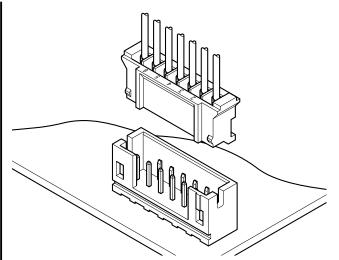Emboss Tape

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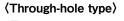
● Reliable contact
● Fully shrouded header
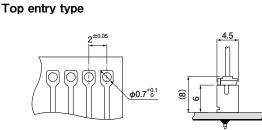● Printed circuit board retention mechanism
● Surface mount model（SMT）

Specifications
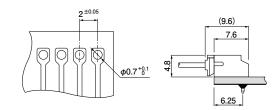
• Current rating: 2 A AC/DC（AWG #24）
• Voltage rating: 100 V AC/DC
• Temperature range: −25℃ to +85℃
　　　　　　　　　（including temperature rise in applying
　　　　　　　　　 electrical current）
• Contact resistance: Initial value/ 10 mΩ max.
　　　　　　　　　After environmental tests/ 20 mΩ max.
• Insulation resistance: 1,000 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 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
△ R75087

PC board layout and Assembly layout

〈Through-hole type〉

Top entry type

2±0.05
4.5
（8）
6
φ0.7+0.1/0

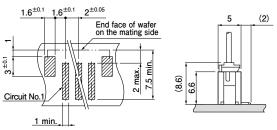**Side entry type**

2±0.05
（9.6）
7.6
4.8
φ0.7+0.1/0
6.25

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. 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〉

**SM4 type
Top entry type**

1.6±0.1 1.6±0.1 2±0.05
End face of wafer on the mating side
5 （2）
1
3±0.1
2 max. 7.5 min.
（8.6） 6.6
Circuit No.1
1 min.

**SM4 type
Side entry type**

1.5±0.1 1.6±0.1 2±0.05
End face of wafer on the mating side
0.2
3.4±0.1
5.5 max. 9 min.
（9.6） （1）
7.6
5.5
1min. Circuit No.1

Note: 1. The above figure is the figure viewed from the connector mounting side.
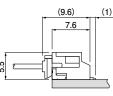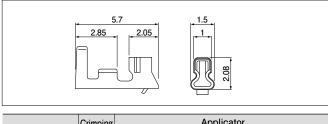　　　2. Tolerances are non-cumulative: ± 0.05 mm for all centers.
　　　3. The dimensions above should serve as a guideline. Contact JST for details.

PH CONNECTOR

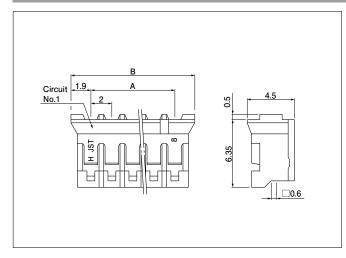## Contact

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SPH-002T-P0.5S		MKS-L	MK/SPH-002-05S	APLMK SPH-002-05S
SPH-002T-P0.5L	AP-K2N		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.	Applicable wire			Q'ty/ reel
	mm²	AWG #	Insulation O.D. (mm)	
SPH-002T-P0.5S	0.05 to 0.22	30 to 24	0.8 to 1.5	8,000
SPH-002T-P0.5L	0.08 to 0.22	28 to 24	0.8 to 1.5	
SPH-004T-P0.5S	0.032 to 0.08	32 to 28	0.5 to 0.9	10,000

Material and Finish
Phosphor bronze, tin-plated (reflow treatment)

RoHS2 compliance

Note: 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.
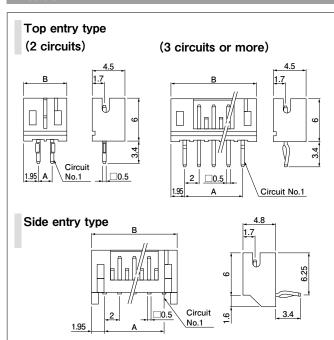3. Contact JST for details.

Housing

No. of circuits	Model No.	Dimensions (mm)		Q'ty/ bag
		A	B	
2	PHR-2	2.0	5.8	2,000
3	PHR-3	4.0	7.8	2,000
4	PHR-4	6.0	9.8	2,000
5	PHR-5	8.0	11.8	2,000
6	PHR-6	10.0	13.8	2,000
7	PHR-7	12.0	15.8	2,000
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

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	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.

PH CONNECTOR

Model number allocation

Contact

S PH - 002 T - P 0.5 S

Form: S···Strip form
Series name
Applicable wire range:
　Normal type 002···AWG #30 to #24
　　　　　　　004···AWG #32 to #28
　Low insertion force type 002···AWG #28 to #24
Surface finish: T···Tin-plated (reflow treatment)
Material: P···Phosphor bronze
Terminal size
Type name: S···Normal type, L···Low insertion force type

Housing

PH R - 2 - ▢

Series name
Part name: Receptacle
No. of circuits: 2 to 16
Color: None···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···Fluorescent yellow, DPK···Dark pink

Header

B 2 B - PH - K - S

Shape of assembled product:
　B···Top entry type　S···Side entry type
No. of circuits: Top and side entry types···2 to 16
Part name: Header
Series name
Indication of clinch: K···Clinched
Color: 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···Fluorescent yellow, None···Ivory

Header（Low insertion force type）

B 2 B - PH - K L - ▢

Shape of assembled product:
　B···Top entry type, S···Side entry type
No. of circuits: Top and side entry types···2 to 16
Part name: Header
Series name
Indication of clinch: K···Clinched
Type name: L···Low insertion force type
Color: None···Gray, R···Red, E···Blue, S···Natural（White）

Header（SMT type）

B 2 B - PH - SM4 - ▢ **-TB** ▢

Shape of assembled product:
　B···Top entry type
　S···Side entry type
No. of circuits:
　Top entry type···2 to 16
　Side entry type···2 to 15
Part name: Header
Series name
SMT specification: SM4···With solder tab
Color: None···Natural（Ivory）, R···Red, E···Blue, M···Green,
　　　 L···Lemon yellow, K···Black, DPK···Dark pink
Packaging style: TB···Embossed-taping
Suction tape: None···Without suction tape, T···With suction tape

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