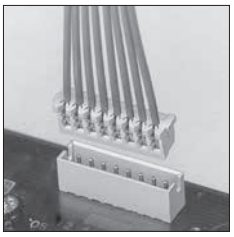
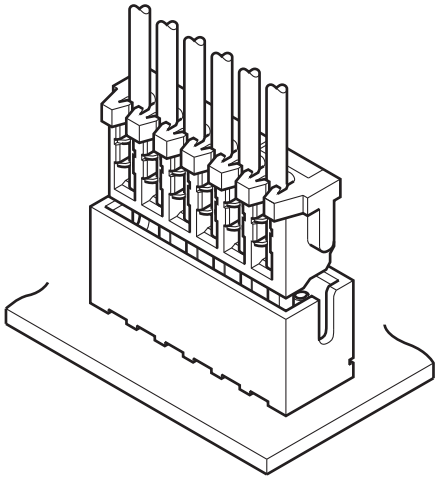


ZR CONNECTOR

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



This is a 1.5 mm pitch IDC connector for wire-to-board applications with a mounting height of 5.5 mm and a thickness of 3.5 mm, giving a compact and space-saving advantage when using the top entry type. The ZR connector offers a unique synergy with the twin U-slot contact design of the IDC socket, the three-point grip feature and the optimally designed wire strain relief. Moreover, the fully shrouded header ensures a secure and durable connection while reducing the risk of stress and misalignment. This connector system is not only compact, but offers a highly reliable solution to your interconnect requirements.

- Compact, space-saving design
- Twin U-slot
- 3-point grip structure
- Fully shrouded header ensures durability with a secure connection reducing the risk of stress and misalignment
- Socket compatible with the ZH crimp style connector

■ Specifications

- Current rating: 0.7 A　AC/DC (AWG #28)
- 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:
  UL style No./ UL1571
  Note: Please contact JST for details regarding the use of other UL style wires.
  Conductor size/ AWG #30, AWG #28
  Conductor composition/ 7 strands, tin-coated
  Insulation O.D./ ϕ0.7 mm to ϕ0.8 mm
  Note: Contact JST for wires larger than ϕ0.8 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.

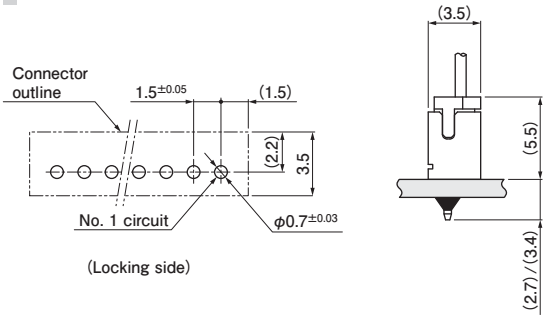
■ Standards

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).

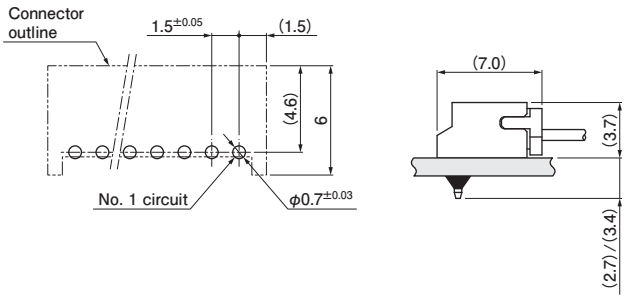
* Specifications registered to overseas standards may differ from the general specifications listed above.

PC board layout and Assembly layout/ DIP type

Top entry type



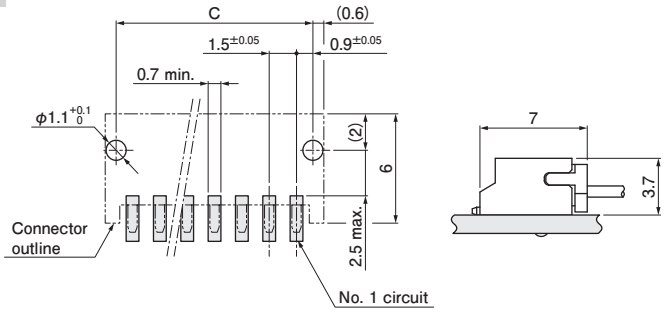
Side entry type



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)

