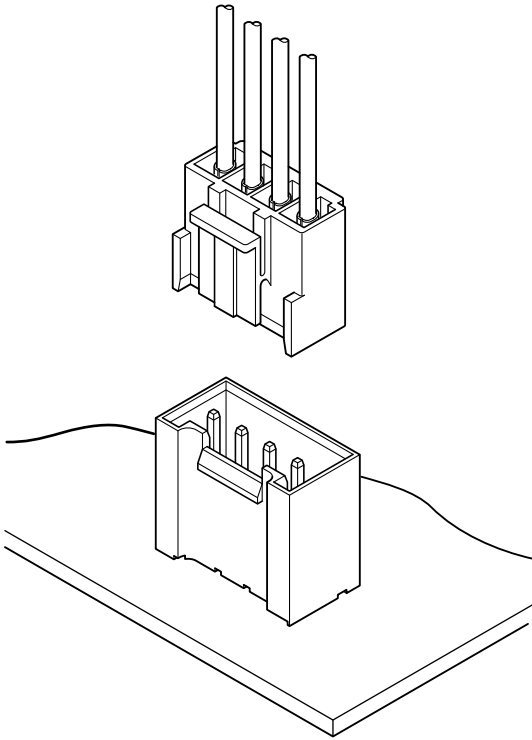


# VH CONNECTOR <High box type>

3.96 mm pitch/Disconnectable Crimp style connectors



This is VH connector high box type, with 21.3 mm mounting height (single circuit: 18.6 mm) and with 9.2 mm thickness (single circuit: 8 mm). This connector exhibits the stable electric connection to the condition such as the vibration, the prying, the micro-current and micro-voltage circuit.

- Header for use specifically with resin coated ("potted") PC board
- Interchangeability

## Specifications

- Current rating: 7 A AC/DC (AWG #18)  
10 A AC/DC (AWG #16) / 1 circuit only
- Voltage rating: 250 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: 1,500 VAC/minute
- Applicable wire: AWG #22 to #16
- Applicable PC board thickness: 1.6 mm

### 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.

\* 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

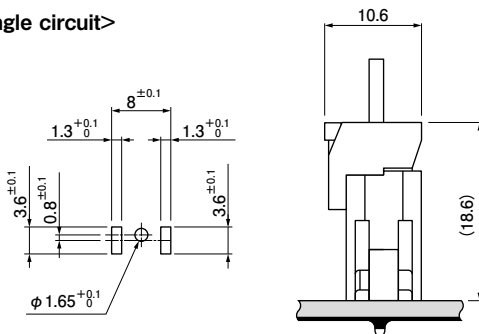
\* Contact JST for details.

## Standards

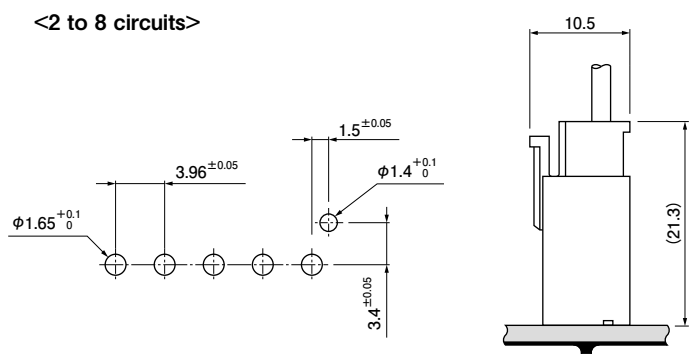
- Ⓜ Recognized E60389
- Ⓢ Certified LR20812
- Ⓡ R75122

## PC board layout and Assembly layout

<Single circuit>



<2 to 8 circuits>



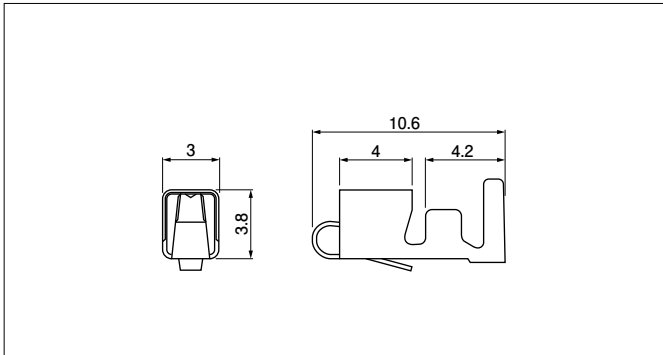
Note: 1. The above figure is the figure viewed from soldering side.

2. Tolerances are non-cumulative: ± 0.05 mm for all centers.

3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guide line. Contact JST for details.

# VH CONNECTOR (High box type)

## Contact



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

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

Note: 1. \*The current rating when combining with single circuit is 10 A AC/DC (AWG #16.)

2. When using retainer mountable type housing, applicable wire's insulation O. D. shall be 1.7 to 2.2 mm.

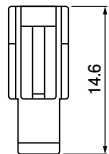
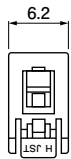
Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SVH-21T-P1.1	AP-K2N	MKS-L	MK/SVH-21-11	APLMK SVH21-11
SVH-41T-P1.1			MK/SVH-41-11	APLMK SVH41-11

Note: Contact JST for fully automatic crimping applicator.

