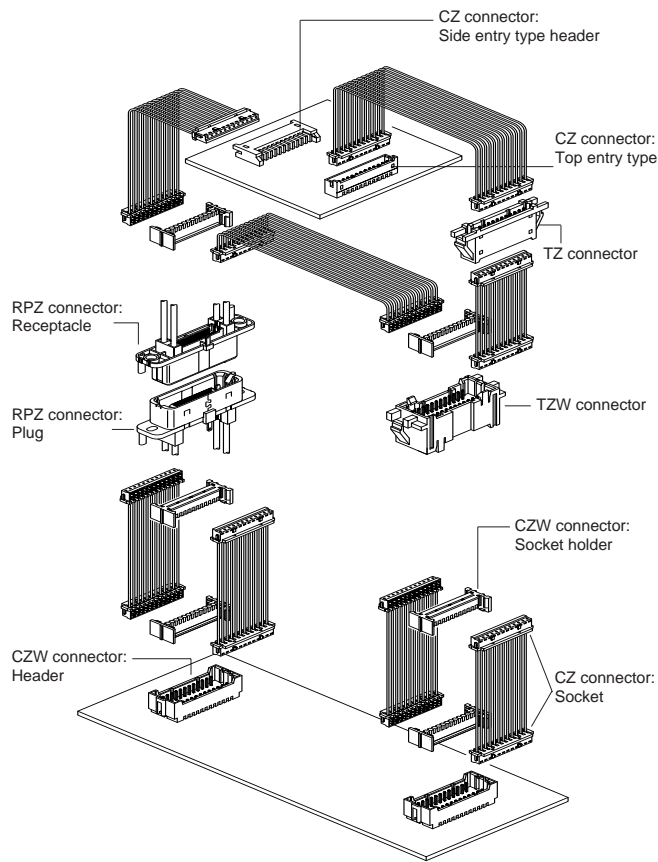


# CZ FAMILY SERIES/CZ·CZW·CZH·CZHW·TZ·TZW

## 1.5mm pitch/Disconnectable Insulation displacement connectors



※ CZ connector used for the harness shown in the above-mentioned figure can be replaced to CZH connector.

**Based upon the 1.5 mm pitch CZ connectors, the CZ family connectors have been expanded to meet the requirements of high density packaging. The CZW connector holder allows dual-row wire-to-board connection using the CZ sockets, while the TZ (single-row) or TZW (dual-row) allows wire-to-wire connection, also using the CZ sockets.**

### CZ connector

- Distortion resistant construction
- Compact and low profile CZW connector

### CZW connector

- Low insertion force
- Locking construction

### CZH connector

- Housing lance
- Int interchangeability

### TZ/TZW connector

- The TZ connector is applicable to single-row connection, while the TZW connector is for dual-row connection.
- Applicable to wide range of panel thickness
- The design of the panel lock part does not allow the wires to be caught there before mounting on the panel.

### Standards

- UL Recognized E60389
- CSA Certified LR20812

### Specifications

Item	Seirse	CZ / CZW connector	CZH / CZHW connector	TZ / TZW connector
Current rating		2 A AC, DC (AWG #26)		
Voltage rating		100 V AC, DC		
Temperature rise		-25°C to +85°C (including temperature rise)		
Contact resistance		Initial value / 10 mΩ max. After environmental tests / 20 mΩ max.	Initial value / 20 mΩ max. After environmental tests / 40 mΩ max.	
Insulation resistance		500 MΩ min.		
Withstanding voltage		500 VAC/minute		
Applicable wire		UL10272 (Contact JST for other UL style wires.) AWG #28, #26 Conductor / 7-strands, tincoated annealed copper Insulation O.D. / 0.7 to 0.83 mm	AWG #28 to #26	—
Applicable PC board thickness		1.6 mm		—
Applicable panel thickness		—	0.5 to 2 mm	

\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

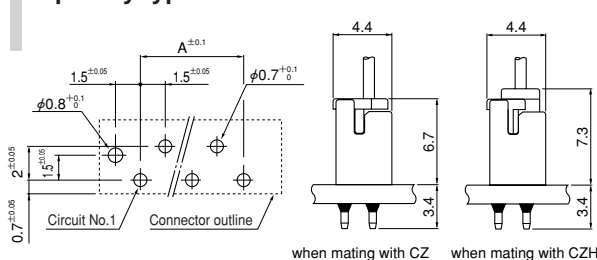
\* Contact JST for details.

\* Compliant with RoHS.

