



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



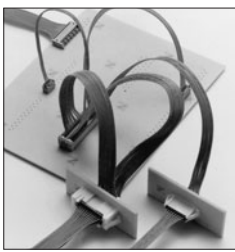
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

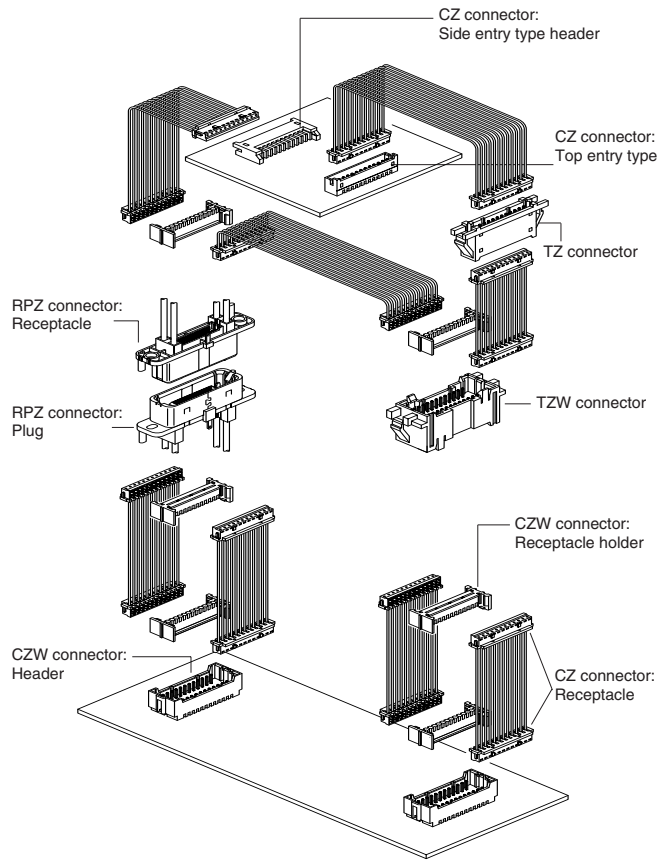
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





# 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 1.5mm 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 receptacles, while the TZ (single-row) or TZW (dual-row) allows wire-to-wire connection, also using the CZ receptacles.**

### CZ connector

- Distortion resistant construction
- Compact and low profile

### CZW connector

- Low insertion force
- Locking construction

### CZH connector

- Housing lance
- Intchangeability

### 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
- CS Certified LR20812

### Specifications

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

\* Compliant with RoHS.

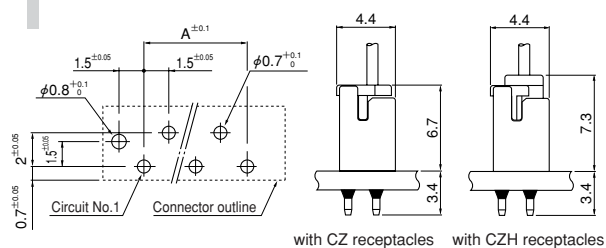
\* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

\* Contact JST for details.

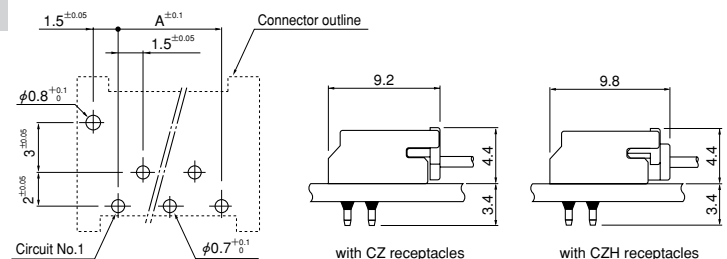
### PC board layout (viewed from component side) and Assembly layout

