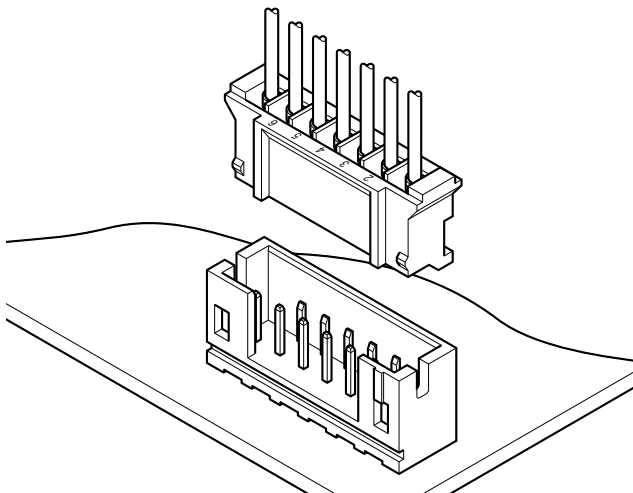
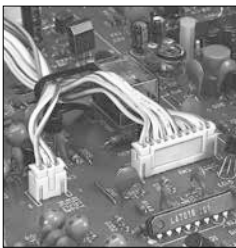




# PH CONNECTOR

2.0 mm pitch/Disconnectable Crimp style connectors



This is a thin, low-profile 2.0 mm pitch connector 8.0 mm in height after mounting and 4.5 mm in width. It is designed to meet the demand for high-density connection of internal wires to printed circuit boards. It is compact, highly reliable and low in cost.

- Reliable contact
- Fully shrouded header
- Printed circuit board retention mechanism
- Surface mount model (SMT)

## Specifications

- Current rating: 2 A AC/DC (AWG #24)
  - Voltage rating: 100 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: 800 VAC/ minute
  - Applicable wire: AWG #32 to #24
  - Applicable PC board thickness: 0.8 to 1.6 mm
- \* In using the products, refer to "Handling Precaution for Terminal and Connector" described on our website (Technical documents of Product information page).
- \* Contact JST for details.
- \* RoHS2 compliance

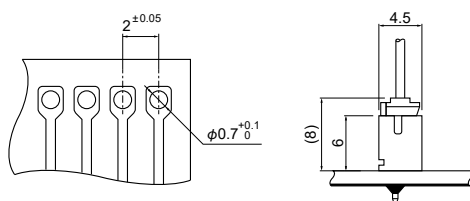
## Standards

- Recognized E60389
- ▲ R75087

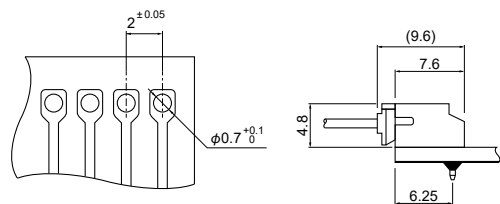
### PC board layout and Assembly layout

<Through-hole type (viewed from soldering side) >

#### Top entry type



#### Side entry type



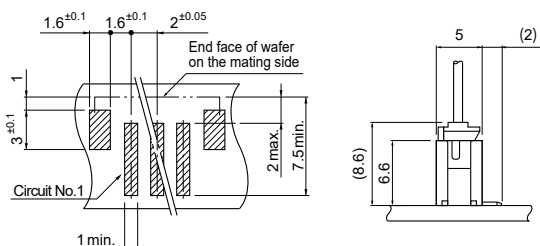
Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers.

2. Hole dimensions differ according to the type of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

<SMT type (viewed from component side) >

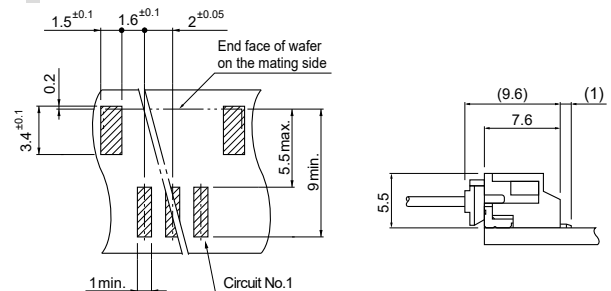
#### SM4 type

##### Top entry type



#### SM4 type

##### Side entry type

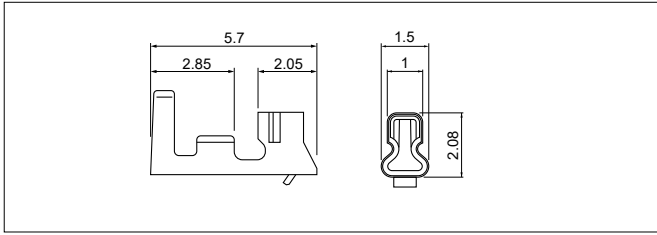


Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers.

