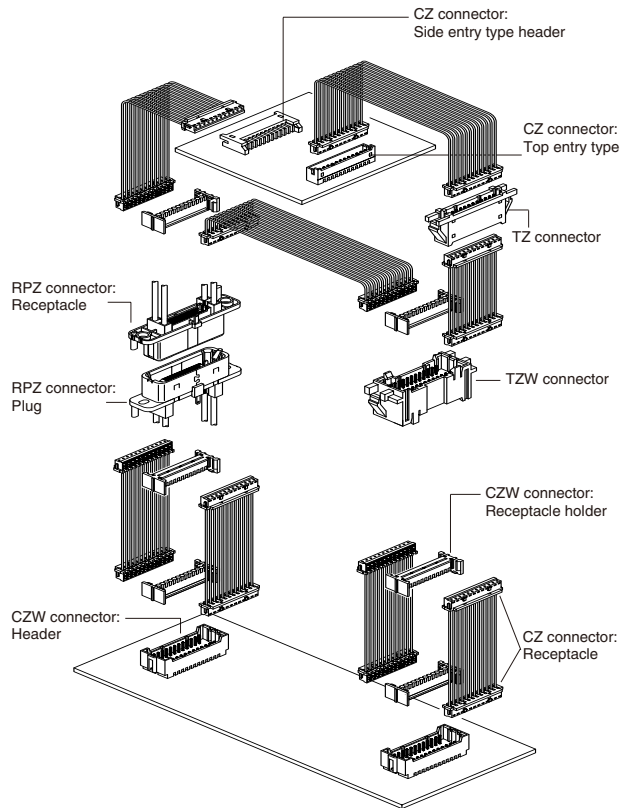


CZ FAMILY SERIES/CZ·CZW·CZH·CZHW·TZ·TZW

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

- Ⓜ Recognized E60389
- Ⓢ 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 / 10mΩ max. After environmental testing / 20mΩ max. | | Initial value / 20mΩ max. After environmental testing / 40mΩ max. |
| Insulation resistance | | 500MΩ min | | |
| Withstanding voltage | | 500VAC/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 0.83mm | AWG#28 to #26 | — |
| Applicable PC board thickness | | 1.6mm | | — |
| Applicable panel thickness | | — | | 0.5 to 2.0mm |

* Compliant with RoHS.

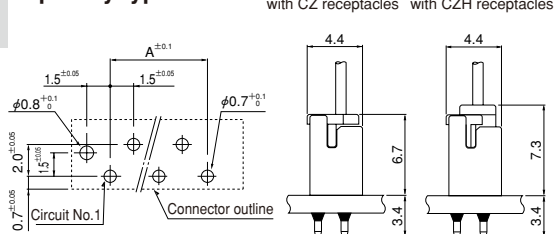
* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.

* Contact JST for details.

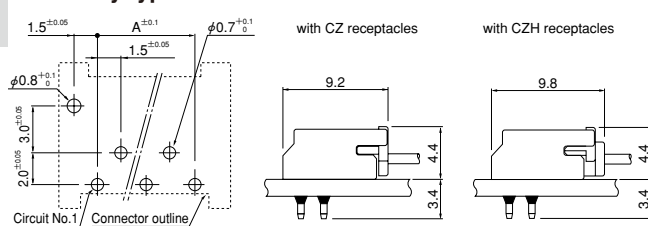
PC board layout (viewed from component side) and Assembly layout

<CZ connector through-hole type>

Top entry type



Side entry type

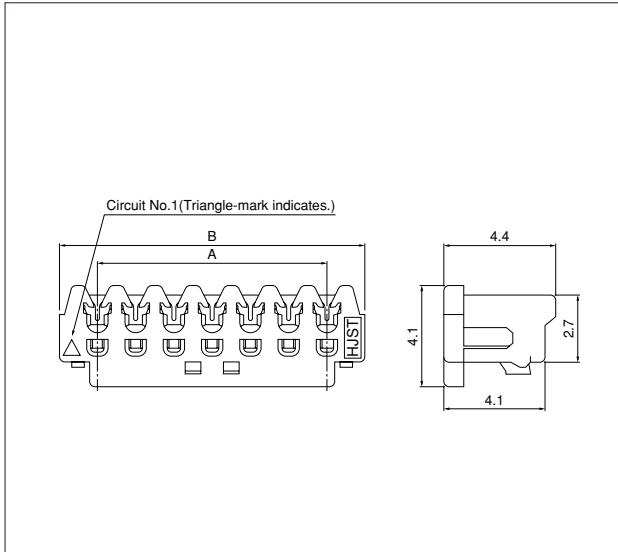


Note: 1. Tolerances are non-cumulative: ±0.05mm for all centers.