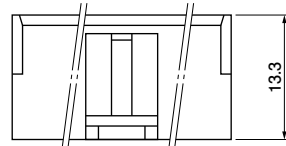
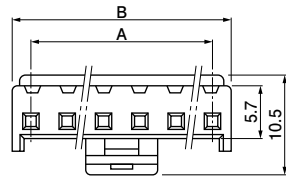
## Housing

### N Type

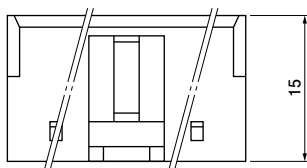
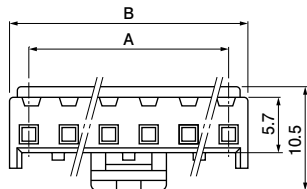
<Single circuit>



<2 to 8 circuits>



### Retainer mountable type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/bag
	N type	Retainer mountable type	A	B	
1	VHR-1N	—	—	—	1,000
2	VHR-2N	—	3.96	7.86	1,000
3	VHR-3N	VHRR-3N	7.92	11.82	*
4	VHR-4N	—	11.88	15.78	1,000
5	VHR-5N	VHRR-5N	15.84	19.74	*
6	VHR-6N	—	19.80	23.70	500
7	VHR-7N	VHRR-7N	23.76	27.66	500
8	VHR-8N	VHRR-8N	27.72	31.62	500

### Material and Finish

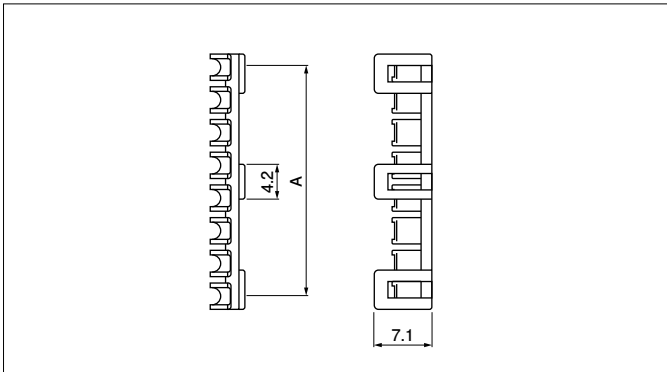
PA 6, UL94V-0, natural (white)

### RoHS2 compliance

\* N type ; 1,000 Retainer mountable type ; 500

# VH CONNECTOR (High box type)

## Retainer



No. of circuits	Model No.	A	Q'ty/bag
3	VHS-3V	7.52	1,000
5	VHS-5V	15.44	1,000
7	VHS-7V	23.36	1,000
8	VHS-8V	27.32	1,000

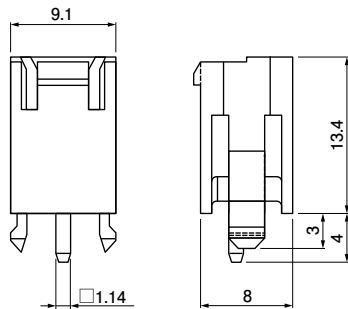
### Material and Finish

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

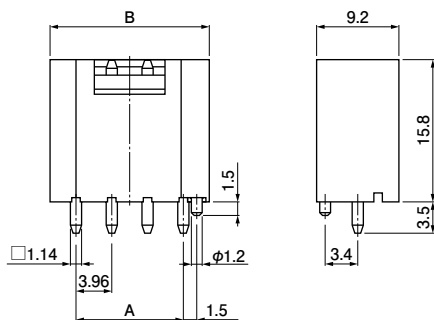
RoHS2 compliance

## Header

### With a boss <Single circuit>



### <2 to 8 circuits>



No. of circuits	Model No.	Q'ty/box
	With a boss	
1	BH1P-VH-1	500

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL-94V-0, natural (white)

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

No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
	With a boss	A	B	
2	BH2P-VH-1	3.96	9.80	250
3	BH3P-VH-1	7.92	13.76	200
4	BH4P-VH-1	11.88	17.72	150
5	BH5P-VH-1	15.84	21.68	100
6	BH6P-VH-1	19.80	25.64	100
7	BH7P-VH-1	23.76	29.60	100
8	BH8P-VH-1	27.72	33.56	100

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL-94V-0, natural (ivory)

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

# VH CONNECTOR (High box type)

## Model number allocation

### Contact

**S VH - 21 T - P 1.1**

Form: S...Strip form, B...Loose piece

Series name

Applicable wire range: 21...AWG #22 to #18  
41...AWG #20 to #16

Surface finish: T...Tin-plated (reflow treatment)

Material: P...Phosphor bronze

Terminal size

### Housing

**VHR - 1 N -**

Series name

Part name: Receptacle

No. of circuits: 1

Shape: N...Opening part for catching contact lance is available.

Color: None...Natural (White), BK...Black, R...Red, BL...Blue, M...Green,  
D...Orange, Y...Yellow, PK...Pink, H...Gray

### Housing

**VHR - 2 N -**

Series name

Part name: Receptacle

No. of circuits: 2 to 8

Shape: N...Opening part for catching contact lance is available.

Color: None...Natural (White), BK...Black, R...Red, BL...Blue, M...Green,  
D...Orange, Y...Yellow, PK...Pink, H...Gray

### Retainer mountable type housing

**VHRR - 3 N -**

Series name

Part name: Receptacle (Retainer mountable type)

No. of circuits: 3, 5, 7, 8

Shape: N...Opening part for catching contact lance is available.

Color: None...Natural (White)

### Retainer

**VHS - 3 V**

Series name

Part name: Retainer

No. of circuits: 3, 5, 7, 8

Flammability: V...UL94V-0

### Header

**BH 1P - VH - 1 -**

Part name: Header

No. of circuits: 1

Series name

Sub model number

Color: None...Natural (White), BK...Black, R...Red, BL...Blue, M...Green,  
O...Orange, Y...Yellow, PK...Pink

### Header

**BH 2P - VH - 1 -**

Part name: Header

No. of circuits: 2 to 8

Series name

Sub model number

Color: None...Natural (Ivory), BK...Black, R...Red, BL...Blue,  
M...Green, Y...Yellow

Note: Depending on the colors, it may take some time for delivery.