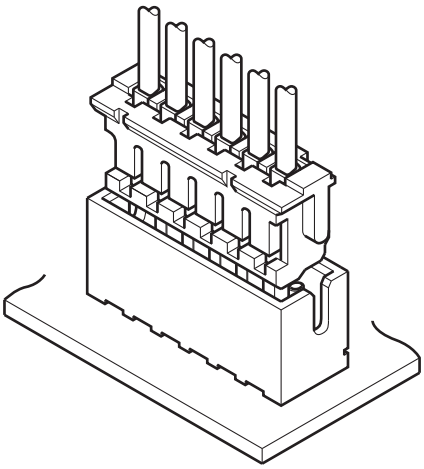


ZH CONNECTOR

1.5 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



This is a 1.5 mm pitch wire-to-board connector with 5.9 mm in mounting height and 3.5 mm in depth when mated with the top-entry type through-hole header.
The housing lance design improves contact insertion workability.
In addition, the combination of high contact force and round pins provides stable contact performance.

- Low-profile and space-saving
- Housing lance system
- Stable contact performance
- Fully shrouded header ensures durability with a secure connection reducing the risk of stress and misalignment
- Socket compatible with IDC type ZR connector

■ Specifications

- Current rating: 1.0 A　AC/DC (AWG #26)
- Voltage rating: 50 V　AC/DC
- Temperature range: −25℃ to +85℃
  (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:
  There shall be no breakdown or flashover while applying 500 VAC for one minute.
- Applicable wire range:
  Conductor size/ AWG #32 to AWG #26
  Insulation O.D. / φ 0.5 mm to φ 1.1 mm
- Applicable PC board thickness:
  0.6 mm to 1.2 mm, 1.6 mm

* Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
* RoHS2 compliance
* Dimensional unit: mm
* Contact JST for details.

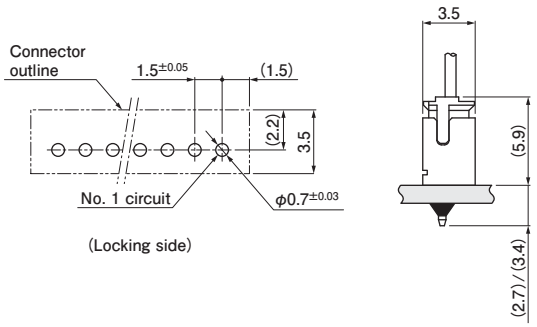
■ Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).
* Specifications registered to overseas standards may differ from the general specifications listed above.

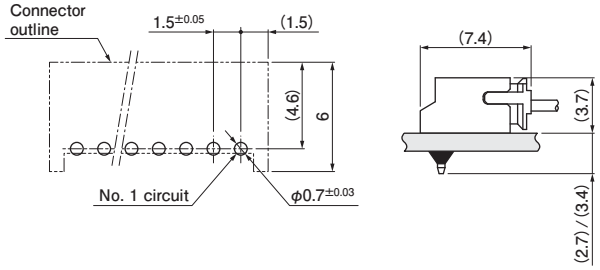
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PC board layout and Assembly layout/ Through-hole type

Top entry type



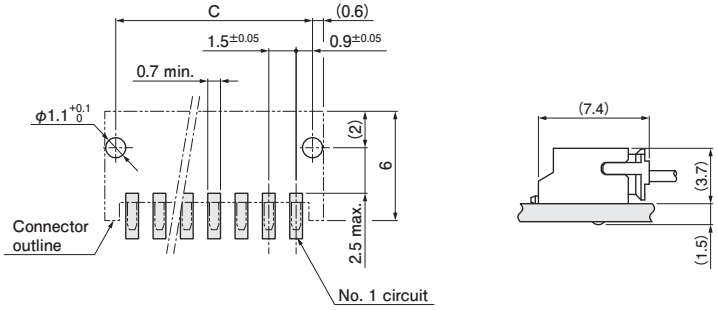
Side entry type



Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
2. Tolerance for the PCB hole pitch shall be ± 0.05 and shall not accumulate.
3. Hole dimensions differ depending on the type of PCB and PCB drilling method.
When using PCB made of hard material composed of fiberglass cloth, please consider a larger hole diameter.
The above dimensions are reference values. Please contact JST for details.