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) | | Qty / box |
|----------|----------------|----------------|-----------------|------|-----------|
| | Gray | Yellow | A | B | |
| 2 | 02CZ-6H | 02CZ-6Y | 1.5 | 4.5 | 2,000 |
| 3 | 03CZ-6H | 03CZ-6Y | 3.0 | 6.0 | 2,000 |
| 4 | 04CZ-6H | 04CZ-6Y | 4.5 | 7.5 | 2,000 |
| 5 | 05CZ-6H | 05CZ-6Y | 6.0 | 9.0 | 2,000 |
| 6 | 06CZ-6H | 06CZ-6Y | 7.5 | 10.5 | 2,000 |
| 7 | 07CZ-6H | 07CZ-6Y | 9.0 | 12.0 | 2,000 |
| 8 | 08CZ-6H | 08CZ-6Y | 10.5 | 13.5 | 2,000 |
| 9 | 09CZ-6H | 09CZ-6Y | 12.0 | 15.0 | 1,000 |
| 10 | 10CZ-6H | 10CZ-6Y | 13.5 | 16.5 | 1,000 |
| 11 | 11CZ-6H | 11CZ-6Y | 15.0 | 18.0 | 1,000 |
| 12 | 12CZ-6H | 12CZ-6Y | 16.5 | 19.5 | 1,000 |
| 13 | 13CZ-6H | 13CZ-6Y | 18.0 | 21.0 | 1,000 |
| 14 | 14CZ-6H | 14CZ-6Y | 19.5 | 22.5 | 1,000 |
| 15 | 15CZ-6H | 15CZ-6Y | 21.0 | 24.0 | 1,000 |
| 16 | 16CZ-6H | 16CZ-6Y | 22.5 | 25.5 | 1,000 |
| 17 | 17CZ-6H | 17CZ-6Y | 24.0 | 27.0 | 1,000 |
| 18 | 18CZ-6H | 18CZ-6Y | 25.5 | 28.5 | 1,000 |
| 19 | 19CZ-6H | 19CZ-6Y | 27.0 | 30.0 | 1,000 |
| 20 | 20CZ-6H | 20CZ-6Y | 28.5 | 31.5 | 1,000 |

Material and Finish

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

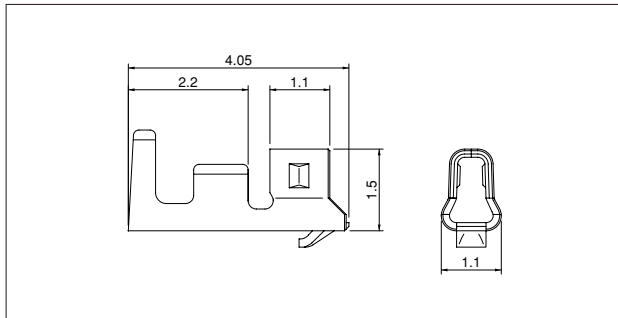
RoHS compliance

<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) | Qty / reel |
|-----------------------|-----------------|-------|----------------------|------------|
| | mm ² | AWG # | | |
| SCZH-002T-P0.5 | 0.08~0.13 | 28~26 | 0.8~1.1 | 13,000 |