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

##### Top entry type



##### Side entry type



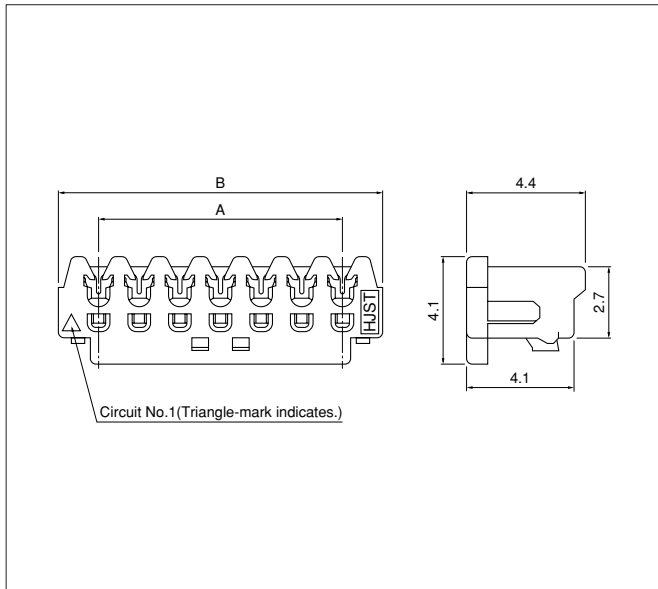
Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

2. Hole dimensions differ according to the kind 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

## CZ connector receptacle



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

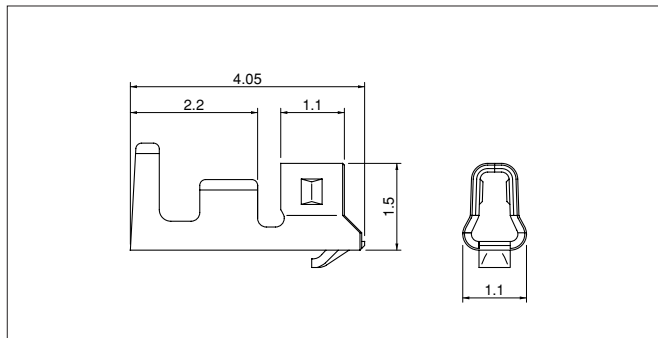
Contact: Phosphor bronze, tin-plated (reflow treatment)  
Housing: Glass-filled PA 66, UL94V-0

### 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

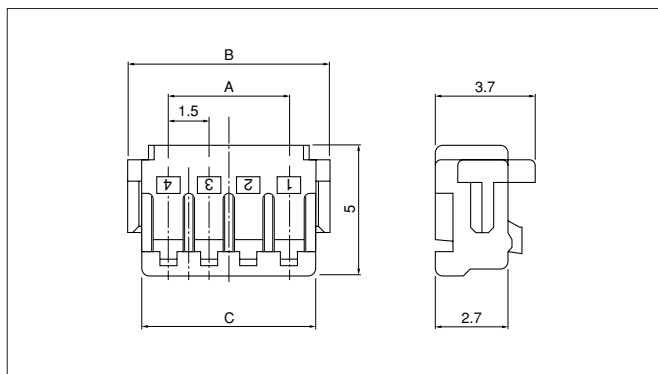
### Material and Finish

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



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)