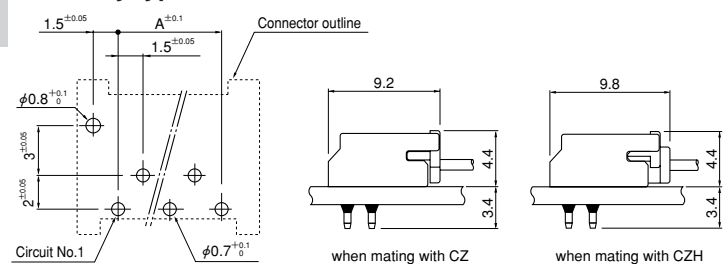
### PC board layout and Assembly layout

#### <CZ connector through-hole type>

##### Top entry type



##### Side entry type



Note: 1. The above figure is the figure viewed from the connector mounting side.

2. Tolerances are non-cumulative: ± 0.05 mm for all centers.

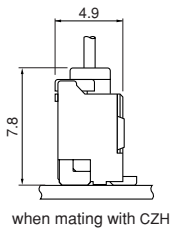
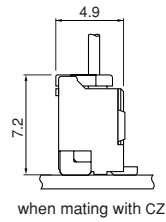
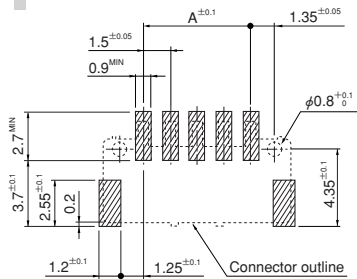
3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

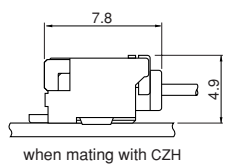
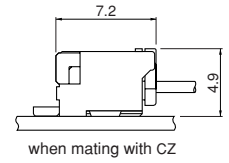
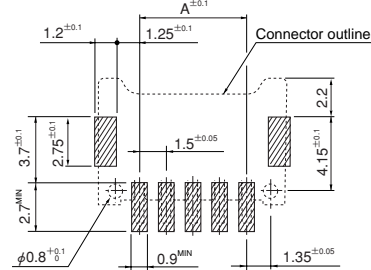
## PC board layout and Assembly layout

### <CZ connector SMT type>

#### Top entry type

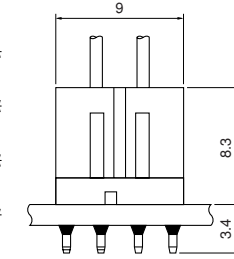
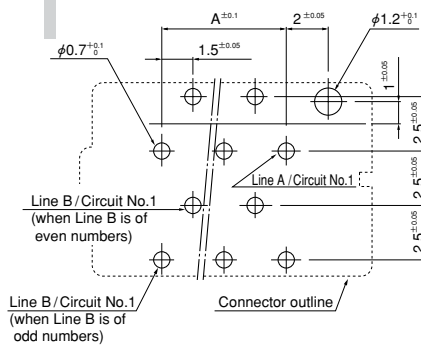


#### Side entry type

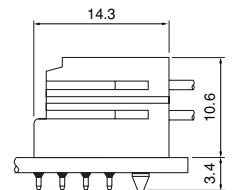
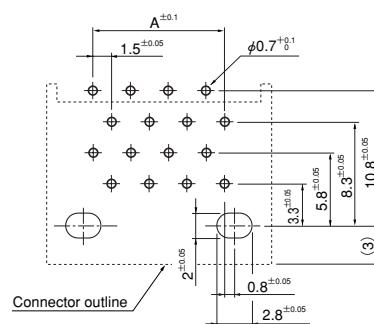


### <CZW connector through-hole type>

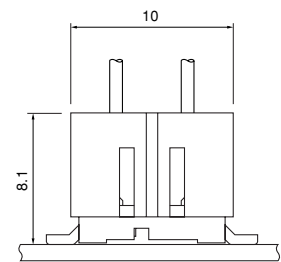
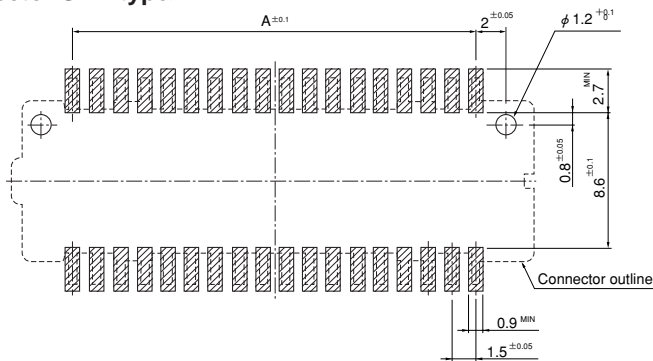
#### Top entry type



#### Side entry type



### <CZW connector SMT type>

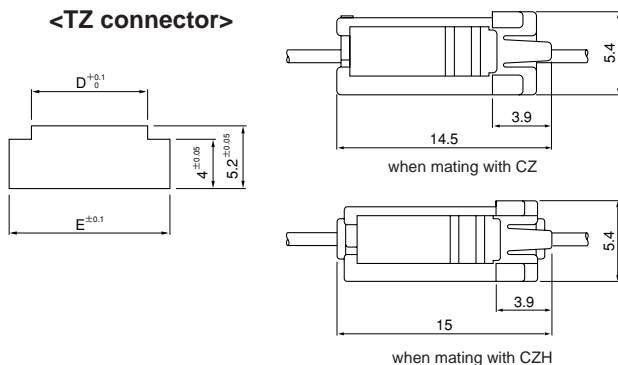


Note: 1. The above figure is the figure viewed from the connector mounting side.