PC board layout and Assembly layout/ SMT type/ SM2 type (with boss)

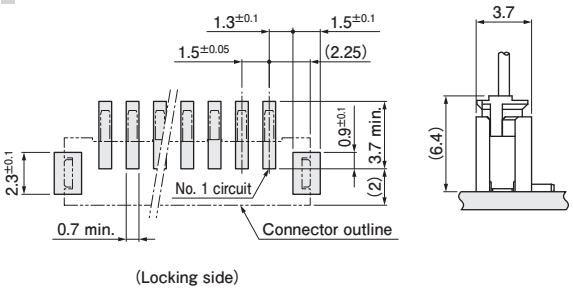
Side entry type



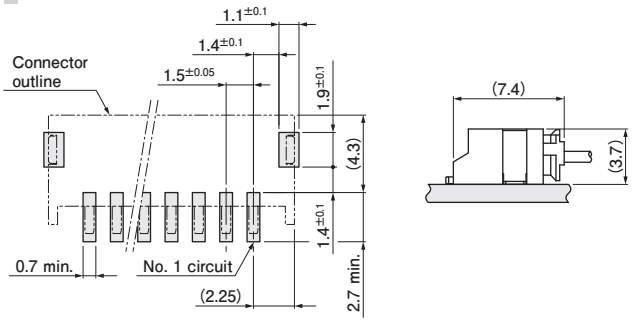
Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
2. Dimension C: See "Header/ SMT type/ SM2 type (with boss)" section on page 5.
3. Tolerance for the PCB pattern pitch shall be ± 0.05 and shall not accumulate.
The above dimensions are reference values. Please contact JST for details.

PC board layout and Assembly layout/ SMT type/ SM4 type (with reinforcement)

Top entry type



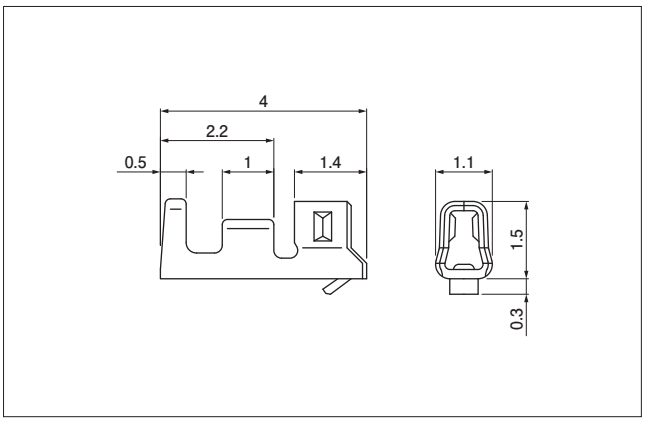
Side entry type



Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
2. Tolerance for the PCB pattern pitch shall be ± 0.05 and shall not accumulate.
The above dimensions are reference values. Please contact JST for details.

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Contact



Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm²)	Insulation O.D. (mm)	
SZH-003T-P0.5	#32 to #28 (0.032 to 0.08)	0.5 to 0.9	16,000
SZH-002T-P0.5	#28 to #26 (0.08 to 0.13)	0.8 to 1.1	13,000

