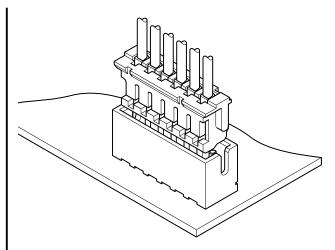


# **ZH** CONNECTOR



# 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 m $\Omega$  max.

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

- Insulation resistance: 500  $M\Omega$   $\,$  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.

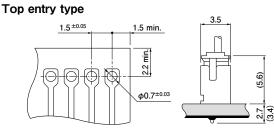
# Standards -

Recognized E60389

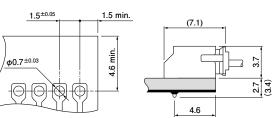
G: Certified LR20812

# PC board layout and Assembly layout

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



# Side entry type



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

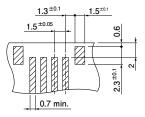
2. Hole dimension differ according to the type of PC board and piercing method. If PC boards made of hard material are used, the hole dimensions should be larger. The dimensions above should serve as a guideline. Contact JST for details.

# ⟨SMT type (viewed from connector mounting side) ⟩

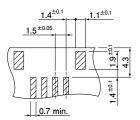
SM2 type Side entry type

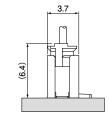
1.5×(N-1)+0.9

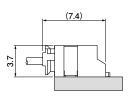
SM4 type
Top entry type



Side entry type



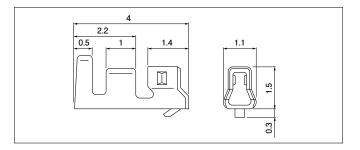




- Note: 1. N...Number of circuits
  - 2. Tolerances are non-cumulative: ± 0.05 mm for all centers.
  - 3. The dimensions above should serve as a guideline. Contact JST for details.

# **ZH CONNECTOR**

# Contact



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

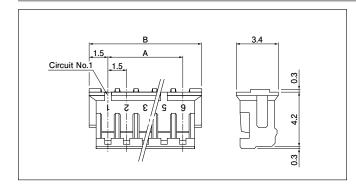
Phosphor bronze, tin-plated (reflow treatment)

# RoHS2 compliance

	Crimping			
Contact	machine	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	AP-NZIN		MK/SZH-003-05	APLMK SZH003-05

Note: Contact JST for fully automatic crimping applicator.

# Housing



No. of	Model No.	Dimension	Q'ty/	
circuits		Α	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 and Finish
PA 66, UL94V-0, natural (white)

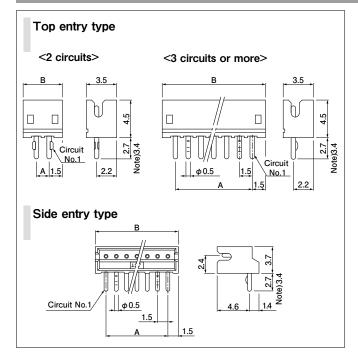
# RoHS2 compliance

Note: 1. ZHR-6(3.0) means the 6-circuits housing with 3.0mm pitch and each even number circuit is filled with the resin.

As for this housing, only circuit No.1 is marked. 2. ZHR-6(3.0) is not UL/CSA approved.

2. ZTH-0(3.0) IS NOT OLY COA approved.

# Through-hole type shrouded header



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

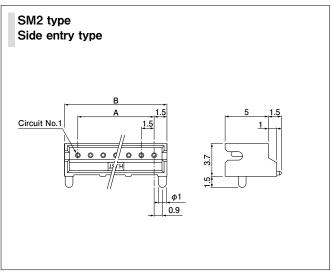
Pin: Brass, copper-undercoated, tin-plated (reflow treatment) Wafer: Glass-filled PA 66, UL94V-0, natural (ivory)

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.

# **ZH CONNECTOR**

# SMT type shrouded header



# SM4 type (with solder tabs) Top entry type Side entry type Circuit No.1

# SM2 type

OHE type						
No. of	Model No.	Dimensio	Q'ty/			
circuits	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)

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

# SM4 type

SW4 type							
No. of circuits	Model No.			Dimensions (mm)		Q'ty/reel	
	Top entry type	Side entry type	Α	В	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)

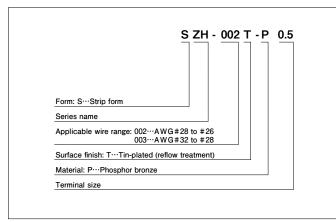
RoHS2 compliance This product displays (LF)(SN) on a label.

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

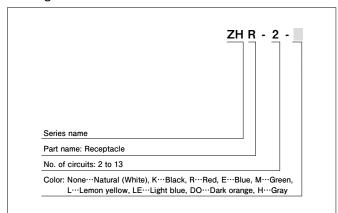
- 2. The products listed above are supplied on embossed-tape. 3. Contact JST for the top entry type headers with suction cap.

# Model number allocation

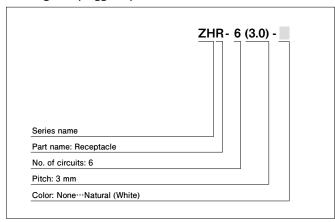
# Contact



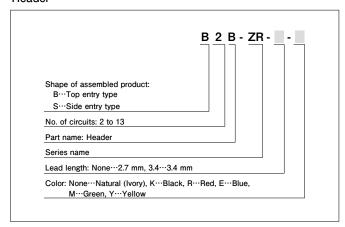
# Housing



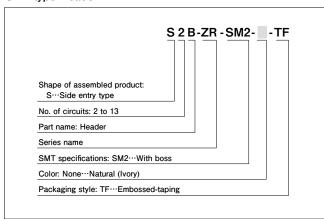
# Housing with plugged up hole



### Header



# SMT type Header



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

# SMT type Header (With solder tab)

