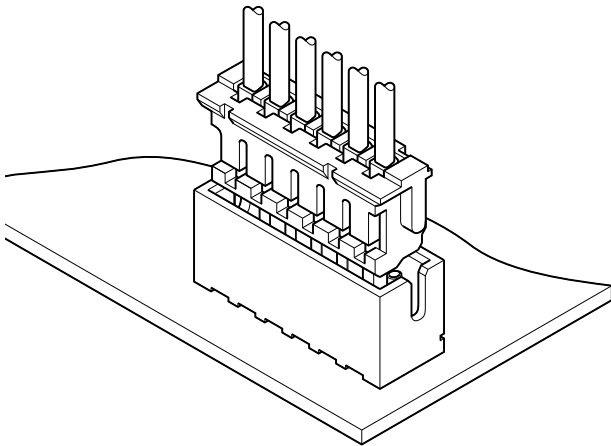


# ZH CONNECTOR



1.5 mm pitch/Disconnectable Crimp style connectors



The ZH connector is very small with a mounting height of 5.6 mm and a thickness of only 3.5 mm. Contact retention lances on the housing make insertion easier, while the dimple at the center of the contact ensures reliable contact with the post.

- Compact, low profile design
- Housing lances
- Reliable contact construction
- Distortion resistant construction
- Compatible with the ZR insulation displacement connectors

## Specifications

- Current rating: 1.0 A AC/DC (AWG #26)
  - Voltage rating: 50 V AC/DC
  - Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
  - Contact resistance: Initial value/ 20 mΩ max.  
After environmental tests/ 30 mΩ max.
  - Insulation resistance: 500 MΩ min.
  - Withstanding voltage: 500 VAC/minute
  - Applicable wire: AWG #32 to #26
  - Applicable PC board thickness: 0.6 to 1.2 mm, 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.

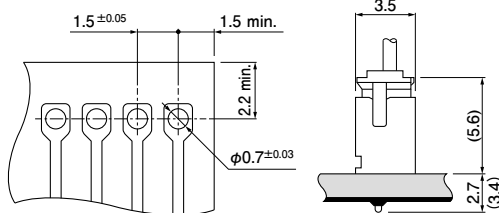
## Standards

- Ⓜ Recognized E60389
- Ⓢ Certified LR20812

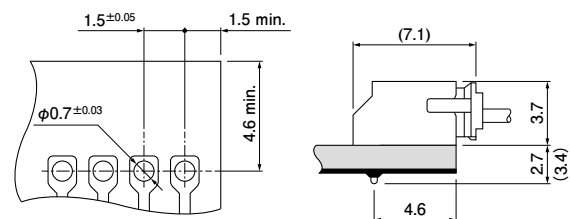
## PC board layout and Assembly layout

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

#### Top entry type



#### Side entry type



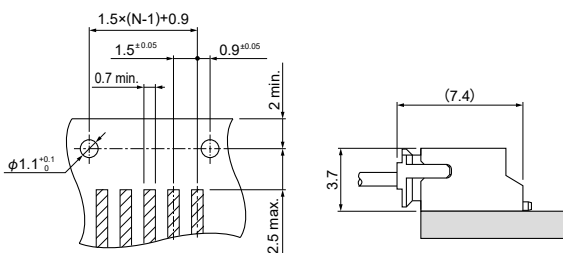
Note: 1. Tolerances are non-cumulative: ± 0.05 mm for all centers.

2. Hole dimension 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 connector mounting side) >

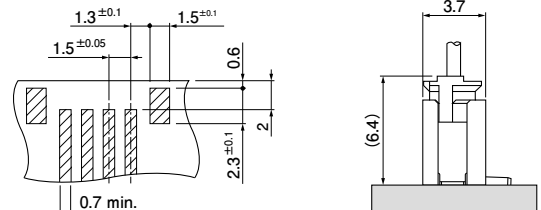
#### SM2 type

#### Side entry type

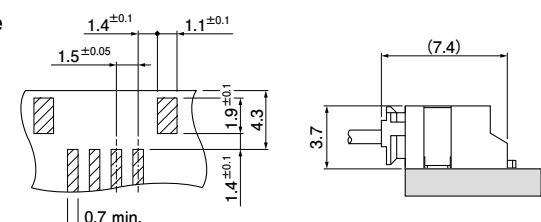


#### SM4 type

#### Top entry type



#### Side entry type



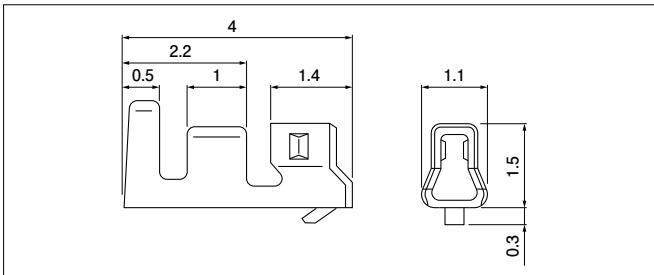
Note: 1. N...Number of circuits

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

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

# ZH CONNECTOR

## Contact



Model No.	Applicable wire			Q'ty/ reel
	mm <sup>2</sup>	AWG#	Insulation O.D. (mm)	
SZH-002T-P0.5	0.08~0.13	28~26	0.8~1.1	13,000
SZH-003T-P0.5	0.032~0.08	32~28	0.5~0.9	16,000