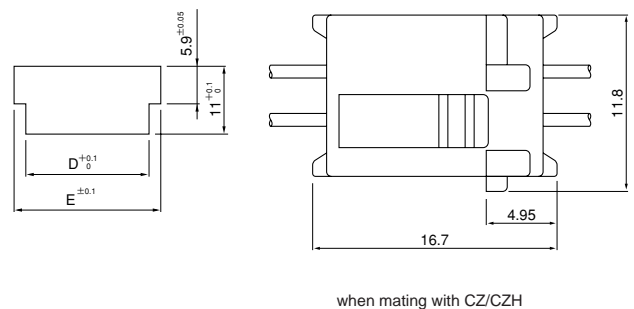
2. Tolerances are non-cumulative: ±0.05 mm for all centers.

3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

### <TZ connector>



### <TZW connector>

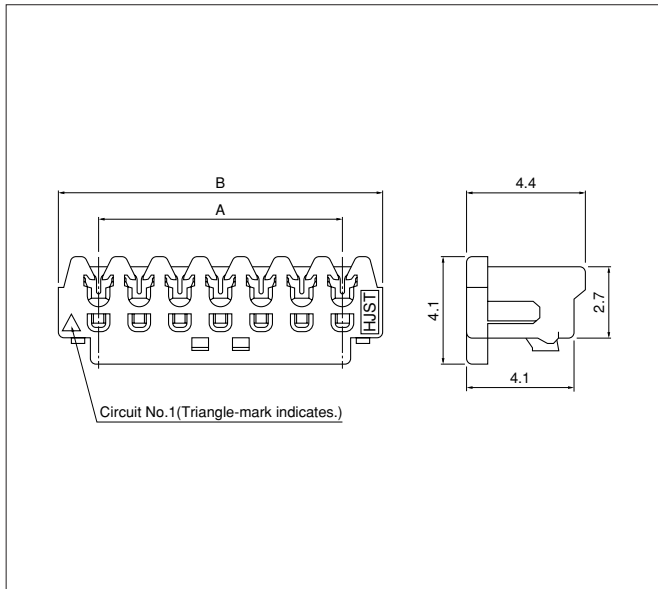


D,E dimensions: Refer to TZ connector (Until for wire-to-wire connection).

D,E dimensions: Refer to TZ connector (Dual-row until for wire-to-wire connection).

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZ connector socket



Circuits	Model No.		Dimensions (mm)		Q'ty/box
	Gray	Yellow	A	B	
2	<b>02CZ-6H</b>	<b>02CZ-6Y</b>	1.5	4.5	2,000
3	<b>03CZ-6H</b>	<b>03CZ-6Y</b>	3.0	6.0	2,000
4	<b>04CZ-6H</b>	<b>04CZ-6Y</b>	4.5	7.5	2,000
5	<b>05CZ-6H</b>	<b>05CZ-6Y</b>	6.0	9.0	2,000
6	<b>06CZ-6H</b>	<b>06CZ-6Y</b>	7.5	10.5	2,000
7	<b>07CZ-6H</b>	<b>07CZ-6Y</b>	9.0	12.0	2,000
8	<b>08CZ-6H</b>	<b>08CZ-6Y</b>	10.5	13.5	2,000
9	<b>09CZ-6H</b>	<b>09CZ-6Y</b>	12.0	15.0	1,000
10	<b>10CZ-6H</b>	<b>10CZ-6Y</b>	13.5	16.5	1,000
11	<b>11CZ-6H</b>	<b>11CZ-6Y</b>	15.0	18.0	1,000
12	<b>12CZ-6H</b>	<b>12CZ-6Y</b>	16.5	19.5	1,000
13	<b>13CZ-6H</b>	<b>13CZ-6Y</b>	18.0	21.0	1,000
14	<b>14CZ-6H</b>	<b>14CZ-6Y</b>	19.5	22.5	1,000
15	<b>15CZ-6H</b>	<b>15CZ-6Y</b>	21.0	24.0	1,000
16	<b>16CZ-6H</b>	<b>16CZ-6Y</b>	22.5	25.5	1,000
17	<b>17CZ-6H</b>	<b>17CZ-6Y</b>	24.0	27.0	1,000
18	<b>18CZ-6H</b>	<b>18CZ-6Y</b>	25.5	28.5	1,000
19	<b>19CZ-6H</b>	<b>19CZ-6Y</b>	27.0	30.0	1,000
20	<b>20CZ-6H</b>	<b>20CZ-6Y</b>	28.5	31.5	1,000