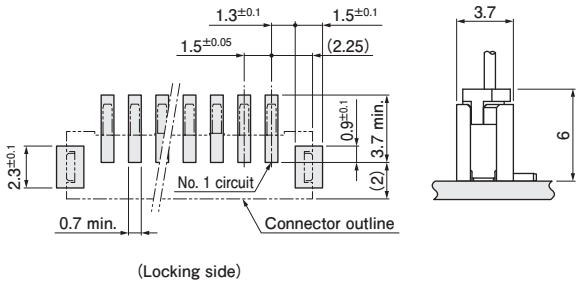
Side entry type



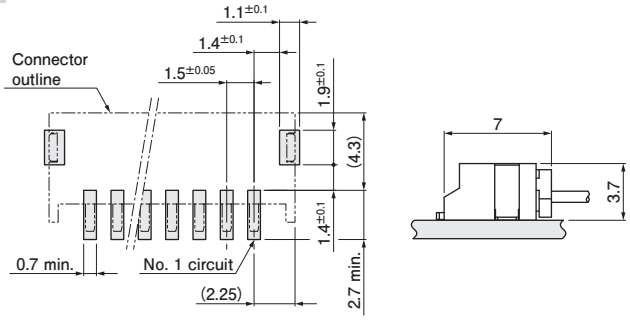
Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
2. Dimension C: See "Header/ SMT type/ SM2 type (with boss)" section on page 5.
3. Tolerance for the PCB pattern pitch shall be ± 0.05 and shall not accumulate.
The above dimensions are reference values. Please contact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

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

Top entry type

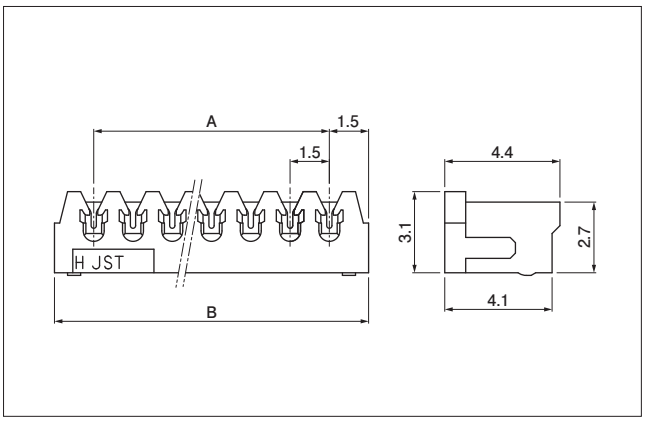


Side entry type



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.

Socket



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	AWG #30 applicable product	AWG #28 applicable product	A	B	
2	**02ZR-3H-P**	**02ZR-8M-P**	1.5	4.5	2,000
3	**03ZR-3H-P**	**03ZR-8M-P**	3.0	6.0	2,000
4	**04ZR-3H-P**	**04ZR-8M-P**	4.5	7.5	2,000
5	**05ZR-3H-P**	**05ZR-8M-P**	6.0	9.0	2,000
6	**06ZR-3H-P**	**06ZR-8M-P**	7.5	10.5	2,000
7	**07ZR-3H-P**	**07ZR-8M-P**	9.0	12.0	2,000
8	**08ZR-3H-P**	**08ZR-8M-P**	10.5	13.5	2,000
9	**09ZR-3H-P**	**09ZR-8M-P**	12.0	15.0	2,000
10	**10ZR-3H-P**	**10ZR-8M-P**	13.5	16.5	2,000
11	**11ZR-3H-P**	**11ZR-8M-P**	15.0	18.0	2,000
12	**12ZR-3H-P**	**12ZR-8M-P**	16.5	19.5	2,000
13	**13ZR-3H-P**	**13ZR-8M-P**	18.0	21.0	2,000

Material and Surface finish, etc.

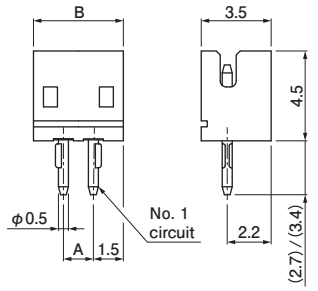
Contact: Phosphor bronze, tin-plated
Housing: PA 66 (Glass-filled)
Natural (gray)/ AWG #30 applicable product
Green/ AWG #28 applicable product

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).

