96( .156)	9.80( .386)	250
3	B 3P-VH-FB-B	7.92( .312)	13.76( .542)	200
4	B 4P-VH-FB-B	11.88( .468)	17.72( .698)	150
5	B 5P-VH-FB-B	15.84( .624)	21.68( .854)	200
6	B 6P-VH-FB-B	19.80( .780)	25.64(1.009)	200
7	B 7P-VH-FB-B	23.76( .935)	29.60(1.165)	100
8	B 8P-VH-FB-B	27.72(1.091)	33.56(1.321)	100
9	B 9P-VH-FB-B	31.68(1.247)	37.52(1.477)	100
10	B10P-VH-FB-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,

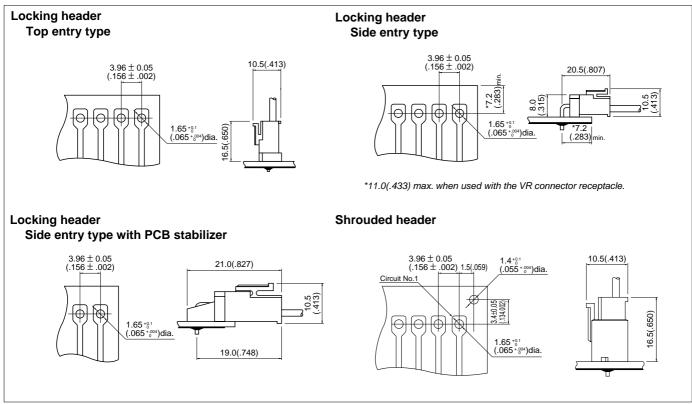
the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

#### 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

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



#### Note

- 1. Tolerances are non-cumulative:  $\pm 0.05$ mm( $\pm .002$ ) 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	
Contact	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	_	_	-	