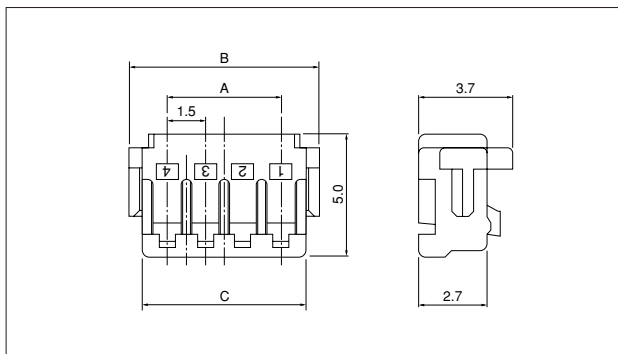
Material and Finish

Phosphor bronze, tin-plated (reflow treatment)

RoHS compliance

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

CZH connector housing



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

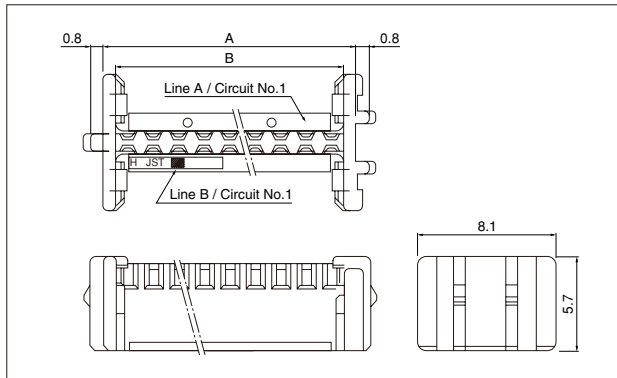
ex. **CZHR-02V-S**

S...natural (white)

K...black H...gray Y...yellow

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

CZW connector holder



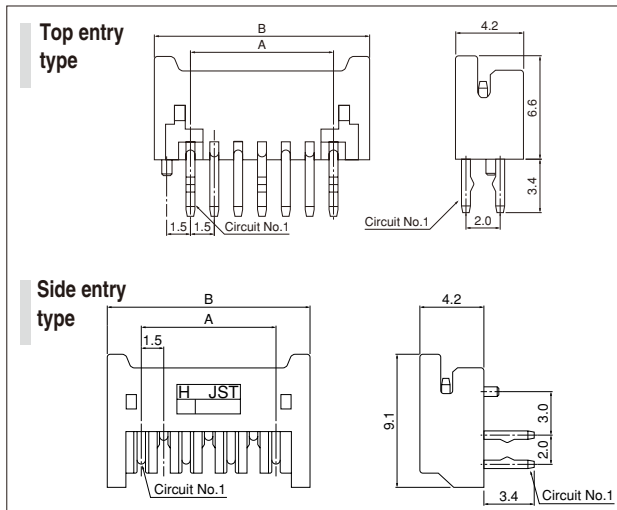
| Circuits | Model No. | Dimensions (mm) | | Q'ty / box |
|----------|------------------|-----------------|------|------------|
| | | A | B | |
| 16 | CZWH-16-S | 14.9 | 13.5 | 1,000 |
| 18 | CZWH-18-S | 16.4 | 15.0 | 1,000 |
| 20 | CZWH-20-S | 17.9 | 16.5 | 1,000 |
| 22 | CZWH-22-S | 19.4 | 18.0 | 1,000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

Material

PBT, UL94V-0, natural (white)

RoHS compliance

CZ connector through-hole type shrouded header



<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

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

Material and Finish

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

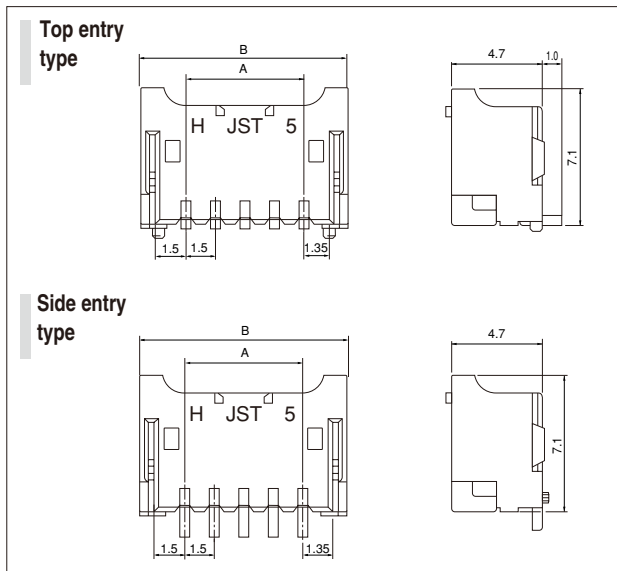
Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

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.