### Material and Finish

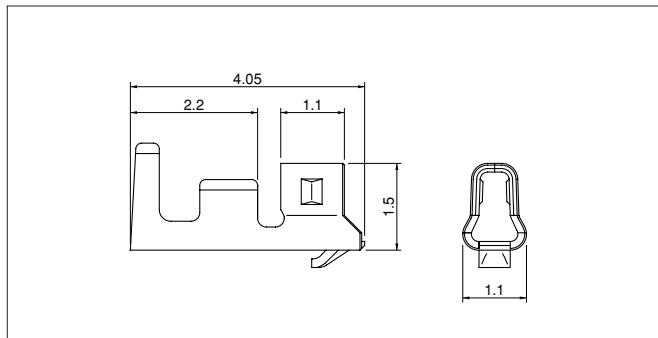
Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

### RoHS compliance

<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. **02CZ-6H**  
Y...yellow H...natural (grayish color)

## CZH connector contact



Model No.	Applicable wire		Insulation O.D. (mm)	Q'ty/reel
	mm <sup>2</sup>	AWG #		
<b>SCZH-002T-P0.5</b>	0.08~0.13	28~26	0.8~1.1	13,000

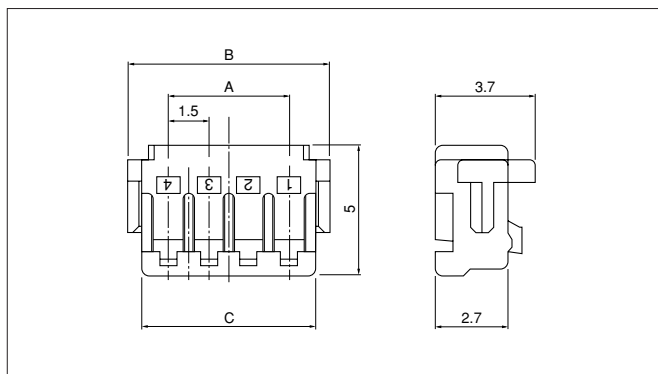
### Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

### RoHS compliance

Contact	Crimping machine	Applicator		
		Crimp applicator	Dies	Crimp applicator with dies
<b>SCZH-002T-P0.5</b>	AP-K2N	MKS-L	MK/SCZH-002-05	APLMK SCZH002-05

## CZH connector housing



### RoHS compliance

<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. **CZHR-02V-S**  
S...natural (white)  
K...black H...gray Y...yellow

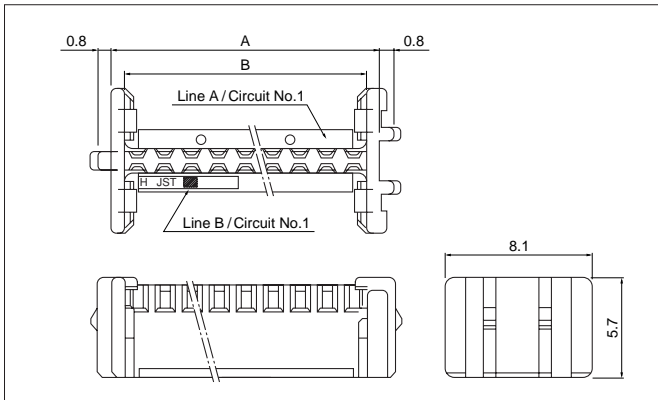
Circuits	Model No.	Dimensions (mm)			Q'ty/box
		A	B	C	
2	<b>CZHR-02V-S</b>	1.5	4.5	3.5	1,000
3	<b>CZHR-03V-S</b>	3.0	6.0	5.0	1,000
4	<b>CZHR-04V-S</b>	4.5	7.5	6.5	1,000
5	<b>CZHR-05V-S</b>	6.0	9.0	8.0	1,000
6	<b>CZHR-06V-S</b>	7.5	10.5	9.5	1,000
7	<b>CZHR-07V-S</b>	9.0	12.0	11.0	1,000
8	<b>CZHR-08V-S</b>	10.5	13.5	12.5	1,000
9	<b>CZHR-09V-S</b>	12.0	15.0	14.0	1,000
10	<b>CZHR-10V-S</b>	13.5	16.5	15.5	1,000
11	<b>CZHR-11V-S</b>	15.0	18.0	17.0	1,000
12	<b>CZHR-12V-S</b>	16.5	19.5	18.5	1,000
13	<b>CZHR-13V-S</b>	18.0	21.0	20.0	1,000
14	<b>CZHR-14V-S</b>	19.5	22.5	21.5	1,000
15	<b>CZHR-15V-S</b>	21.0	24.0	23.0	1,000
16	<b>CZHR-16V-S</b>	22.5	25.5	24.5	1,000
17	<b>CZHR-17V-S</b>	24.0	27.0	26.0	1,000
19	<b>CZHR-19V-S</b>	27.0	30.0	29.0	1,000
20	<b>CZHR-20V-S</b>	28.5	31.5	30.5	1,000