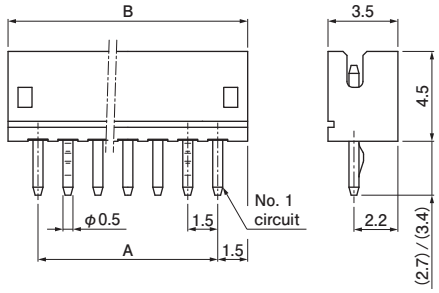
Header/ DIP type

Top entry type

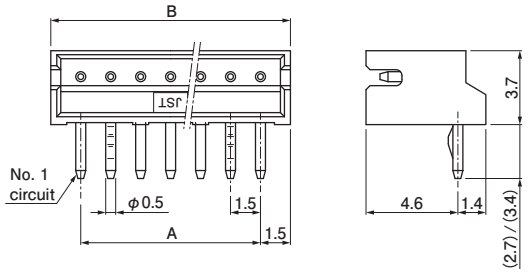
<2 circuits>



<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

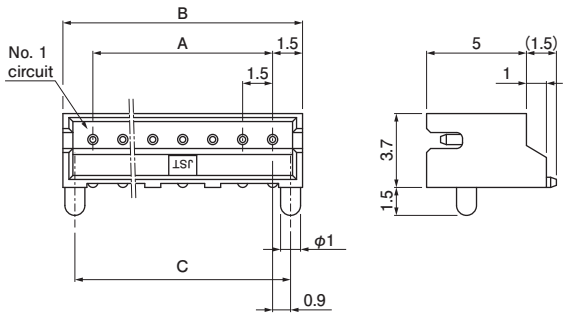
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	2.7 mm soldering length	3.4 mm soldering length	A	B	2.7 mm soldering length	3.4 mm soldering length
2	**S2B-ZR**	**S2B-ZR-3.4**	1.5	4.5	2,000	2,000
3	**S3B-ZR**	**S3B-ZR-3.4**	3.0	6.0	2,000	1,000
4	**S4B-ZR**	**S4B-ZR-3.4**	4.5	7.5	2,000	2,000
5	**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).

Header/ SMT type/ SM2 type (with boss)

Side entry type



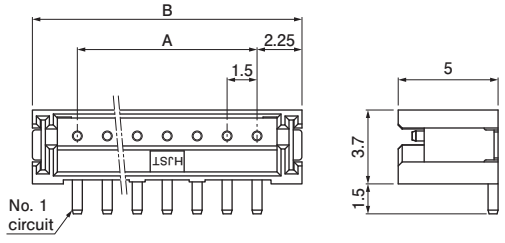
No. of circuits	Model No.	Dimensions (mm)			Q'ty/reel
	Side entry type	A	B	C	
2	S2B-ZR-SM2-TF	1.5	4.5	3.3	1,000
3	S3B-ZR-SM2-TF	3.0	6.0	4.8	1,000
4	S4B-ZR-SM2-TF	4.5	7.5	6.3	1,000
5	S5B-ZR-SM2-TF	6.0	9.0	7.8	1,000
6	S6B-ZR-SM2-TF	7.5	10.5	9.3	1,000
7	S7B-ZR-SM2-TF	9.0	12.0	10.8	1,000
8	S8B-ZR-SM2-TF	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)

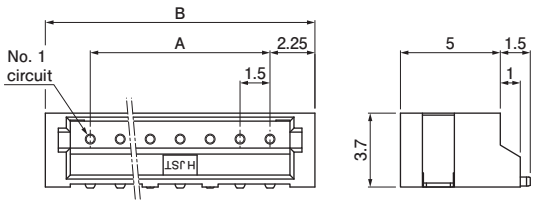
Note: 1. This product displays (LF)(SN) on a label.
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Header/ SMT type/ SM4 type (with reinforcement)

