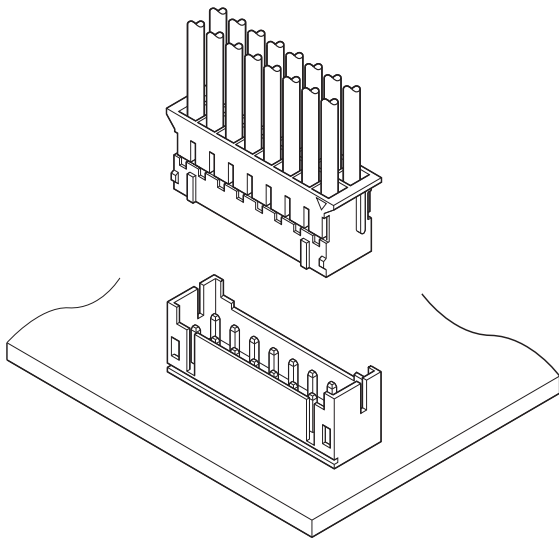




# PHD CONNECTOR

2.0 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



This is a 2.0 mm pitch wire-to-board connector with dual-row structure. In mounting height of 8.8 mm and depth of 5 mm, this connector realizes low profile and space-saving, and supports a compact and high densification of equipment.

- Low profile and space-saving design
- High reliability contact
- Fully shrouded header

## Standards

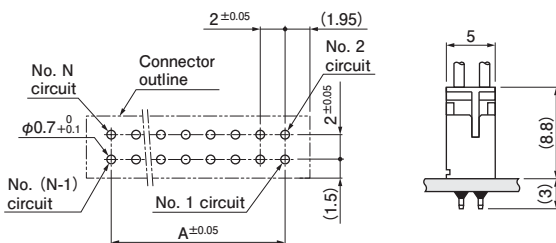
☑ :Recognized E60389

## Specifications

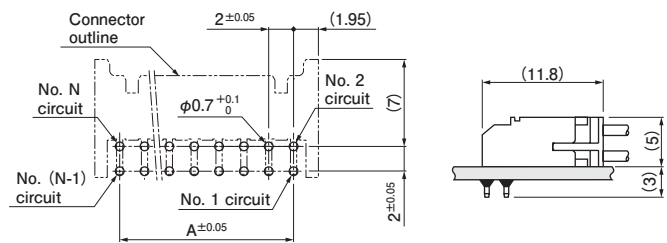
- Current rating: 3 A AC/DC (AWG #22)
  - Voltage rating: 250 V AC/DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance:
    - Initial value/ 10 mΩ max.
    - After environmental tests/ 20 mΩ max.
  - Insulation resistance: 1,000 MΩ min.
  - Withstanding voltage:
    - There shall be no breakdown or flashover while applying 800 VAC for one minute.
  - Applicable wire range:
    - Conductor size/ AWG #28 to AWG #22
    - Insulation O.D./  $\phi$  0.9 mm to  $\phi$  1.5 mm
  - Applicable PC board thickness: 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.

## PC board layout and Assembly layout

### Top entry type



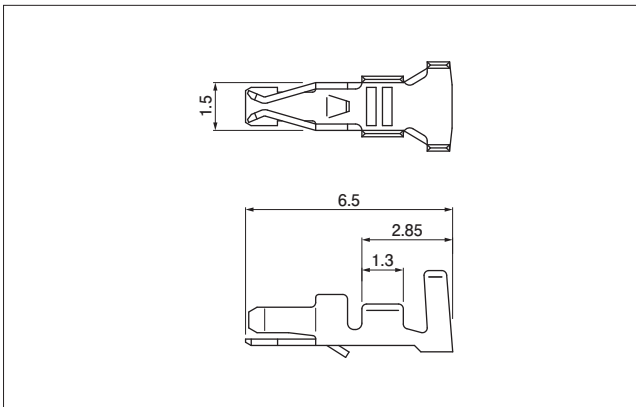
### Side entry type



- Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.  
 2. Dimension A: See "Header" section on page 3.  
 3. Tolerance for the PCB hole pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.05$ .  
 4. Hole dimensions differ according to the type of PC board and piercing method.  
 Larger hole diameters are required when using the hard material such as glass fabric PC board.  
 5. The above dimensions are reference values. Please contact JST for details.

# PHD CONNECTOR

## Contact



Model No.	Applicable wire range		Q'ty/ reel	
	Conductor size	AWG (mm <sup>2</sup> )		Insulation O.D. (mm)
SPHD-002T-P0.5	#28 to #24	(0.08 to 0.21)	0.9 to 1.5	8,000
SPHD-001T-P0.5	#26 to #22	(0.13 to 0.33)	1.0 to 1.5	

Material and Surface finish, etc.