CZ connector SMT 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 | BM02B-CZSS-1-TF | SM02B-CZSS-1-TB | 1.5 | 6.0 | 800 | 1,250 |
| 4 | BM04B-CZSS-1-TF | SM04B-CZSS-1-TB | 4.5 | 9.0 | 800 | 1,250 |
| 5 | BM05B-CZSS-1-TF | SM05B-CZSS-1-TB | 6.0 | 10.5 | 800 | 1,250 |
| 6 | BM06B-CZSS-1-TF | — | 7.5 | 12.0 | 800 | — |
| 8 | BM08B-CZSS-1-TF | — | 10.5 | 15.0 | 800 | — |
| 10 | BM10B-CZSS-1-TF | SM10B-CZSS-1-TB | 13.5 | 18.0 | 800 | 1,250 |
| 13 | BM13B-CZSS-1-TF | SM13B-CZSS-1-TB | 18.0 | 22.5 | 800 | 1,250 |
| 14 | BM14B-CZSS-1-TF | — | 19.5 | 24.0 | 800 | — |
| 15 | BM15B-CZSS-1-TF | — | 21.0 | 25.5 | 800 | — |
| 16 | BM16B-CZSS-1-TF | SM16B-CZSS-1-TB | 22.5 | 27.0 | 800 | 1,250 |
| 17 | BM17B-CZSS-1-TF | — | 24.0 | 28.5 | 800 | — |
| 20 | BM20B-CZSS-1-TF | — | 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.

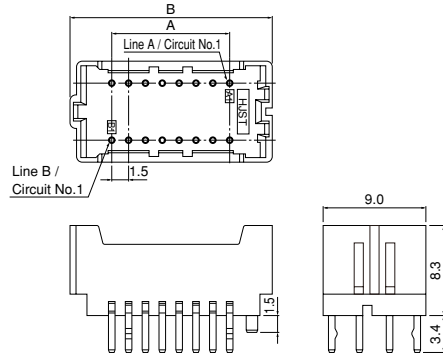
<For reference> As the color identification, the following alphabet shall be put in the underlined part. For availability, delivery and minimum order quantity, contact JST.

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

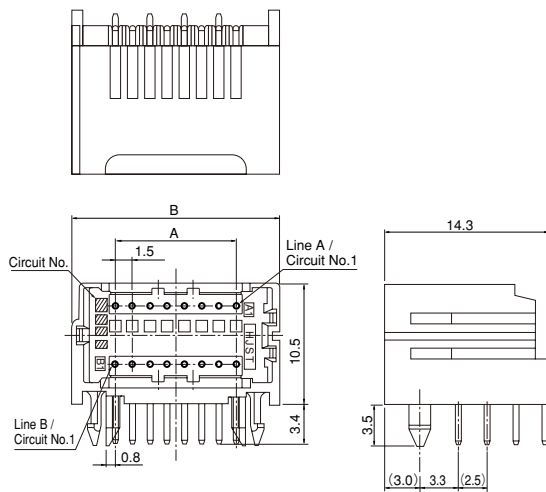
CZ FAMILY SERIES / CZ · CZW · CZH · CZHW · TZ · TZW