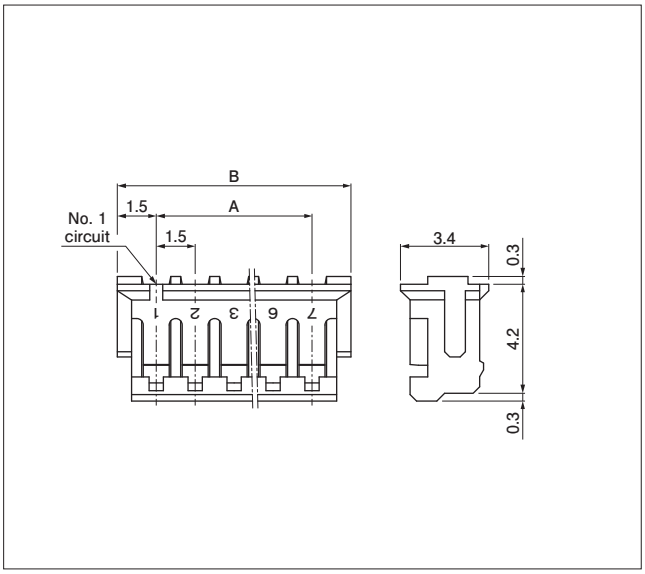
Material and Surface finish, etc.
Phosphor bronze, tin-plated

Crimping machine

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

Note: Contact JST for fully automatic crimping applicator.

Housing



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
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 Surface finish, etc.
PA 66, natural (white)

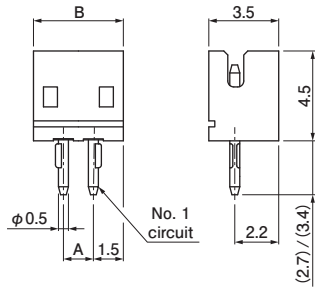
Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

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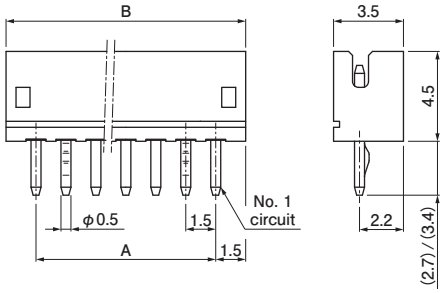
Header/ Through-hole type

Top entry type

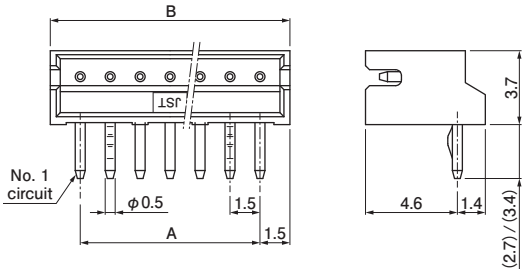
<2 circuits>



<3 circuits or more>



Side entry type



Top entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	2.7 mm soldering length	3.4 mm soldering length	A	B	
2	B2B-ZR	B2B-ZR-3.4	1.5	4.5	2,000
3	B3B-ZR	B3B-ZR-3.4	3.0	6.0	2,000
4	B4B-ZR	B4B-ZR-3.4	4.5	7.5	2,000
5	B5B-ZR	B5B-ZR-3.4	6.0	9.0	2,000
6	B6B-ZR	B6B-ZR-3.4	7.5	10.5	2,000
7	B7B-ZR	B7B-ZR-3.4	9.0	12.0	1,000
8	B8B-ZR	B8B-ZR-3.4	10.5	13.5	1,000
9	B9B-ZR	B9B-ZR-3.4	12.0	15.0	1,000
10	B10B-ZR	B10B-ZR-3.4	13.5	16.5	1,000
11	B11B-ZR	B11B-ZR-3.4	15.0	18.0	1,000
12	B12B-ZR	B12B-ZR-3.4	16.5	19.5	1,000
13	B13B-ZR	B13B-ZR-3.4	18.0	21.0	500

Material and Surface finish, etc.
Pin: Brass, copper-undercoated, tin-plated Wafer: PA 66 (Glass-filled), natural (ivory)

