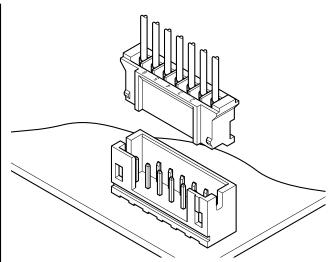


# PH CONNECTOR



### 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/  $10 \text{ m}\Omega$  max.

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

- Insulation resistance:  $1,000 \text{ M}\Omega$  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 -

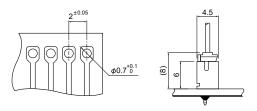
Recognized E60389

△ R75087

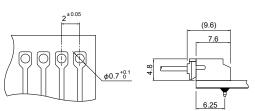
#### PC board layout and Assembly layout

#### ⟨Through-hole type (viewed from soldering side) ⟩

#### Top entry type



#### Side entry type

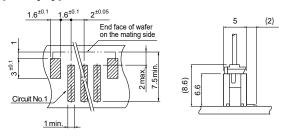


Note: 1. Tolerances are non-cumulative:  $\pm 0.05$  mm for all centers.

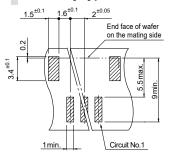
2. Hole dimensions differ according to the type of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

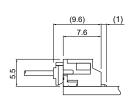
#### ⟨SMT type (viewed from component side) >

#### SM4 type Top entry type



#### SM4 type Side entry type



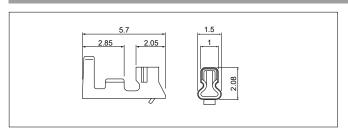


Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers.

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

## PH CONNECTOR

#### **Contact**



( 'ontact	Crimping machine	Applicator			
		Crimp applicator	Dies	Crimp applicator with dies	
SPH-002T-P0.5S		MICCI	MK/SPH-002-05S	APLMK SPH002-05S	
SPH-002T-P0.5L	AP-K2N	MKS-L	MK/SPH-002-05L	APLMK SPH002-05L	
SPH-004T-P0.5S		MKS-L-10	MK/SPH-002-05S	APLMK SPH004-05S	

Note: Contact JST for fully automatic crimping applicator.

Model No.		Q'ty/		
	mm²	AWG#	Insulation O.D. (mm)	reel
SPH-002T-P0.5S	0.05 ~ 0.22	30~24	0.8~1.5	8.000
SPH-002T-P0.5L	0.08 ~ 0.22	28~24	8~24 0.8~1.5	
SPH-004T-P0.5S	0.032~0.08	32~28	0.5~0.9	10,000

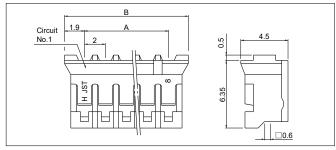
#### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

#### RoHS2 compliance

- 1. Contact JST for gold-plated products.
- 2. 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.
- 3. Contact JST for details.

#### Housing



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-2-00

(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	Model No.	Dimensi	Q'ty/	
circuits		Α	В	box
2	PHR-2	2.0	5.8	1,000
3	PHR-3	4.0	7.8	1,000
4	PHR-4	6.0	9.8	1,000
5	PHR-5	8.0	11.8	1,000
6	PHR-6	10.0	13.8	1,000
7	PHR-7	12.0	15.8	1,000
8	PHR-8	14.0	17.8	1,000
9	PHR-9	16.0	19.8	1,000
10	PHR-10	18.0	21.8	1,000
11	PHR-11	20.0	23.8	1,000
12	PHR-12	22.0	25.8	1,000
13	PHR-13	24.0	27.8	1,000
14	PHR-14	26.0	29.8	1,000
15	PHR-15	28.0	31.8	1,000
16	PHR-16	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) □0.5 Circuit No.1 Side entry type 3.4 Circuit 1.95

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

As the color identification, <For reference>

the following alphabet shall be put in the underlined part.

For availability, delivery and minimum order quantity, contact JST. ex. | **B2B-PH-K-**00|

S...natural (white)

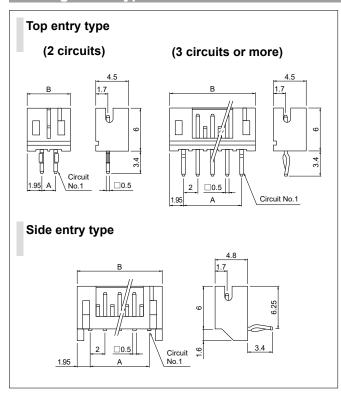
K...black R...red TR...tomato red

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)



N. C	Model No.		Dimensions (mm)		Q'ty/box	
No. of circuits	Top entry type	Side entry type	A	В	Top 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.

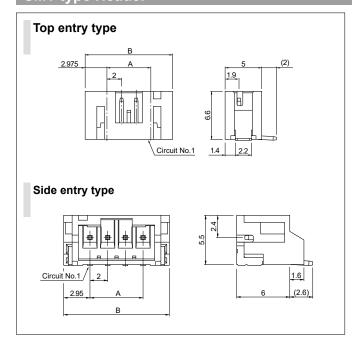
For availability, delivery and minimum order quantity, contact JST.

ex. B2B-PH-KL-oo

(blank)...gray

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

#### **SMT** type Header



	Mode	Dimensions (mm)			O# /	
No. of circuits	Top entry type	Side entry type	А	В		Q'ty/ reel
	Top entry type			Top entry type	Side entry type	1001
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