### Material

PBT, UL94V-0, natural (white)

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZW connector holder

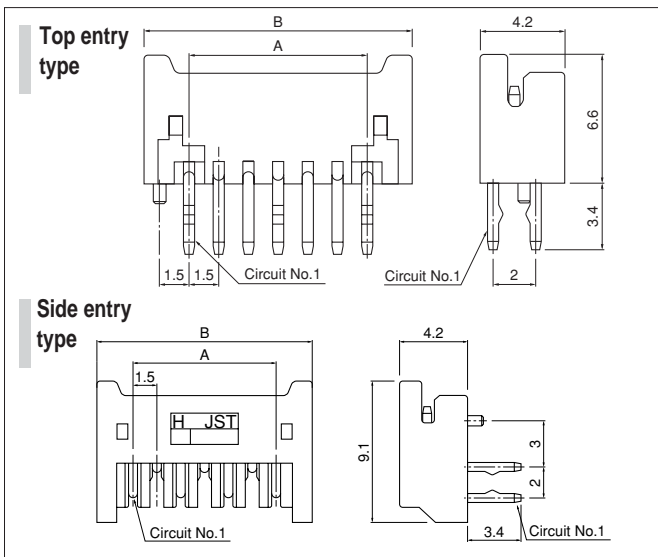


Circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
16	<b>CZWH-16-S</b>	14.9	13.5	1,000
18	<b>CZWH-18-S</b>	16.4	15.0	1,000
20	<b>CZWH-20-S</b>	17.9	16.5	1,000
22	<b>CZWH-22-S</b>	19.4	18.0	1,000
24	<b>CZWH-24-S</b>	20.9	19.5	1,000
26	<b>CZWH-26-S</b>	22.4	21.0	1,000
28	<b>CZWH-28-S</b>	23.9	22.5	1,000
30	<b>CZWH-30-S</b>	25.4	24.0	1,000
32	<b>CZWH-32-S</b>	26.9	25.5	1,000
34	<b>CZWH-34-S</b>	28.4	27.0	1,000
36	<b>CZWH-36-S</b>	29.9	28.5	1,000
38	<b>CZWH-38-S</b>	31.4	30.0	1,000
40	<b>CZWH-40-S</b>	32.9	31.5	1,000

Material  
PBT, UL94V-0, natural (white)

RoHS compliance

## CZ connector through-hole type shrouded header



Circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>B02B-CZHK-B-1</b>	<b>S02B-CZHK-B-1</b>	1.5	6.0	2,072	1,480
3	<b>B03B-CZHK-B-1</b>	<b>S03B-CZHK-B-1</b>	3.0	7.5	1,624	1,160
4	<b>B04B-CZHK-B-1</b>	<b>S04B-CZHK-B-1</b>	4.5	9.0	1,344	960
5	<b>B05B-CZHK-B-1</b>	<b>S05B-CZHK-B-1</b>	6.0	10.5	1,176	840
6	<b>B06B-CZHK-B-1</b>	<b>S06B-CZHK-B-1</b>	7.5	12.0	1,008	720
7	<b>B07B-CZHK-B-1</b>	<b>S07B-CZHK-B-1</b>	9.0	13.5	896	640
8	<b>B08B-CZHK-B-1</b>	<b>S08B-CZHK-B-1</b>	10.5	15.0	784	560
9	<b>B09B-CZHK-B-1</b>	<b>S09B-CZHK-B-1</b>	12.0	16.5	728	520
10	<b>B10B-CZHK-B-1</b>	<b>S10B-CZHK-B-1</b>	13.5	18.0	672	480
11	<b>B11B-CZHK-B-1</b>	<b>S11B-CZHK-B-1</b>	15.0	19.5	616	440
12	<b>B12B-CZHK-B-1</b>	<b>S12B-CZHK-B-1</b>	16.5	21.0	560	400
13	<b>B13B-CZHK-B-1</b>	<b>S13B-CZHK-B-1</b>	18.0	22.5	504	360
14	<b>B14B-CZHK-B-1</b>	<b>S14B-CZHK-B-1</b>	19.5	24.0	504	360
15	<b>B15B-CZHK-B-1</b>	<b>S15B-CZHK-B-1</b>	21.0	25.5	448	320
16	<b>B16B-CZHK-B-1</b>	<b>S16B-CZHK-B-1</b>	22.5	27.0	448	320
17	<b>B17B-CZHK-B-1</b>	<b>S17B-CZHK-B-1</b>	24.0	28.5	392	280
18	<b>B18B-CZHK-B-1</b>	<b>S18B-CZHK-B-1</b>	25.5	30.0	392	280
19	<b>B19B-CZHK-B-1</b>	<b>S19B-CZHK-B-1</b>	27.0	31.5	392	280
20	<b>B20B-CZHK-B-1</b>	<b>S20B-CZHK-B-1</b>	28.5	33.0	336	240

Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

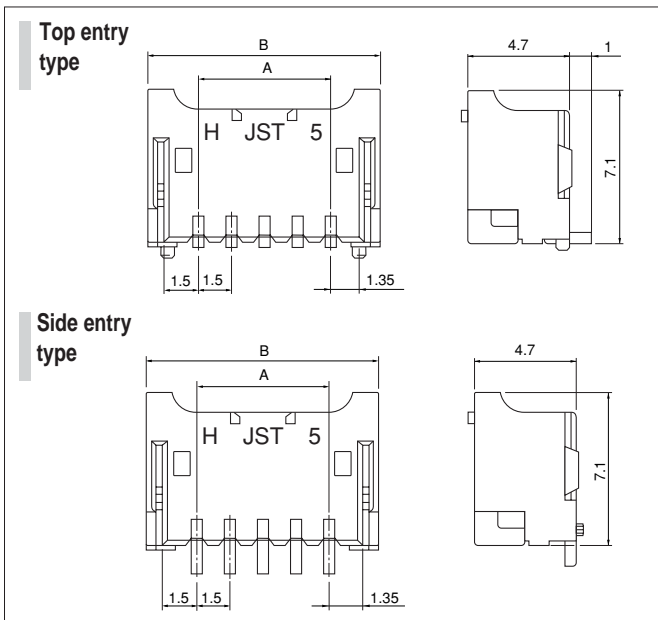
Note: Models B( )B-CZHK-B are the headers without the boss.

Note: Models S( )B-CZHK-B are the headers without the boss.

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

<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. **B02B-CZHK-B-1** H...natural (grayish color) Y...yellow K...black

## CZ connector SMT type shrouded header



Circuits	Model No.		Dimensions (mm)		Q'ty/reel	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
2	<b>BM02B-CZSS-1-TF</b>	<b>SM02B-CZSS-1-TB</b>	1.5	6.0	800	1,250
4	<b>BM04B-CZSS-1-TF</b>	<b>SM04B-CZSS-1-TB</b>	4.5	9.0	800	1,250
5	<b>BM05B-CZSS-1-TF</b>	<b>SM05B-CZSS-1-TB</b>	6.0	10.5	800	1,250
6	<b>BM06B-CZSS-1-TF</b>	<b>SM06B-CZSS-1-TB</b>	7.5	12.0	800	1,250
8	<b>BM08B-CZSS-1-TF</b>	<b>SM08B-CZSS-1-TB</b>	10.5	15.0	800	1,250
10	<b>BM10B-CZSS-1-TF</b>	<b>SM10B-CZSS-1-TB</b>	13.5	18.0	800	1,250
13	<b>BM13B-CZSS-1-TF</b>	<b>SM13B-CZSS-1-TB</b>	18.0	22.5	800	1,250
14	<b>BM14B-CZSS-1-TF</b>	—	19.5	24.0	800	—
15	<b>BM15B-CZSS-1-TF</b>	—	21.0	25.5	800	—
16	<b>BM16B-CZSS-1-TF</b>	<b>SM16B-CZSS-1-TB</b>	22.5	27.0	800	1,250
17	<b>BM17B-CZSS-1-TF</b>	—	24.0	28.5	800	—
20	<b>BM20B-CZSS-1-TF</b>	—	28.5	33.0	800	—

Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Wafer: PA, UL94V-0, natural (ivory)

Solder tab: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Note: Models BM( )B-CZSS-TF are the headers without the boss.

Note: Models SM( )B-CZSS-TF are the headers without the boss.

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

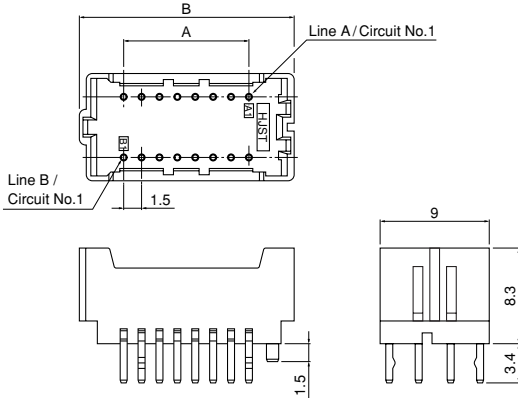
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