2. The dimensions above should serve as a guideline. Contact JST for details.

# PH CONNECTOR

## Contact



Model No.	Applicable wire			Q'ty/ reel
	mm <sup>2</sup>	AWG #	Insulation O.D. (mm)	
<b>SPH-002T-P0.5S</b>	0.05 ~ 0.22	30~24	0.8~1.5	8,000
<b>SPH-002T-P0.5L</b>	0.08 ~ 0.22	28~24	0.8~1.5	
<b>SPH-004T-P0.5S</b>	0.032~0.08	32~28	0.5~0.9	10,000

### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

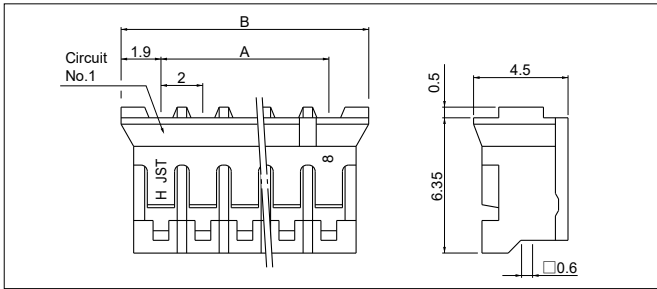
Note:

- Contact JST for gold-plated products.
- SPH-002T-P0.5L is low-insertion force type contact, for easier insertion/withdrawal, which would be less resistant to the vibration. The crimp height is different from the standard.
- Contact JST for details.

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SPH-002T-P0.5S</b>	AP-K2N	MKS-L	MK/SPH-002-05S	APLMK SPH002-05S
<b>SPH-002T-P0.5L</b>			MK/SPH-002-05L	APLMK SPH002-05L
<b>SPH-004T-P0.5S</b>		MKS-L-10	MK/SPH-002-05S	APLMK SPH004-05S

Note: Contact JST for fully automatic crimping applicator.

## Housing



<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. **PHR-2-oo**

(blank)...natural (white)

BK...black R...red TR...tomato red BL...blue Y...yellow

L...lemon yellow M...green D...orange N...brown

P...purple PK...pink H...gray LE...light blue

FY...vivid yellow DPK...dark pink

No. of circuits	Model No.	Dimensions (mm)		Q'ty/ box
		A	B	
2	<b>PHR-2</b>	2.0	5.8	1,000
3	<b>PHR-3</b>	4.0	7.8	1,000
4	<b>PHR-4</b>	6.0	9.8	1,000
5	<b>PHR-5</b>	8.0	11.8	1,000
6	<b>PHR-6</b>	10.0	13.8	1,000
7	<b>PHR-7</b>	12.0	15.8	1,000
8	<b>PHR-8</b>	14.0	17.8	1,000
9	<b>PHR-9</b>	16.0	19.8	1,000
10	<b>PHR-10</b>	18.0	21.8	1,000
11	<b>PHR-11</b>	20.0	23.8	1,000
12	<b>PHR-12</b>	22.0	25.8	1,000
13	<b>PHR-13</b>	24.0	27.8	1,000
14	<b>PHR-14</b>	26.0	29.8	1,000
15	<b>PHR-15</b>	28.0	31.8	1,000
16	<b>PHR-16</b>	30.0	33.8	1,000

### Material and Finish

PA 66, UL94V-0, natural (white)

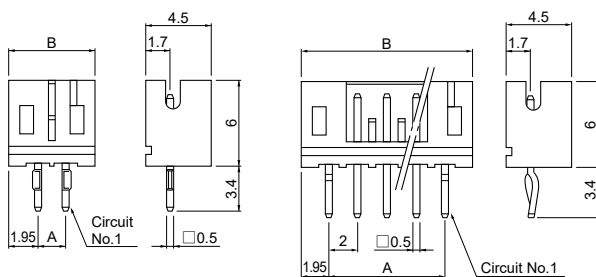
### RoHS2 compliance

## Through-hole type Header

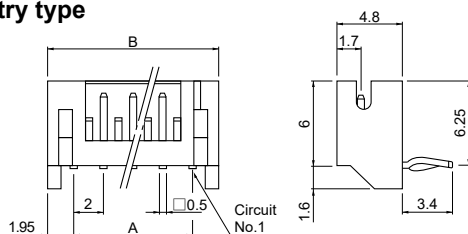
### Top entry type

(2 circuits)

