ZH CONNECTOR
1.5mm pitch/Disconnectable Crimp style connectors

Emboss Tape

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

* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
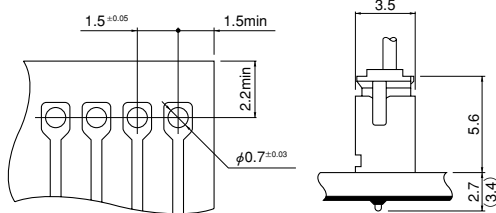* Contact JST for details.
* Compliant with RoHS.

Standards
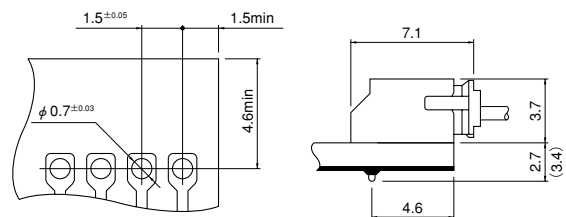
UL Recognized E60389

CSA 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 component side)〉
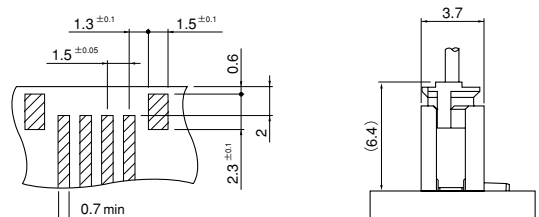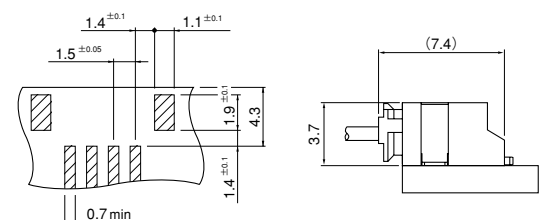
SM2 type
Side entry type

SM4 type
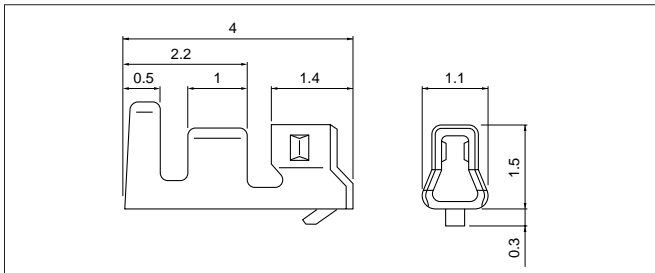### Top entry type

Side entry type

Note: 1. N...Number of circuits
  2. Tolerances are non-cumulative: ±0.05 mm 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

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
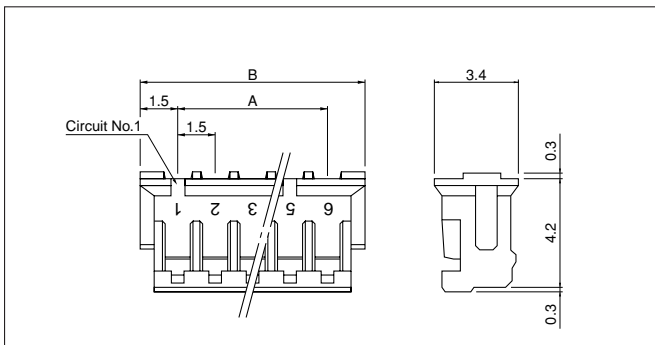
*Note: *Strip-crimp applicator.*

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

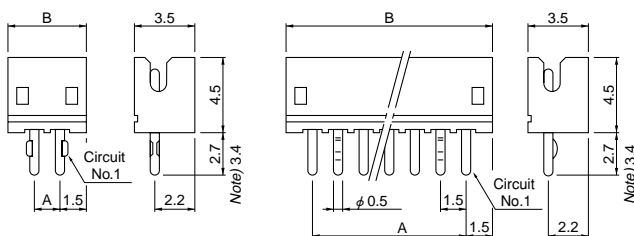| Material |
|---|
| PA 66, UL94V-0, natural (white) |

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

<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

Through-hole type shrouded header

Top entry type

<2 circuits>

<3 circuits or more>

Side entry type
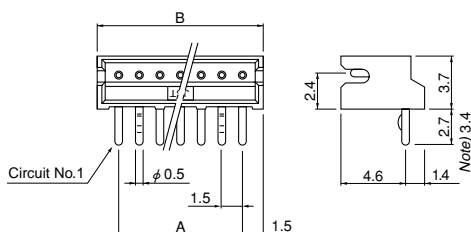
Circuits	Model No.		Note)	Note)	Dimensions (mm)		Q'ty/box		
	Top entry type	Side entry type	Top entry type	Side entry type	A	B	Top entry type	Side entry type	Side entry type-3.4
2	**B2B-ZR**	**S2B-ZR**	**B2B-ZR-3.4**	**S2B-ZR-3.4**	1.5	4.5	2,000	2,000	2,000
3	**B3B-ZR**	**S3B-ZR**	**B3B-ZR-3.4**	**S3B-ZR-3.4**	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 3.4 mm long solder tails, suited for the 1.6 mm 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.
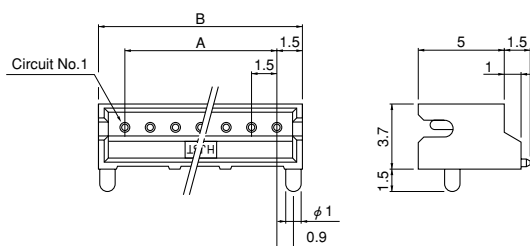
   ex.   **B2B-ZR-3.4-oo**
        (blank)…natural (ivory)
        K…black   R…red   E…blue   M…green   Y…Yellow

ZH CONNECTOR

SMT type shrouded header

SM2 type
Side entry type

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

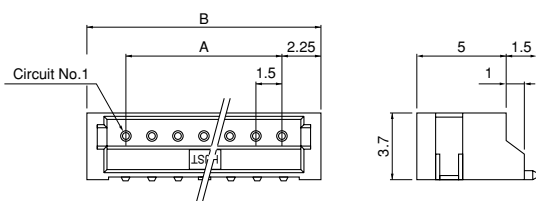| Material and Finish |
|---|

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. 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-<u>oo</u>-TF**

(blank)…natural (ivory)
K…black   R…red   E…blue   M…green   L…lemon yellow
LE…light blue   DO…dark orange   DH…dark gray