Top entry type



Side entry type



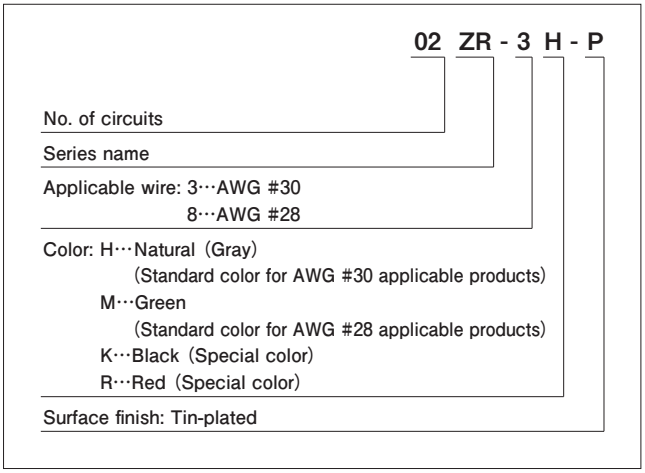
No. of circuits	Model No.		Dimensions (mm)		Q'ty/reel
	Top entry type	Side entry type	A	B	
2	B2B-ZR-SM4-TF	S2B-ZR-SM4A-TF	1.5	6.0	1,000
3	B3B-ZR-SM4-TF	S3B-ZR-SM4A-TF	3.0	7.5	1,000
4	B4B-ZR-SM4-TF	S4B-ZR-SM4A-TF	4.5	9.0	1,000
5	B5B-ZR-SM4-TF	S5B-ZR-SM4A-TF	6.0	10.5	1,000
6	B6B-ZR-SM4-TF	S6B-ZR-SM4A-TF	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

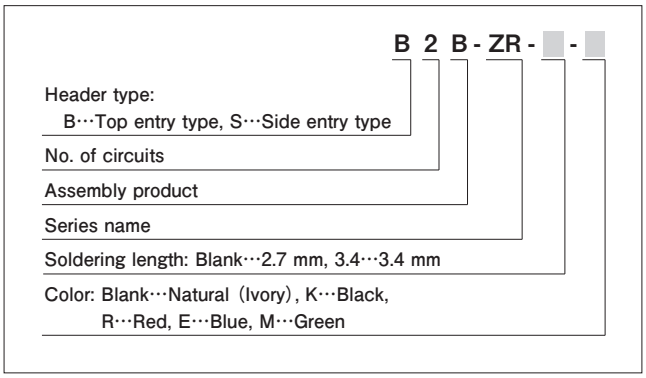
Note: 1. This product displays (LF)(SN) on a label.
2. PA 9T is used for some colored products.
3. This product is supplied on embossed tape and reel packaging.
4. The top entry type is available with suction tape.
5. For flame retardant grade of resin material used, please refer to the "List of Registered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

Model number allocation

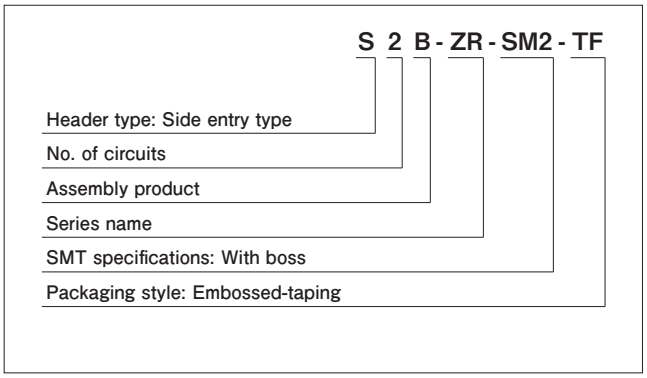
Socket



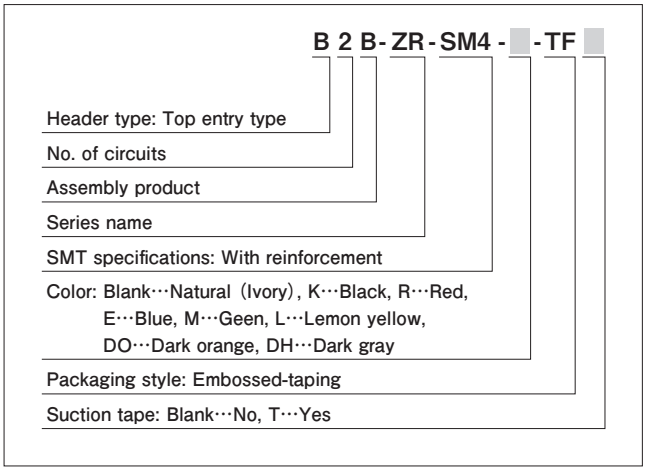
Header/ DIP type



Header/ SMT type/ SM2 type



Header/ SMT type/ SM4 type/ Top entry type



Header/ SMT type/ SM4 type/ Side entry type