ex. **B02B-CZSS-1-TF** S...natural (ivory) H...gray

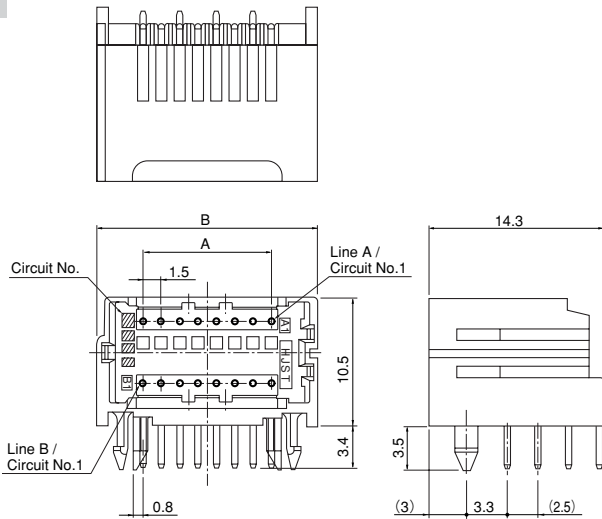
# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## CZW connector through-hole type shrouded header

### Top entry type



### Side entry type



Circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
16	<b>B16B-CZW<del>H</del>K-B-1</b>	—	10.5	18.0	420	—
18	<b>B18B-CZW<del>H</del>K-B-1</b>	—	12.0	19.5	385	—
20	<b>B20B-CZW<del>H</del>K-B-1</b>	<b>S20B-CZW<del>H</del>S-B-1</b>	13.5	21.0	350	280
22	<b>B22B-CZW<del>H</del>K-B-1</b>	—	15.0	22.5	315	—
24	<b>B24B-CZW<del>H</del>K-B-1</b>	—	16.5	24.0	315	—
26	<b>B26B-CZW<del>H</del>K-B-1</b>	<b>S26B-CZW<del>H</del>S-B-1</b>	18.0	25.5	280	224
28	<b>B28B-CZW<del>H</del>K-B-1</b>	—	19.5	27.0	280	—
30	<b>B30B-CZW<del>H</del>K-B-1</b>	—	21.0	28.5	245	—
32	<b>B32B-CZW<del>H</del>K-B-1</b>	—	22.5	30.0	245	—
34	<b>B34B-CZW<del>H</del>K-B-1</b>	—	24.0	31.5	245	—
36	<b>B36B-CZW<del>H</del>K-B-1</b>	—	25.5	33.0	210	—
38	<b>B38B-CZW<del>H</del>K-B-1</b>	—	27.0	34.5	210	—
40	<b>B40B-CZW<del>H</del>K-B-1</b>	<b>S40B-CZW<del>H</del>S-B-1</b>	28.5	36.0	210	168

#### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

Note: Models B( )B-CZW~~H~~K-B are the headers without the boss.

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

<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.

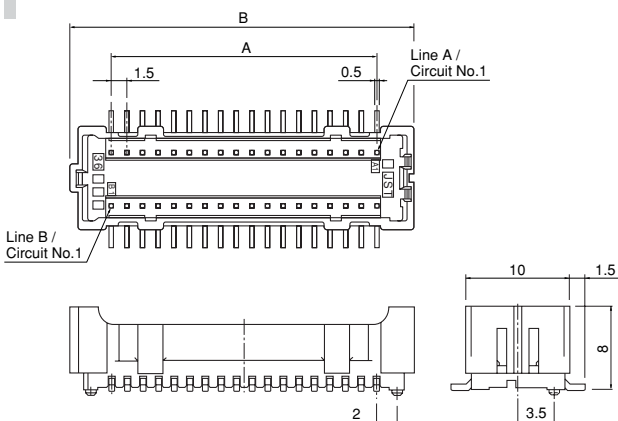
ex. **B16B-CZW~~H~~K-B-1**

H...natural (grayish color)

Y...yellow

## CZW connector SMT type shrouded header

### Top entry type



Circuits	Model No.	Dimensions (mm)		Q'ty/reel
		A	B	
36	<b>BM36B-CZW<del>S</del>SS-1-TF</b>	25.5	33.0	300
40	<b>BM40B-CZW<del>S</del>SS-1-TF</b>	28.5	36.0	300

#### Material and Finish

Press pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

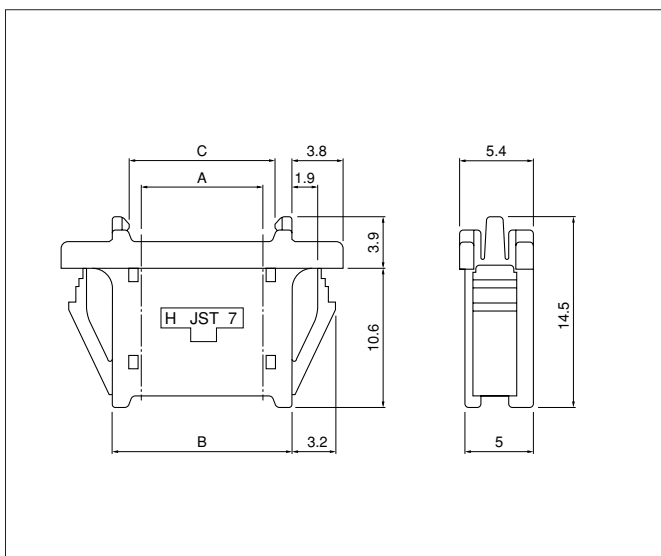
Wafer: PA, UL94V-0, natural (ivory)

Note: Models BM( )B-CZW~~S~~SS-TF are the headers without the boss.

