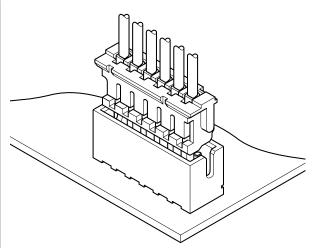


## **ZH** CONNECTOR



## 1.5mm pitch/Disconnectable Crimp style connectors



The ZH connector is very small with a mounting height of 5.6mm and a thickness of only 3.5mm. 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: 1.0A AC, DC (AWG #26)

• Voltage rating: 50V AC, DC

• Temperature range: -25°C to +85°C

(including temperature rise in applying

electrical current)

• Contact resistance: Initial value/20m  $\Omega$  max.

After environmental testing/30m  $\Omega$  max.

• Insulation resistance: 500M  $\Omega$  min. • Withstanding voltage: 500V AC/minute

Applicable wire: AWG #32 to #26

• Applicable PC board thickness: 0.6 to 1.2mm,1.6mm

\* Compliant with RoHS.

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

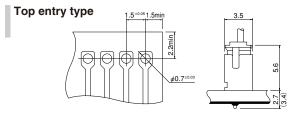
### Standards -

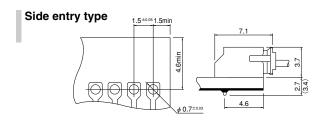
Recognized E60389

⊕ Certified LR20812

#### PC board layout and Assembly layout

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

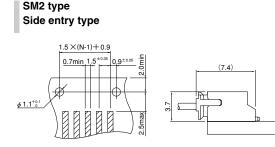




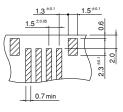
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimension differ according to the kind 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.

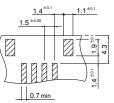
## (SMT type (viewed from component side) >

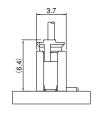


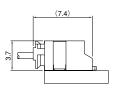
SM4 type Top entry type



Side entry type



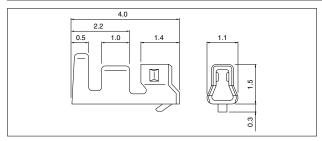




- Note: 1. N...Number of circuits
  - 2. Tolerances are non-cumulative: ±0.05mm for all centers.
  - 3. The dimensions above should serve as a guideline. Contact JST for details.

## **ZH CONNECTOR**

#### Contact



	Crimping	Applicator			
Contact	machine	Crimp applicator	Dies	Crimp applicator with dies	
0711 0007 00 5		MKS-L	MK/SZH-002-05	APLMK SZH002-05	
SZH-002T-P0.5	AP-K2N	_		_	

SZR-0021-P0.5 | AP-K2N | \_\_\_\_\_\_

#### Applicable wire Q'ty / reel Model No. AWG# Insulation O.D. (mm) mm<sup>2</sup> 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

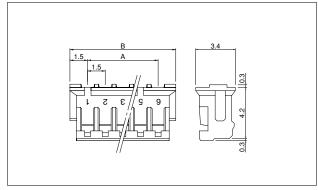
Phosphor bronze, tin-plated (reflow treatment)

#### RoHS compliance

(Contact	Crimping	Applicator				
	machine	Crimp applicator	Dies	Crimp applicator with dies		
SZH-003T-P0.5		MKS-L	MK/SZH-003-05	APLMK SZH003-05		
	AP-K2N	*MKS-SC	SC/S7H-003-05	API SC SZH003-05		

Note: \*Strip-crimp 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-2-00

(blank)...natural (white)

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

Circuits	Model No.	Dimensi	Q'ty /	
Circuits	Model No.	A	В	bag
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

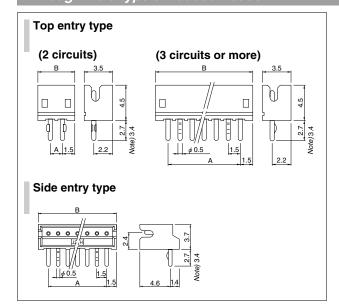
Material
PA 66, UL94V-0, natural (white)

#### RoHS 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



	Model No.			Dimensions (mm)		Q'ty / box			
Circuits	Top entry type	Side entry type	Note) Top entry type	Note) Side entry type	Α	В	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
	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)

RoHS 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.

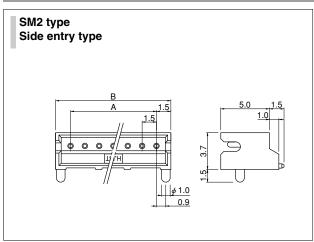
#### ex. B2B-ZR-3.4-<u>oo</u>

(blank)...natural (ivory)

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

## **ZH CONNECTOR**

## SMT type shrouded header



# SM4 type (with solder tabs) Top entry type Side entry type 0 0 0

#### SM2 type

Circuits	Model No.	Dimensions (mm)		Q'ty /	
	Side entry type	Α	В	reel	
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)