Note: 1. This product displays (LF)(SN) on a label.
2. 2.7 mm soldering length is suitable for 0.6 mm to 1.2 mm board thickness.
3.4 mm soldering length is suitable for 1.6 mm board thickness.
3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Side entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	2.7 mm soldering length	3.4 mm soldering length	A	B	2.7 mm soldering length	3.4 mm soldering length
2	S2B-ZR	S2B-ZR-3.4	1.5	4.5	2,000	2,000
3	S3B-ZR	S3B-ZR-3.4	3.0	6.0	2,000	1,000
4	S4B-ZR	S4B-ZR-3.4	4.5	7.5	2,000	2,000
5	S5B-ZR	S5B-ZR-3.4	6.0	9.0	1,000	1,000
6	S6B-ZR	S6B-ZR-3.4	7.5	10.5	1,000	1,000
7	S7B-ZR	S7B-ZR-3.4	9.0	12.0	1,000	1,000
8	S8B-ZR	S8B-ZR-3.4	10.5	13.5	1,000	1,000
9	S9B-ZR	S9B-ZR-3.4	12.0	15.0	1,000	1,000
10	S10B-ZR	S10B-ZR-3.4	13.5	16.5	1,000	1,000
11	S11B-ZR	S11B-ZR-3.4	15.0	18.0	500	500
12	S12B-ZR	S12B-ZR-3.4	16.5	19.5	500	500
13	S13B-ZR	S13B-ZR-3.4	18.0	21.0	500	500

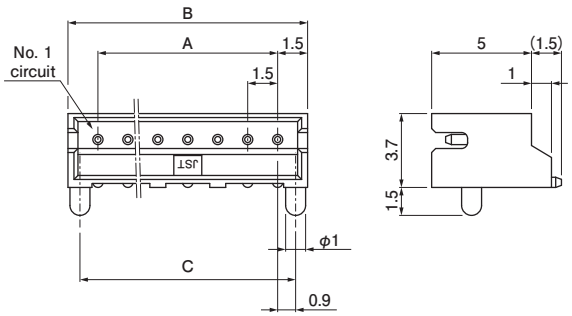
Material and Surface finish, etc.
Pin: Brass, copper-undercoated, tin-plated Wafer: PA 66 (Glass-filled), natural (ivory)

Note: 1. This product displays (LF)(SN) on a label.
2. 2.7 mm soldering length is suitable for 0.6 mm to 1.2 mm board thickness.
3.4 mm soldering length is suitable for 1.6 mm board thickness.
3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

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Header/ SMT type/ SM2 type (with boss)

Side entry type



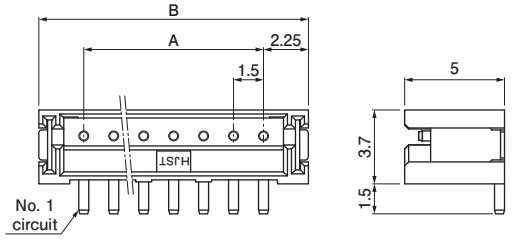
No. of circuits	Model No.	Dimensions (mm)			Q'ty/reel
	Side entry type	A	B	C	
2	S2B-ZR-SM2-TF	1.5	4.5	3.3	1,000
3	S3B-ZR-SM2-TF	3.0	6.0	4.8	1,000
4	S4B-ZR-SM2-TF	4.5	7.5	6.3	1,000
5	S5B-ZR-SM2-TF	6.0	9.0	7.8	1,000
6	S6B-ZR-SM2-TF	7.5	10.5	9.3	1,000
7	S7B-ZR-SM2-TF	9.0	12.0	10.8	1,000
8	S8B-ZR-SM2-TF	10.5	13.5	12.3	1,000
9	S9B-ZR-SM2-TF	12.0	15.0	13.8	1,000
10	S10B-ZR-SM2-TF	13.5	16.5	15.3	1,000
11	S11B-ZR-SM2-TF	15.0	18.0	16.8	1,000
12	S12B-ZR-SM2-TF	16.5	19.5	18.3	1,000
13	S13B-ZR-SM2-TF	18.0	21.0	19.8	1,000

Material and Surface finish, etc.
Pin: Brass, copper-undercoated, tin-plated Wafer: PA 46 (Glass-filled), natural (ivory)

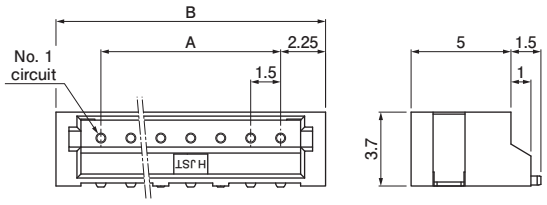
Note: 1. This product displays (LF)(SN) on a label.
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Header/ SMT type/ SM4 type (with reinforcement)