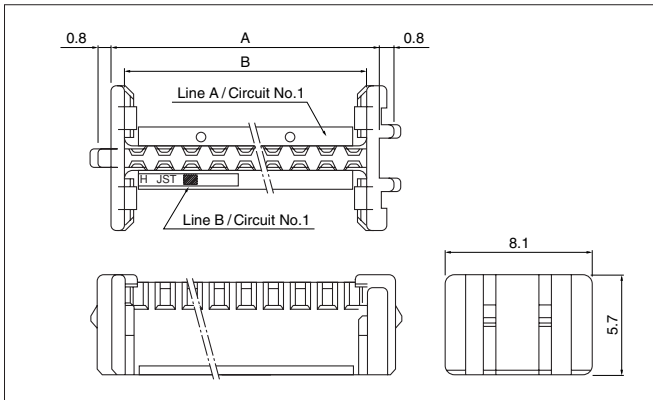
### RoHS compliance

<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

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

## CZW connector holder

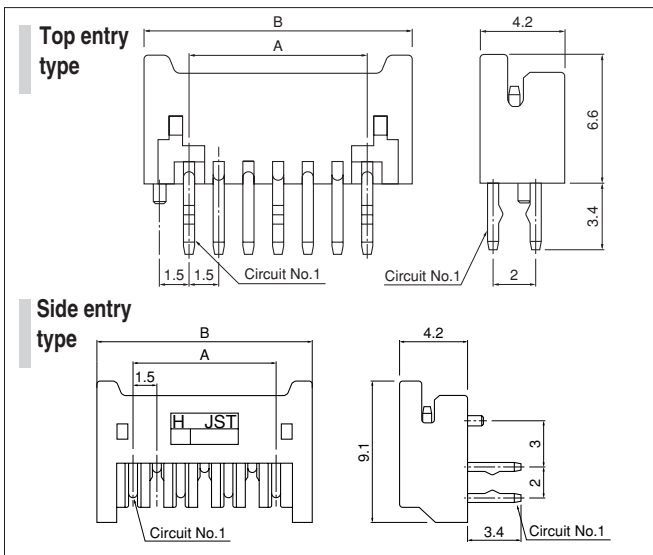


Circuits	Model No.	Dimensions (mm)		Q'ty / box
		A	B	
16	<b>CZWH-16-S</b>	14.9	13.5	1,000
18	<b>CZWH-18-S</b>	16.4	15.0	1,000
20	<b>CZWH-20-S</b>	17.9	16.5	1,000
22	<b>CZWH-22-S</b>	19.4	18.0	1,000
24	<b>CZWH-24-S</b>	20.9	19.5	1,000
26	<b>CZWH-26-S</b>	22.4	21.0	1,000
28	<b>CZWH-28-S</b>	23.9	22.5	1,000
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)

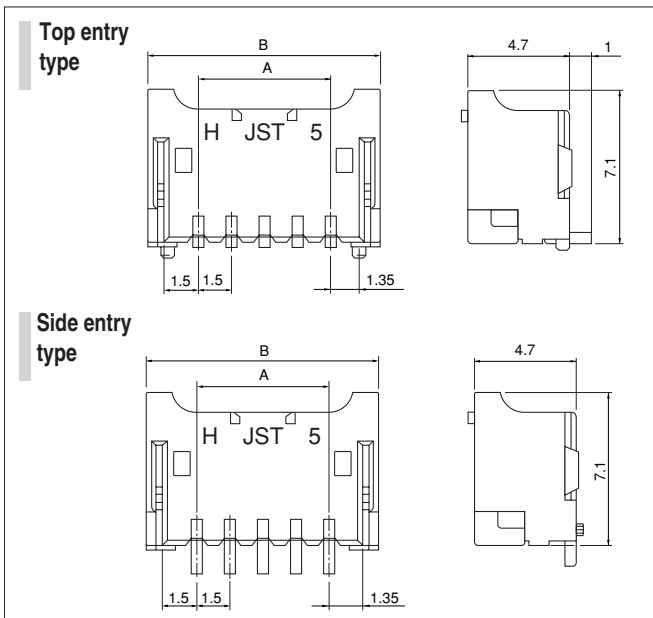
Note: Models B( )B-CZHK-B are the headers without the boss.

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>	—	7.5	12.0	800	—
8	<b>BM08B-CZSS-1-TF</b>	—	10.5	15.0	800	—
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.

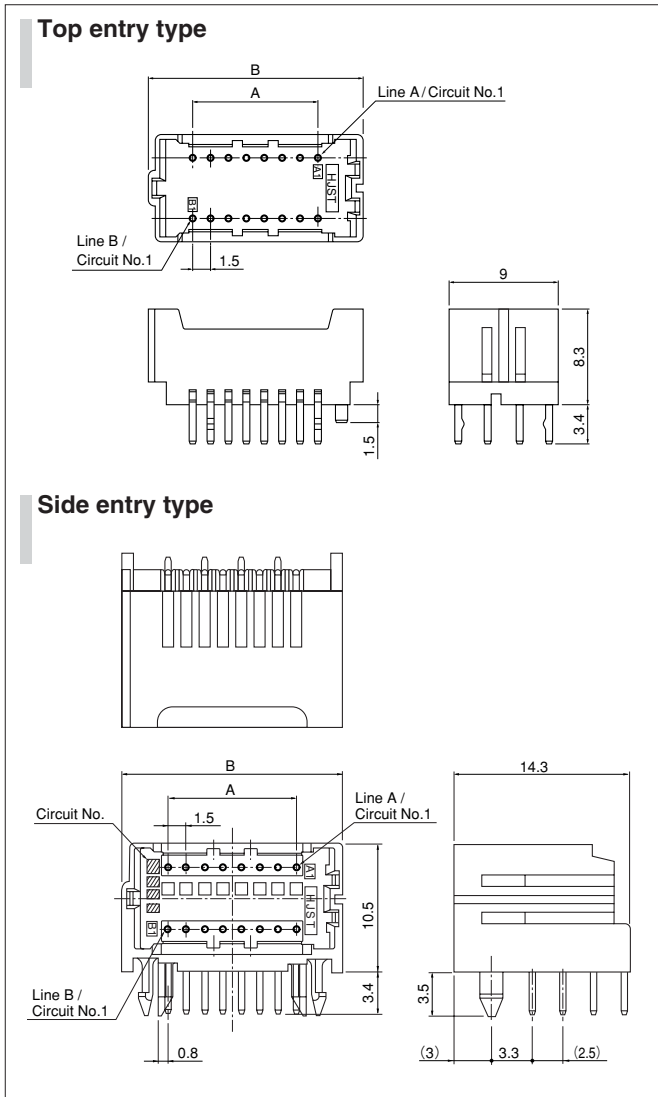
Note: Models SM( )B-CZSS-TF are the headers without the boss.