(3 circuits or more)



### Side entry type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B2B-PH-K-S</b>	<b>S2B-PH-K-S</b>	2.0	5.9	1,000	1,000
3	<b>B3B-PH-K-S</b>	<b>S3B-PH-K-S</b>	4.0	7.9	1,000	1,000
4	<b>B4B-PH-K-S</b>	<b>S4B-PH-K-S</b>	6.0	9.9	1,000	500
5	<b>B5B-PH-K-S</b>	<b>S5B-PH-K-S</b>	8.0	11.9	1,000	500
6	<b>B6B-PH-K-S</b>	<b>S6B-PH-K-S</b>	10.0	13.9	1,000	500
7	<b>B7B-PH-K-S</b>	<b>S7B-PH-K-S</b>	12.0	15.9	500	500
8	<b>B8B-PH-K-S</b>	<b>S8B-PH-K-S</b>	14.0	17.9	500	250
9	<b>B9B-PH-K-S</b>	<b>S9B-PH-K-S</b>	16.0	19.9	500	250
10	<b>B10B-PH-K-S</b>	<b>S10B-PH-K-S</b>	18.0	21.9	500	250
11	<b>B11B-PH-K-S</b>	<b>S11B-PH-K-S</b>	20.0	23.9	500	250
12	<b>B12B-PH-K-S</b>	<b>S12B-PH-K-S</b>	22.0	25.9	400	250
13	<b>B13B-PH-K-S</b>	<b>S13B-PH-K-S</b>	24.0	27.9	250	250
14	<b>B14B-PH-K-S</b>	<b>S14B-PH-K-S</b>	26.0	29.9	250	250
15	<b>B15B-PH-K-S</b>	<b>S15B-PH-K-S</b>	28.0	31.9	250	200
16	<b>B16B-PH-K-S</b>	<b>S16B-PH-K-S</b>	30.0	33.9	250	200

### Material and Finish

Post: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, natural (white)

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

<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. **B2B-PH-K-oo**

S...natural (white)

K...black R...red TR...tomato red

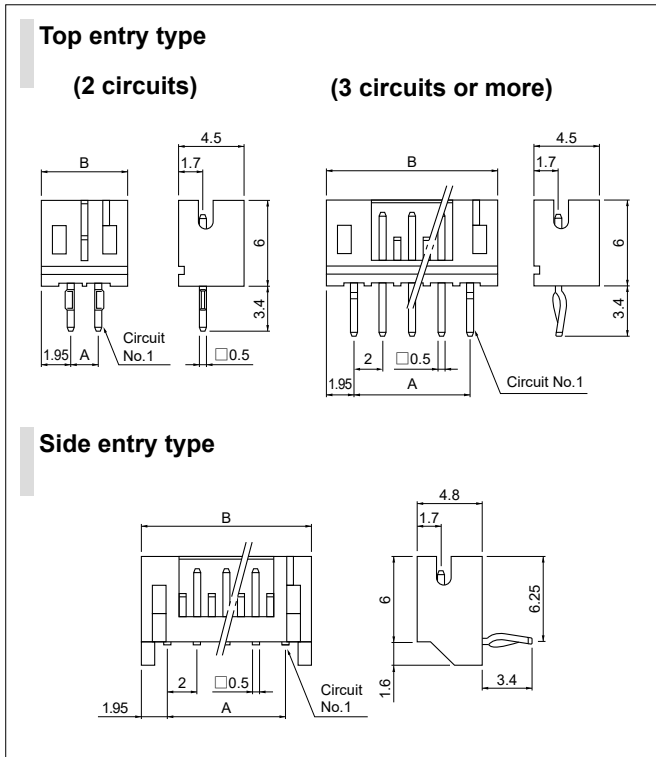
E...blue Y...yellow L...lemon yellow M...green

