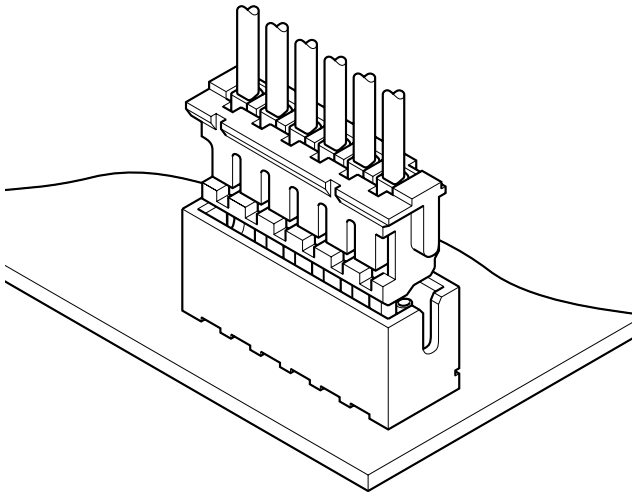# ZH CONNECTOR
1.5mm pitch/Disconnectable Crimp style connectors

Emboss Tape

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 Ω max.
  After environmental testing/30m Ω max.
- Insulation resistance: 500M Ω 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.
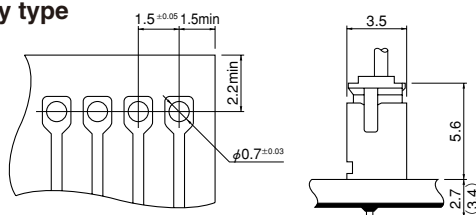- * Contact JST for details.

Standards

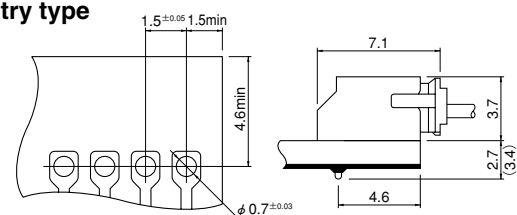 Recognized E60389

 Certified LR20812

PC board layout and Assembly layout

〈Through-hole type (viewed from soldering side)〉
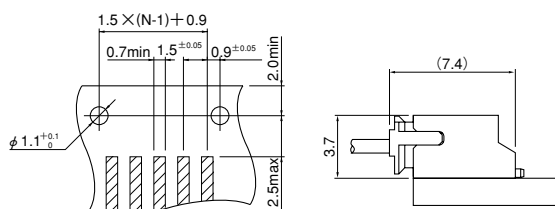
Top entry type

Side entry type

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)〉
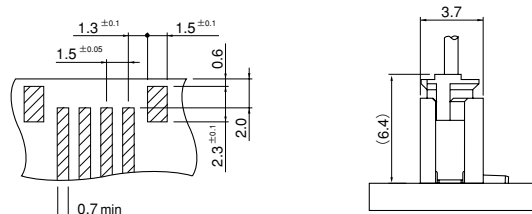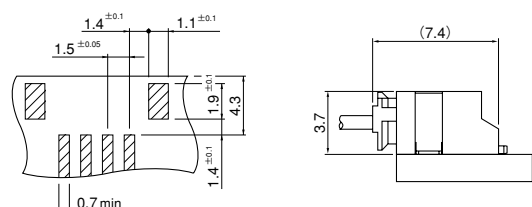
SM2 type
Side entry type

SM4 type
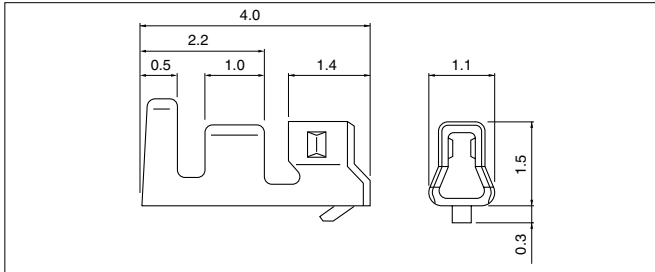**Top entry type**

Side entry type

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

Contact

Model No.	Applicable wire			Q'ty / reel
	mm²	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)