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



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.

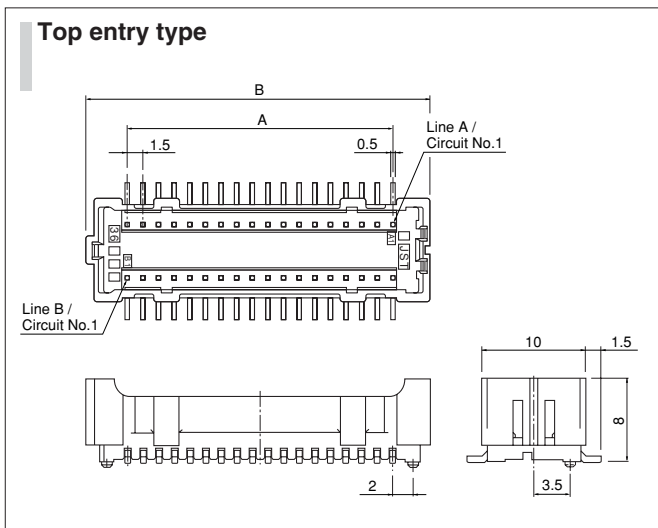
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

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

H...natural (grayish color)

Y...yellow

## CZW connector SMT type shrouded header



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)

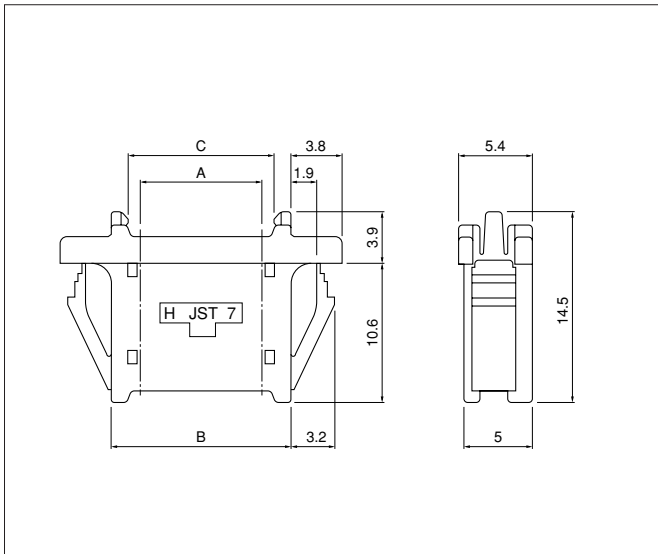
Wafer: PA, UL94V-0, natural (ivory)

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)					Qty / 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

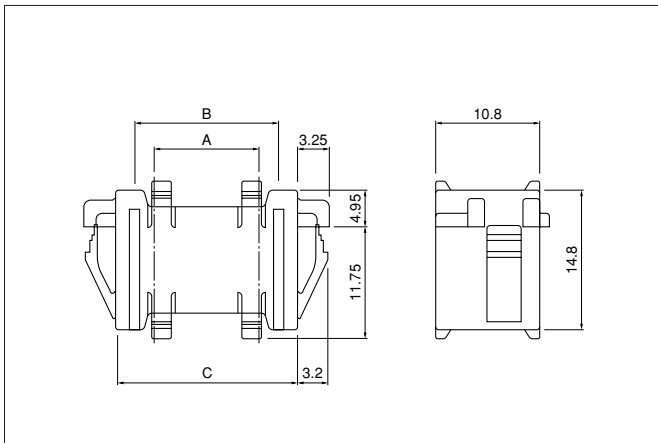
Pin: Copper alloy, copper-undercoated, tin-plated (reflow treatment)

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 (P2).

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



Circuits	Model No.	Dimensions (mm)					Qty / 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 (P2).