Top entry type



Side entry type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/reel
	Top entry type	Side entry type	A	B	
2	B2B-ZR-SM4-TF	S2B-ZR-SM4A-TF	1.5	6.0	1,000
3	B3B-ZR-SM4-TF	S3B-ZR-SM4A-TF	3.0	7.5	1,000
4	B4B-ZR-SM4-TF	S4B-ZR-SM4A-TF	4.5	9.0	1,000
5	B5B-ZR-SM4-TF	S5B-ZR-SM4A-TF	6.0	10.5	1,000
6	B6B-ZR-SM4-TF	S6B-ZR-SM4A-TF	7.5	12.0	1,000
7	B7B-ZR-SM4-TF	S7B-ZR-SM4A-TF	9.0	13.5	1,000
8	B8B-ZR-SM4-TF	S8B-ZR-SM4A-TF	10.5	15.0	1,000
9	B9B-ZR-SM4-TF	S9B-ZR-SM4A-TF	12.0	16.5	1,000
10	B10B-ZR-SM4-TF	S10B-ZR-SM4A-TF	13.5	18.0	1,000
11	B11B-ZR-SM4-TF	S11B-ZR-SM4A-TF	15.0	19.5	1,000
12	B12B-ZR-SM4-TF	S12B-ZR-SM4A-TF	16.5	21.0	1,000
13	B13B-ZR-SM4-TF	S13B-ZR-SM4A-TF	18.0	22.5	1,000

Material and Surface finish, etc.
Pin: Brass, copper-undercoated, tin-plated Wafer: PA 6T, natural (ivory) Reinforcement: Brass, copper-undercoated, tin-plated

Note: 1. This product displays (LF)(SN) on a label.
2. PA 9T is used for some colored products.
3. This product is supplied on embossed tape and reel packaging.
4. The top entry type is available with suction tape.
5. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

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Model number allocation

Contact

S ZH - 002 T - P 0.5

- Supply form: Strip form
- Series name
- Applicable wire range:
  003···AWG #32 to AWG #28
  002···AWG #28 to AWG #26
- Surface finish: Tin-plated
- Material: Phosphor bronze
- Applicable pin size

Housing

ZH R - 2 - □

- Series name
- Type: Receptacle
- No. of circuits
- Color: Blank···Natural (White), K···Black, R···Red, E···Blue, M···Green, L···Lemon yellow

Header/ Through-hole type

B 2 B - ZR - □ - □

- Header type:
  B···Top entry type, S···Side entry type
- No. of circuits
- Assembly product
- Series name
- Soldering length: Blank···2.7 mm, 3.4···3.4 mm
- Color: Blank···Natural (Ivory), K···Black, R···Red, E···Blue, M···Green

Header/ SMT type/ SM2 type

S 2 B - ZR - SM2 - TF

- Header type: Side entry type
- No. of circuits
- Assembly product
- Series name
- SMT specifications: With boss
- Packaging style: Embossed-taping

Header/ SMT type/ SM4 type/ Top entry type

B 2 B - ZR - SM4 - □ - TF □

- Header type: Top entry type
- No. of circuits
- Assembly product
- Series name
- SMT specifications: With reinforcement
- Color: Blank···Natural (Ivory), K···Black, R···Red, E···Blue, M···Geen, L···Lemon yellow, DO···Dark orange, DH···Dark gray
- Packaging style: Embossed-taping
- Suction tape: Blank···No, T···Yes

Header/ SMT type/ SM4 type/ Side entry type

S 2 B - ZR - SM4 A - □ - TF

- Header type: Side entry type
- No. of circuits
- Assembly product
- Series name
- SMT specifications: With reinforcement
- Sub model number
- Color: Blank···Natural (Ivory), K···Black, R···Red, E···Blue, M···Green, L···Lemon yellow
- Packaging style: Embossed-taping

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