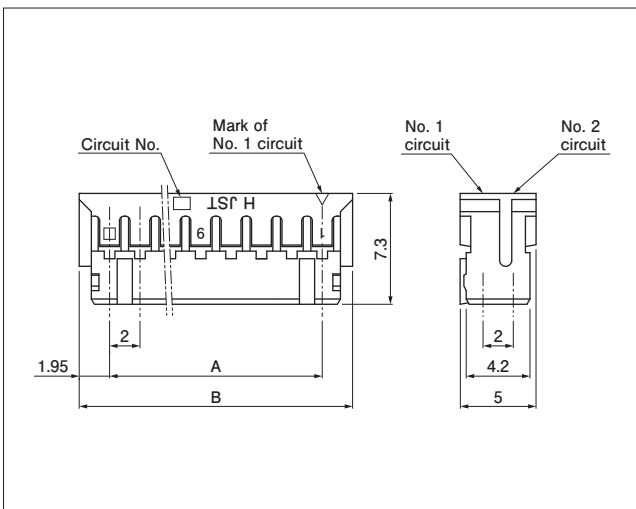
Phosphor bronze, tin-plated

## Crimping machine

Contact	Crimping machine	Applicator	Crimp applicator with dies
SPHD-002T-P0.5	AP-K2N	MKS-L-10	APLMK SPHD002-05
SPHD-001T-P0.5			APLMK SPHD001-05

Note: Contact JST for fully automatic crimping applicator.

## Socket housing



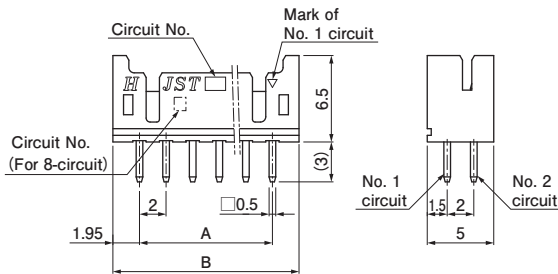
No. of circuits	Model No.	Dimensions (mm)		Q'ty/bag
		A	B	
8	PHDR-08VS	6.0	9.9	1,000
10	PHDR-10VS	8.0	11.9	1,000
12	PHDR-12VS	10.0	13.9	1,000
14	PHDR-14VS	12.0	15.9	1,000
16	PHDR-16VS	14.0	17.9	1,000
18	PHDR-18VS	16.0	19.9	1,000
20	PHDR-20VS	18.0	21.9	1,000
22	PHDR-22VS	20.0	23.9	1,000
24	PHDR-24VS	22.0	25.9	1,000
26	PHDR-26VS	24.0	27.9	1,000
28	PHDR-28VS	26.0	29.9	1,000
30	PHDR-30VS	28.0	31.9	1,000
32	PHDR-32VS	30.0	33.9	1,000
34	PHDR-34VS	32.0	35.9	1,000

Material and Surface finish, etc.

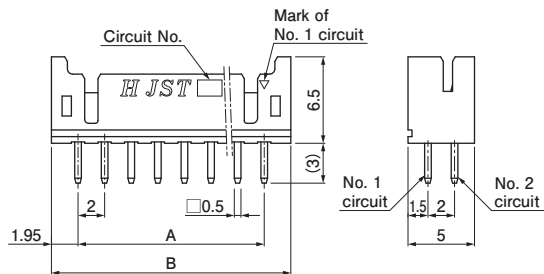
PA 66, UL94V-0, natural (white)