O...orange N...brown P...purple PK...pink H...gray

LE...light blue FY...vivid yellow (blank)...ivory

# PH CONNECTOR

## Through-hole type Header <Low insertion force type>



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	B2B-PH-KL	S2B-PH-KL	2.0	5.9	1,000	1,000
3	B3B-PH-KL	S3B-PH-KL	4.0	7.9	1,000	1,000
4	B4B-PH-KL	S4B-PH-KL	6.0	9.9	1,000	500
5	B5B-PH-KL	S5B-PH-KL	8.0	11.9	1,000	500
6	B6B-PH-KL	S6B-PH-KL	10.0	13.9	1,000	500
7	B7B-PH-KL	S7B-PH-KL	12.0	15.9	500	500
8	B8B-PH-KL	S8B-PH-KL	14.0	17.9	500	250
9	B9B-PH-KL	S9B-PH-KL	16.0	19.9	500	250
10	B10B-PH-KL	S10B-PH-KL	18.0	21.9	500	250
11	B11B-PH-KL	S11B-PH-KL	20.0	23.9	500	250
12	B12B-PH-KL	S12B-PH-KL	22.0	25.9	400	250
13	B13B-PH-KL	S13B-PH-KL	24.0	27.9	250	250
14	B14B-PH-KL	S14B-PH-KL	26.0	29.9	250	200
15	B15B-PH-KL	S15B-PH-KL	28.0	31.9	250	200
16	B16B-PH-KL	S16B-PH-KL	30.0	33.9	250	200

### Material and Finish

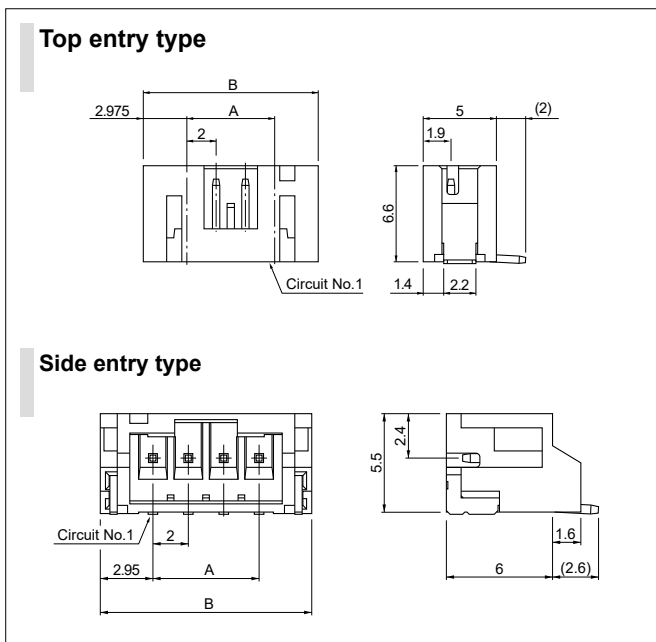
Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 66, UL94V-0, gray

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

<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. **B2B-PH-KL-oo**

(blank)...gray  
R...red E...blue S...natural (white)

## SMT type Header



No. of circuits	Model No.		Dimensions (mm)			Q'ty/reel
	Top entry type	Side entry type	A	B		
				Top entry type	Side entry type	
2	B2B-PH-SM4-TB	S2B-PH-SM4-TB	2.0	7.95	7.9	1,000
3	B3B-PH-SM4-TB	S3B-PH-SM4-TB	4.0	9.95	9.9	1,000
4	B4B-PH-SM4-TB	S4B-PH-SM4-TB	6.0	11.95	11.9	1,000
5	B5B-PH-SM4-TB	S5B-PH-SM4-TB	8.0	13.95	13.9	1,000
6	B6B-PH-SM4-TB	S6B-PH-SM4-TB	10.0	15.95	15.9	1,000
7	B7B-PH-SM4-TB	S7B-PH-SM4-TB	12.0	17.95	17.9	1,000
8	B8B-PH-SM4-TB	S8B-PH-SM4-TB	14.0	19.95	19.9	1,000
9	B9B-PH-SM4-TB	S9B-PH-SM4-TB	16.0	21.95	21.9	1,000
10	B10B-PH-SM4-TB	S10B-PH-SM4-TB	18.0	23.95	23.9	1,000
11	B11B-PH-SM4-TB	S11B-PH-SM4-TB	20.0	25.95	25.9	1,000
12	B12B-PH-SM4-TB	S12B-PH-SM4-TB	22.0	27.95	27.9	1,000
13	B13B-PH-SM4-TB	S13B-PH-SM4-TB	24.0	29.95	29.9	1,000
14	B14B-PH-SM4-TB	S14B-PH-SM4-TB	26.0	31.95	31.9	1,000
15	B15B-PH-SM4-TB	S15B-PH-SM4-TB	28.0	33.95	33.9	1,000
16	B16B-PH-SM4-TB	—	30.0	35.95	—	1,000

### Material and Finish

Post: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

**RoHS2 compliance** This product displays (LF)(SN) on a label.  
Note: Contact JST for the top entry type headers with suction cap.

<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. **B2B-PH-SM4-oo-TB**

(blank)...natural (ivory)  
R...red E...blue M...green L...lemon yellow K...black  
DPK...dark pink