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

# CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

## TZ connector (Unit for wire-to-wire connection)



Circuits	Model No.	Dimensions (mm)					Q'ty/box
		A	B	C	D	E	
2	BU02P-TZ-S	1.5	5.9	3.5	6.3	9.9	500
3	BU03P-TZ-S	3.0	7.4	5.0	7.8	11.4	500
4	BU04P-TZ-S	4.5	8.9	6.5	9.3	12.9	500
5	BU05P-TZ-S	6.0	10.4	8.0	10.8	14.4	500
6	BU06P-TZ-S	7.5	11.9	9.5	12.3	15.9	250
7	BU07P-TZ-S	9.0	13.4	11.0	13.8	17.4	250
8	BU08P-TZ-S	10.5	14.9	12.5	15.3	18.9	250
9	BU09P-TZ-S	12.0	16.4	14.0	16.8	20.4	250
10	BU10P-TZ-S	13.5	17.9	15.5	18.3	21.9	250
11	BU11P-TZ-S	15.0	19.4	17.0	19.8	23.4	250
12	BU12P-TZ-S	16.5	20.9	18.5	21.3	24.9	250
13	BU13P-TZ-S	18.0	22.4	20.0	22.8	26.4	250
14	BU14P-TZ-S	19.5	23.9	21.5	24.3	27.9	250
15	BU15P-TZ-S	21.0	25.4	23.0	25.8	29.4	250
16	BU16P-TZ-S	22.5	26.9	24.5	27.3	30.9	250
17	BU17P-TZ-S	24.0	28.4	26.0	28.8	32.4	250
18	BU18P-TZ-S	25.5	29.9	27.5	30.3	33.9	150
19	BU19P-TZ-S	27.0	31.4	29.0	31.8	35.4	150
20	BU20P-TZ-S	28.5	32.9	30.5	33.3	36.9	100

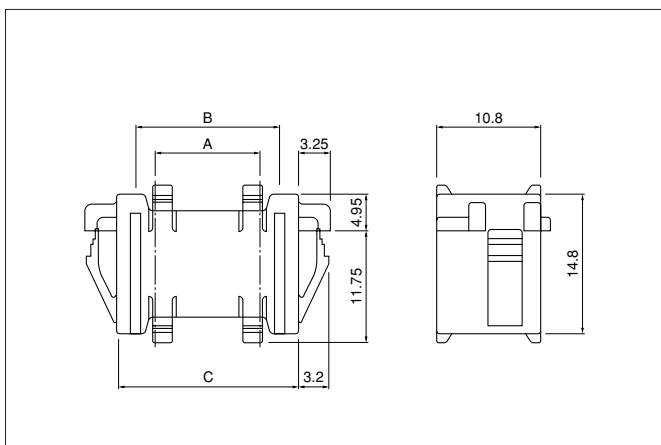
### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural (white)

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

Note: D and E dimensions; Refer to the panel layout of TZ connector (Page2).

## TZW connector (Dual-row unit for wire-to-wire connection)



Circuits	Model No.	Dimensions (mm)					Q'ty/box
		A	B	C	D	E	
16	BU16P-TZW-S	10.5	15.0	19.0	19.4	23.0	160
18	BU18P-TZW-S	12.0	16.5	20.5	20.9	24.5	140
20	BU20P-TZW-S	13.5	18.0	22.0	22.4	26.0	140
22	BU22P-TZW-S	15.0	19.5	23.5	23.9	27.5	140
24	BU24P-TZW-S	16.5	21.0	25.0	25.4	29.0	120
26	BU26P-TZW-S	18.0	22.5	26.5	26.9	30.5	120
28	BU28P-TZW-S	19.5	24.0	28.0	28.4	32.0	120
30	BU30P-TZW-S	21.0	25.5	29.5	29.9	33.5	100
32	BU32P-TZW-S	22.5	27.0	31.0	31.4	35.0	100
34	BU34P-TZW-S	24.0	28.5	32.5	32.9	36.5	100
36	BU36P-TZW-S	25.5	30.0	34.0	34.4	38.0	100
38	BU38P-TZW-S	27.0	31.5	35.5	35.9	39.5	100
40	BU40P-TZW-S	28.5	33.0	37.0	37.4	41.0	80

### Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)  
Housing: PA 66, UL94V-0, natural (white)

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

Note: D and E dimensions; Refer to the panel layout of TZW connector (Page2).