## Header

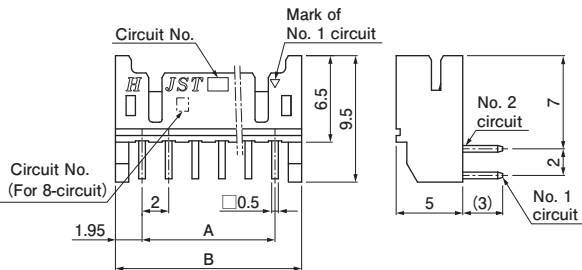
### Top entry type <12-circuit or less>



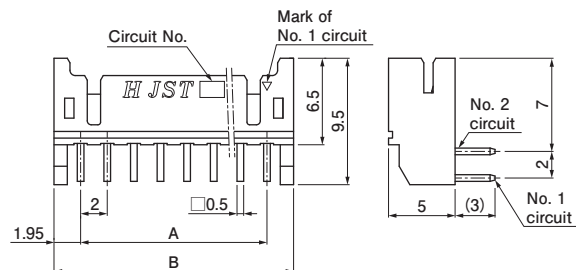
### <14-circuit or more>



### Side entry type <12-circuit or less>



### <14-circuit or more>



### Top entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	PA 66 (Glass-filled)	PA 66	A	B	
8	B8B-PHDSS	—	6.0	9.9	500
10	B10B-PHDSS	B10B-PHDSS-B	8.0	11.9	500
12	B12B-PHDSS	B12B-PHDSS-B	10.0	13.9	500
14	B14B-PHDSS	B14B-PHDSS-B	12.0	15.9	500
16	B16B-PHDSS	B16B-PHDSS-B	14.0	17.9	500
18	B18B-PHDSS	B18B-PHDSS-B	16.0	19.9	500
20	B20B-PHDSS	B20B-PHDSS-B	18.0	21.9	250
22	B22B-PHDSS	B22B-PHDSS-B	20.0	23.9	250
24	B24B-PHDSS	B24B-PHDSS-B	22.0	25.9	250
26	B26B-PHDSS	B26B-PHDSS-B	24.0	27.9	250
28	B28B-PHDSS	B28B-PHDSS-B	26.0	29.9	250
30	B30B-PHDSS	B30B-PHDSS-B	28.0	31.9	250
32	B32B-PHDSS	B32B-PHDSS-B	30.0	33.9	250
34	B34B-PHDSS	B34B-PHDSS-B	32.0	35.9	250

Material and Surface finish, etc.

Post: Copper alloy, copper-undercoated, tin-plated  
Wafer: PA 66 (Glass-filled), UL94V-0, natural (ivory)  
PA 66, UL94V-0, natural (white)

Note: This product displays (LF) (SN) on a label.

### Side entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	PA 66 (Glass-filled)	PA 66	A	B	
8	S8B-PHDSS	—	6.0	9.9	500
10	S10B-PHDSS	S10B-PHDSS-B	8.0	11.9	500
12	S12B-PHDSS	S12B-PHDSS-B	10.0	13.9	500
14	S14B-PHDSS	S14B-PHDSS-B	12.0	15.9	250
16	S16B-PHDSS	S16B-PHDSS-B	14.0	17.9	250
18	S18B-PHDSS	S18B-PHDSS-B	16.0	19.9	250
20	S20B-PHDSS	S20B-PHDSS-B	18.0	21.9	250
22	S22B-PHDSS	S22B-PHDSS-B	20.0	23.9	250
24	S24B-PHDSS	S24B-PHDSS-B	22.0	25.9	200
26	S26B-PHDSS	S26B-PHDSS-B	24.0	27.9	200
28	S28B-PHDSS	S28B-PHDSS-B	26.0	29.9	200
30	S30B-PHDSS	S30B-PHDSS-B	28.0	31.9	200
32	S32B-PHDSS	S32B-PHDSS-B	30.0	33.9	200
34	S34B-PHDSS	S34B-PHDSS-B	32.0	35.9	200

Material and Surface finish, etc.

Post: Copper alloy, copper-undercoated, tin-plated  
Wafer: PA 66 (Glass-filled), UL94V-0, natural (ivory)  
PA 66, UL94V-0, natural (white)

Note: This product displays (LF) (SN) on a label.

## Model number allocation

### Contact

**S PHD - 002 T - P 0.5**

Supply form: Strip form

Series name

Applicable wire range:  
 002...AWG #28 to AWG #24  
 001...AWG #26 to AWG #22

Surface finish: Tin-plated

Material: Phosphor bronze

Applicable post size

### Socket housing

**PHDR - 10 V S**

Series name

Type: Socket

No. of circuits

Flammability: UL94V-0

Color: S...Natural (White), K...Black, E...Blue,  
 R...Red, Y...Yellow

### Header/ PA 66 (Glass-filled)

**B 10 B - PHD S S**

Header type: B...Top entry type  
 S...Side entry type

No. of circuits

Assembly product

Series name

Color: S...Natural (Ivory), K...Black, E...Blue

Clinched (Kinked) / Not clinched: Straight

### Header/ PA 66

**B 10 B - PHD S S - B**

Header type: B...Top entry type  
 S...Side entry type

No. of circuits

Assembly product

Series name

Color: S...Natural (White), K...Black, E...Blue, R...Red

Clinched (Kinked) / Not clinched: Straight

Material: PA 66