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

#### SM4 type

om rtypo								
Model No.			Dimensions (mm)		Q'ty / reel			
Top entry type	Side entry type	Α	В	Top entry type	Side entry type			
B2B-ZR-SM4-TF	S2B-ZR-SM4A-TF	1.5	6.0	1,000	1,000			
B3B-ZR-SM4-TF	S3B-ZR-SM4A-TF	3.0	7.5	1,000	1,000			
B4B-ZR-SM4-TF	S4B-ZR-SM4A-TF	4.5	9.0	1,000	1,000			
B5B-ZR-SM4-TF	S5B-ZR-SM4A-TF	6.0	10.5	1,000	1,000			
B6B-ZR-SM4-TF	S6B-ZR-SM4A-TF	7.5	12.0	1,000	1,000			
B7B-ZR-SM4-TF	S7B-ZR-SM4A-TF	9.0	13.5	1,000	1,000			
B8B-ZR-SM4-TF	S8B-ZR-SM4A-TF	10.5	15.0	1,000	1,000			
B9B-ZR-SM4-TF	S9B-ZR-SM4A-TF	12.0	16.5	1,000	1,000			
B10B-ZR-SM4-TF	S10B-ZR-SM4A-TF	13.5	18.0	1,000	1,000			
B11B-ZR-SM4-TF	S11B-ZR-SM4A-TF	15.0	19.5	1,000	1,000			
B12B-ZR-SM4-TF	S12B-ZR-SM4A-TF	16.5	21.0	1,000	1,000			
B13B-ZR-SM4-TF	S13B-ZR-SM4A-TF	18.0	22.5	1,000	1,000			
	Top entry type B2B-ZR-SM4-TF B3B-ZR-SM4-TF B4B-ZR-SM4-TF B5B-ZR-SM4-TF B6B-ZR-SM4-TF B7B-ZR-SM4-TF B8B-ZR-SM4-TF B8B-ZR-SM4-TF B10B-ZR-SM4-TF B11B-ZR-SM4-TF B11B-ZR-SM4-TF	Model No.  Top entry type Side entry type  B2B-ZR-SM4-TF S2B-ZR-SM4A-TF  B3B-ZR-SM4-TF S3B-ZR-SM4A-TF  B4B-ZR-SM4-TF S4B-ZR-SM4A-TF  B5B-ZR-SM4-TF S5B-ZR-SM4A-TF  B6B-ZR-SM4-TF S6B-ZR-SM4A-TF  B8B-ZR-SM4-TF S8B-ZR-SM4A-TF  B9B-ZR-SM4-TF S9B-ZR-SM4A-TF  B10B-ZR-SM4-TF S10B-ZR-SM4A-TF  B11B-ZR-SM4-TF S11B-ZR-SM4A-TF  B12B-ZR-SM4-TF S12B-ZR-SM4A-TF	Model No.         Dimension           Top entry type         Side entry type         A           B2B-ZR-SM4-TF         S2B-ZR-SM4A-TF         1.5           B3B-ZR-SM4-TF         S3B-ZR-SM4A-TF         3.0           B4B-ZR-SM4-TF         S4B-ZR-SM4A-TF         4.5           B5B-ZR-SM4-TF         S5B-ZR-SM4A-TF         6.0           B6B-ZR-SM4-TF         S6B-ZR-SM4A-TF         7.5           B7B-ZR-SM4-TF         S8B-ZR-SM4A-TF         10.5           B9B-ZR-SM4-TF         S9B-ZR-SM4A-TF         12.0           B10B-ZR-SM4-TF         S10B-ZR-SM4A-TF         13.5           B11B-ZR-SM4-TF         S11B-ZR-SM4A-TF         15.0           B12B-ZR-SM4-TF         S12B-ZR-SM4A-TF         16.5	Model No.         Dimensions (mm)           Top entry type         Side entry type         A         B           B2B-ZR-SM4-TF         S2B-ZR-SM4A-TF         1.5         6.0           B3B-ZR-SM4-TF         S3B-ZR-SM4A-TF         3.0         7.5           B4B-ZR-SM4-TF         S4B-ZR-SM4A-TF         4.5         9.0           B5B-ZR-SM4-TF         S5B-ZR-SM4A-TF         7.5         12.0           B6B-ZR-SM4-TF         S6B-ZR-SM4A-TF         9.0         13.5           B8B-ZR-SM4-TF         S8B-ZR-SM4A-TF         10.5         15.0           B9B-ZR-SM4-TF         S10B-ZR-SM4A-TF         12.0         16.5           B10B-ZR-SM4-TF         S11B-ZR-SM4A-TF         15.0         19.5           B12B-ZR-SM4-TF         S12B-ZR-SM4A-TF         15.0         19.5	Model No.         Dimensions (mm)         Q'ty           Top entry type         Side entry type         A         B         Top entry type           B2B-ZR-SM4-TF         S2B-ZR-SM4A-TF         1.5         6.0         1,000           B3B-ZR-SM4-TF         S3B-ZR-SM4A-TF         3.0         7.5         1,000           B4B-ZR-SM4-TF         S4B-ZR-SM4A-TF         4.5         9.0         1,000           B5B-ZR-SM4-TF         S5B-ZR-SM4A-TF         7.5         12.0         1,000           B6B-ZR-SM4-TF         S7B-ZR-SM4A-TF         9.0         13.5         1,000           B8B-ZR-SM4-TF         S8B-ZR-SM4A-TF         10.5         15.0         1,000           B9B-ZR-SM4-TF         S9B-ZR-SM4A-TF         12.0         16.5         1,000           B10B-ZR-SM4-TF         S10B-ZR-SM4A-TF         13.5         18.0         1,000           B11B-ZR-SM4-TF         S11B-ZR-SM4A-TF         15.0         19.5         1,000           B12B-ZR-SM4-TF         S12B-ZR-SM4A-TF         16.5         21.0         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)

RoHS compliance This product displays (LF)(SN) on a label. Note: 1. The products listed above are supplied on embossed-tape.

2. 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.

S2B-ZR-SM4A-oo-TF

(blank)...natural (ivory)

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