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 | B16B-CZW_HK-B-1 | — | 10.5 | 18.0 | 420 | — |
| 18 | B18B-CZW_HK-B-1 | — | 12.0 | 19.5 | 385 | — |
| 20 | B20B-CZW_HK-B-1 | S20B-CZW_HS-B-1 | 13.5 | 21.0 | 350 | 280 |
| 22 | B22B-CZW_HK-B-1 | — | 15.0 | 22.5 | 315 | — |
| 24 | B24B-CZW_HK-B-1 | — | 16.5 | 24.0 | 315 | — |
| 26 | B26B-CZW_HK-B-1 | S26B-CZW_HS-B-1 | 18.0 | 25.5 | 280 | 224 |
| 28 | B28B-CZW_HK-B-1 | — | 19.5 | 27.0 | 280 | — |
| 30 | B30B-CZW_HK-B-1 | — | 21.0 | 28.5 | 245 | — |
| 32 | B32B-CZW_HK-B-1 | — | 22.5 | 30.0 | 245 | — |
| 34 | B34B-CZW_HK-B-1 | — | 24.0 | 31.5 | 245 | — |
| 36 | B36B-CZW_HK-B-1 | — | 25.5 | 33.0 | 210 | — |
| 38 | B38B-CZW_HK-B-1 | — | 27.0 | 34.5 | 210 | — |
| 40 | B40B-CZW_HK-B-1 | S40B-CZW_HS-B-1 | 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_HK-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.

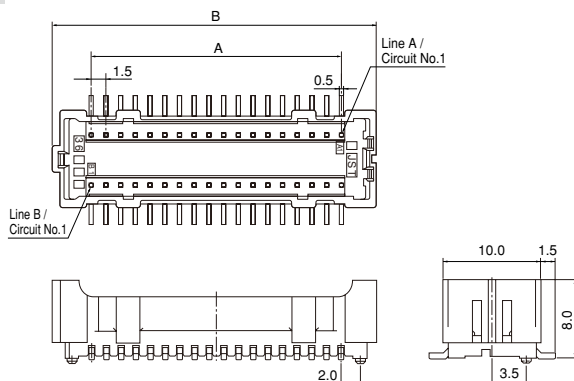
ex. **B16B-CZW_HK-B-1**

H...natural (grayish color)

Y...yellow

CZW connector SMT type shrouded header

Top entry type



| Circuits | Model No. | Dimensions (mm) | | Q'ty / box |
|----------|------------------------------------|-----------------|------|------------|
| | | A | B | |
| 36 | BM36B-CZW_SS-1-TF | 25.5 | 33.0 | 300 |
| 40 | BM40B-CZW_SS-1-TF | 28.5 | 36.0 | 300 |

Material and Finish

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

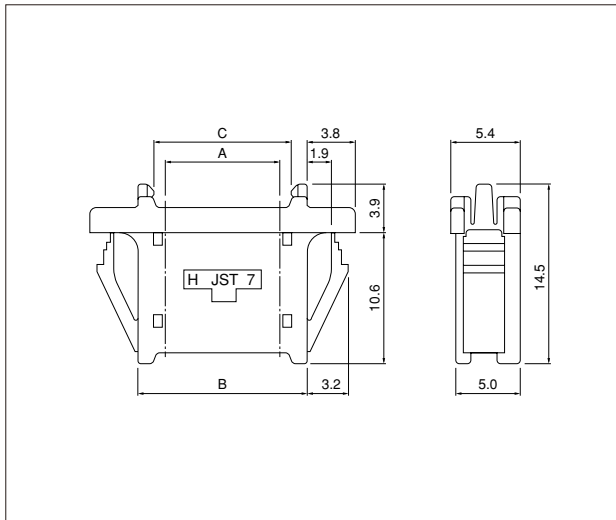
Wafer: PA, UL94V-0, natural (ivory)

Note: Models BM()B-CZW_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 |

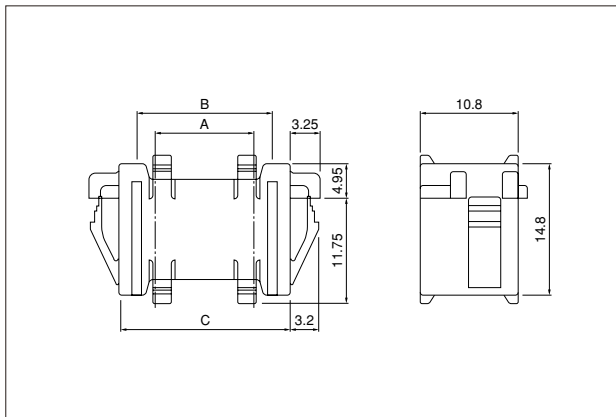
Material and Finish

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.

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.