RoHS 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
		—	—	—

*Note: *Strip-crimp applicator.*

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

Housing
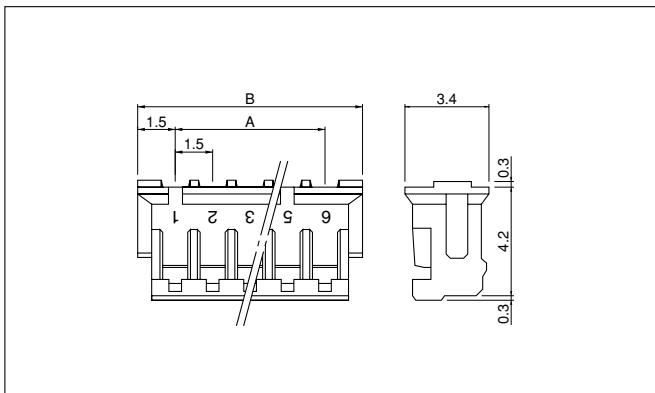
Circuits	Model No.	Dimensions (mm)		Q'ty / bag
		A	B	
2	**ZHR-2**	1.5	4.5	1,000
3	**ZHR-3**	3.0	6.0	1,000
4	**ZHR-4**	4.5	7.5	1,000
5	**ZHR-5**	6.0	9.0	1,000
6	**ZHR-6**	7.5	10.5	1,000
6	**ZHR-6(3.0)**	15.0	18.0	1,000
7	**ZHR-7**	9.0	12.0	1,000
8	**ZHR-8**	10.5	13.5	1,000
9	**ZHR-9**	12.0	15.0	1,000
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
PA 66, UL94V-0, natural (white)

<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**

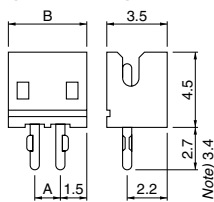*(blank)…natural (white)*
K…black   R…red   E…blue   M…green

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.
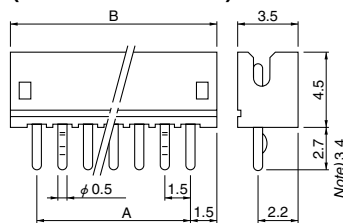*2. ZHR-6(3.0) is not UL/CSA approved.*

Through-hole type shrouded header

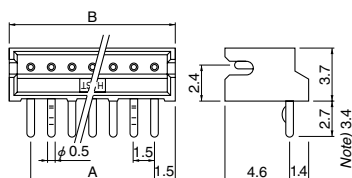### Top entry type

(2 circuits)   **(3 circuits or more)**

Side entry type

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)

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.
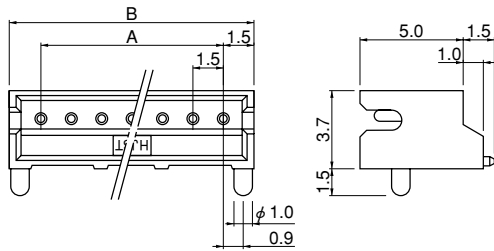*For availability, delivery and minimum order quantity, contact JST.*

ex.   **B2B-ZR-3.4-oo**

(blank)…natural (ivory)
K…black   R…red   E…blue   M…green
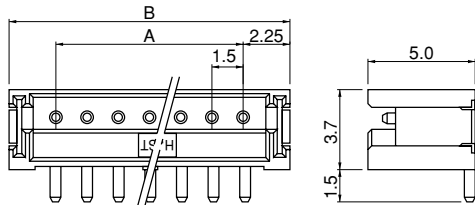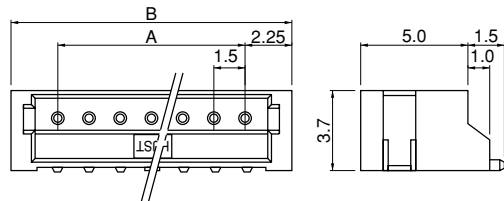
ZH CONNECTOR

SMT type shrouded header

SM2 type
Side entry type

SM4 type (with solder tabs)
Top entry type

Side entry type

SM2 type

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)

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

SM4 type

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)

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.*

ex. **S2B-ZR-SM4A-oo-TF**

*   (blank)…natural (ivory)*
*   K…black   R…red   E…blue   M…green*