### Material and Finish

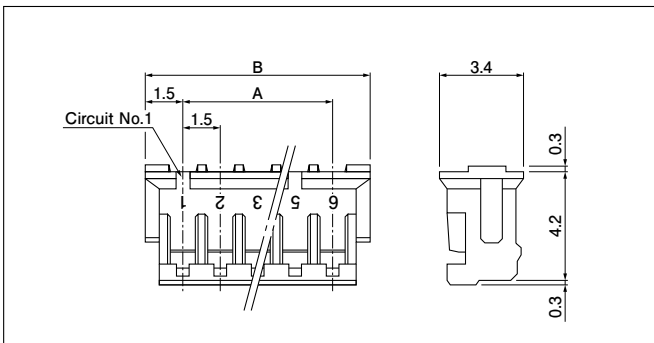
Phosphor bronze, tin-plated (reflow treatment)

### RoHS2 compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
SZH-002T-P0.5	AP-K2N	MKS-L	MK/SZH-002-05	APLMK SZH002-05
SZH-003T-P0.5			MK/SZH-003-05	APLMK SZH003-05

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. **ZHR-2-oo**

(blank)...natural (white)

K...black R...red E...blue M...green L...lemon yellow

LE...light blue DO...dark orange H...gray

No. of circuits	Model No.	Dimensions (mm)		Q'ty/ bag
		A	B	
2	ZHR-2	1.5	4.5	1,000
3	ZHR-3	3.0	6.0	1,000
4	ZHR-4	4.5	7.5	1,000
5	ZHR-5	6.0	9.0	1,000
6	ZHR-6	7.5	10.5	1,000
6	ZHR-6(3.0)	15.0	18.0	1,000
7	ZHR-7	9.0	12.0	1,000
8	ZHR-8	10.5	13.5	1,000
9	ZHR-9	12.0	15.0	1,000
10	ZHR-10	13.5	16.5	1,000
11	ZHR-11	15.0	18.0	1,000
12	ZHR-12	16.5	19.5	1,000
13	ZHR-13	18.0	21.0	1,000

### Material and Finish

PA 66, UL94V-0, natural (white)

### RoHS2 compliance

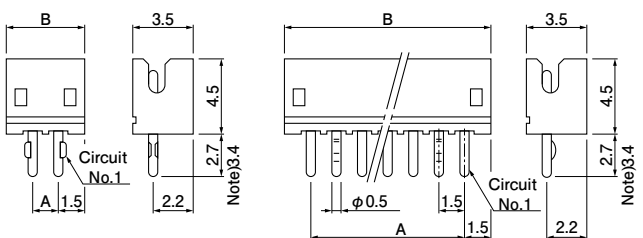
Note: 1. ZHR-6(3.0) is 6 circuits 3.0mm pitch plugged up.  
As for this housing, only circuit No.1 is marked.  
2. ZHR-6(3.0) is not UL/CSA approved.

## Through-hole type shrouded header

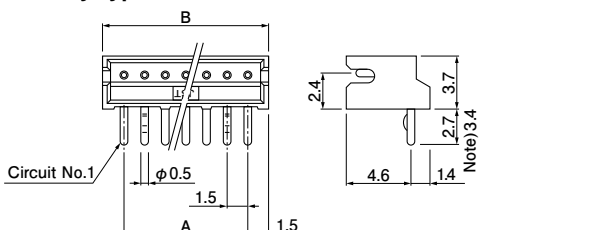
### Top entry type

<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	Note) Top entry type	Note) Side entry type	A	B	Top entry type	Side entry type	Side entry type-3.4
2	B2B-ZR	S2B-ZR	B2B-ZR-3.4	S2B-ZR-3.4	1.5	4.5	2,000	2,000	2,000
3	B3B-ZR	S3B-ZR	B3B-ZR-3.4	S3B-ZR-3.4	3.0	6.0	2,000	2,000	1,000
4	B4B-ZR	S4B-ZR	B4B-ZR-3.4	S4B-ZR-3.4	4.5	7.5	2,000	2,000	2,000
5	B5B-ZR	S5B-ZR	B5B-ZR-3.4	S5B-ZR-3.4	6.0	9.0	2,000	1,000	1,000
6	B6B-ZR	S6B-ZR	B6B-ZR-3.4	S6B-ZR-3.4	7.5	10.5	2,000	1,000	1,000
7	B7B-ZR	S7B-ZR	B7B-ZR-3.4	S7B-ZR-3.4	9.0	12.0	1,000	1,000	1,000
8	B8B-ZR	S8B-ZR	B8B-ZR-3.4	S8B-ZR-3.4	10.5	13.5	1,000	1,000	1,000
9	B9B-ZR	S9B-ZR	B9B-ZR-3.4	S9B-ZR-3.4	12.0	15.0	1,000	1,000	1,000
10	B10B-ZR	S10B-ZR	B10B-ZR-3.4	S10B-ZR-3.4	13.5	16.5	1,000	1,000	1,000
11	B11B-ZR	S11B-ZR	B11B-ZR-3.4	S11B-ZR-3.4	15.0	18.0	1,000	500	500
12	B12B-ZR	S12B-ZR	B12B-ZR-3.4	S12B-ZR-3.4	16.5	19.5	1,000	500	500
13	B13B-ZR	S13B-ZR	B13B-ZR-3.4	S13B-ZR-3.4	18.0	21.0	500	500	500

### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

RoHS2 compliance This product displays (LF)(SN) on a label.  
Note: Headers with 3.4mm long solder tails, suited for the 1.6mm thick PC board.

<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-ZR-3.4-oo**

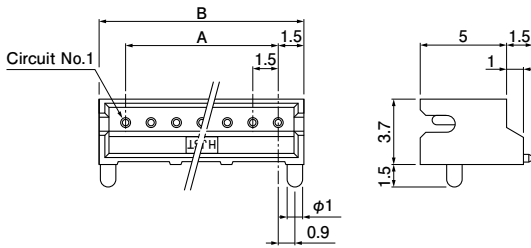
(blank)...natural (ivory)

K...black R...red E...blue M...green Y...Yellow

# ZH CONNECTOR

## SMT type shrouded header

### SM2 type Side entry type



### SM2 type

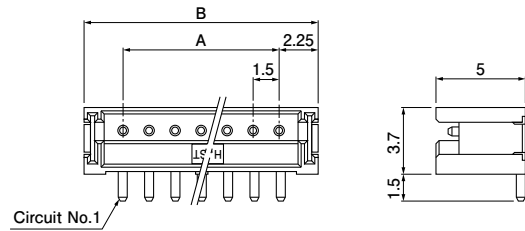
No. of circuits	Model No.	Dimensions (mm)		Q'ty/reel
	Side entry type	A	B	
2	S2B-ZR-SM2-TF	1.5	4.5	1,000
3	S3B-ZR-SM2-TF	3.0	6.0	1,000
4	S4B-ZR-SM2-TF	4.5	7.5	1,000
5	S5B-ZR-SM2-TF	6.0	9.0	1,000
6	S6B-ZR-SM2-TF	7.5	10.5	1,000
7	S7B-ZR-SM2-TF	9.0	12.0	1,000
8	S8B-ZR-SM2-TF	10.5	13.5	1,000
9	S9B-ZR-SM2-TF	12.0	15.0	1,000
10	S10B-ZR-SM2-TF	13.5	16.5	1,000
11	S11B-ZR-SM2-TF	15.0	18.0	1,000
12	S12B-ZR-SM2-TF	16.5	19.5	1,000
13	S13B-ZR-SM2-TF	18.0	21.0	1,000

#### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: Glass-filled PA 46, UL94V-0, natural (ivory)

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

### SM4 type (with solder tabs) Top entry type



### SM4 type

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-ZR-SM4-TF	S2B-ZR-SM4A-TF	1.5	6.0	1,000	1,000
3	B3B-ZR-SM4-TF	S3B-ZR-SM4A-TF	3.0	7.5	1,000	1,000
4	B4B-ZR-SM4-TF	S4B-ZR-SM4A-TF	4.5	9.0	1,000	1,000
5	B5B-ZR-SM4-TF	S5B-ZR-SM4A-TF	6.0	10.5	1,000	1,000
6	B6B-ZR-SM4-TF	S6B-ZR-SM4A-TF	7.5	12.0	1,000	1,000
7	B7B-ZR-SM4-TF	S7B-ZR-SM4A-TF	9.0	13.5	1,000	1,000
8	B8B-ZR-SM4-TF	S8B-ZR-SM4A-TF	10.5	15.0	1,000	1,000
9	B9B-ZR-SM4-TF	S9B-ZR-SM4A-TF	12.0	16.5	1,000	1,000
10	B10B-ZR-SM4-TF	S10B-ZR-SM4A-TF	13.5	18.0	1,000	1,000
11	B11B-ZR-SM4-TF	S11B-ZR-SM4A-TF	15.0	19.5	1,000	1,000
12	B12B-ZR-SM4-TF	S12B-ZR-SM4A-TF	16.5	21.0	1,000	1,000
13	B13B-ZR-SM4-TF	S13B-ZR-SM4A-TF	18.0	22.5	1,000	1,000

#### Material and Finish

Pin: Brass, copper-undercoated, tin-plated (reflow treatment)  
Wafer: PA 6T, UL94V-0, natural (ivory)  
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

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

Note: 1. PA 9T is used for some colored products.

2. The products listed above are supplied on embossed-tape.

3. 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. S2B-ZR-SM4A-oo-TF

(blank)...natural (ivory)

K...black R...red E...blue M...green L...lemon yellow

LE...light blue DO...dark orange DH...dark gray

### Side entry type

