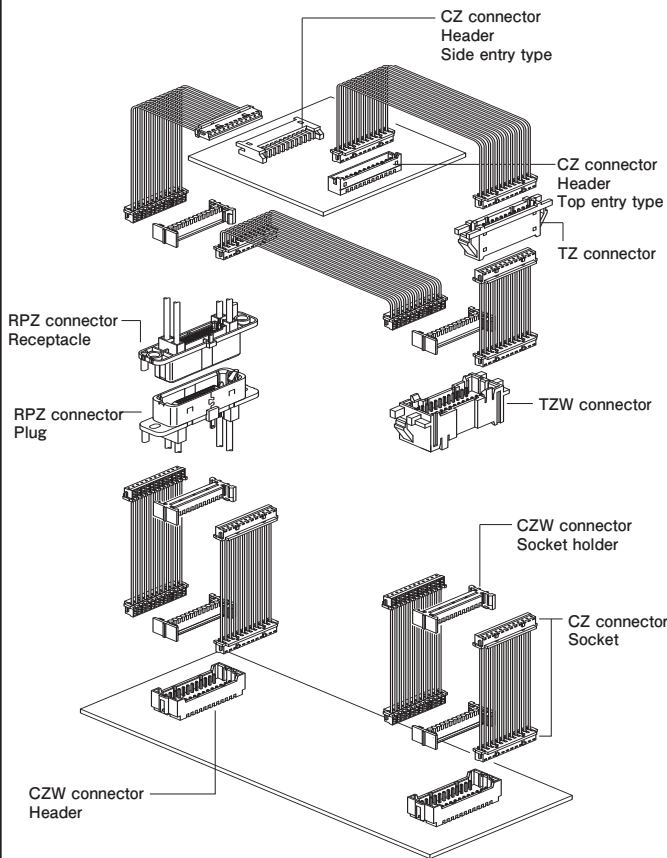


CZ FAMILY / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

1.5 mm pitch/Disconnectable ID/crimp style connectors (Wire-to-board/Wire-to-wire)



* 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 connector, holder for making that socket connector in dual-row, and the headers for dual-row PC board/Single and dual rows wire-to-wire connection for them can support rationalization of manufacturing the complicated harnesses and high density of mounting on PCB.

■ Features

CZ connector

- Distortion resistant construction
- Compact and low profile CZW connector

CZW connector

- Low insertion force
- Locking structure (One-sided lock prevention structure)
- * CZW connector socket is an assembly product that holds two CZ connector sockets by a socket folder.

■ Standards

⚡ : Recognized E60389

Ⓢ : Certified LR20812

■ Specifications

	CZ/CZW connectors	CZH/CZHW connectors	TZ/TZW connectors
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 test/ 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, tinned annealed copper Insulation O.D./ 0.7 to 0.83 mm	AWG #28 to #26	—
Applicable PC board thickness	1.6mm		—
Applicable panel thickness	—		0.5 to 2 mm

* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).

* RoHS2 compliance

* Dimensional unit: mm

* Contact JST for details.

CZH/CZHW connectors

- Housing lance
- Interchangeability

* The crimp type CZH connector housing and CZHW connector are compatible with the insulation displacement type CZ/CZW connector sockets respectively.

* The CZHW connector is an assembly product which the CZ connector socket of the CZW connector socket is replaced with the CZH connector housing.

TZ/TZW connectors

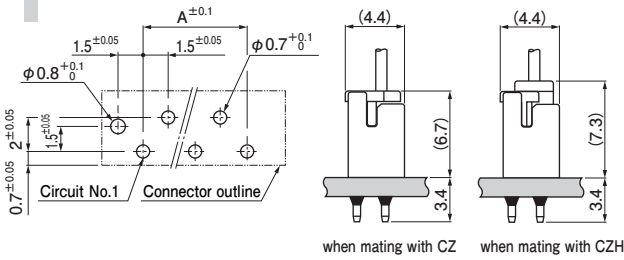
- The TZ connector is applicable to single-row connection, while the TZW connector is for dual-row connection.
- Applicable to wide range of panel thickness
- The design of the panel lock part does not allow the wires to be caught there before mounting on the panel.

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

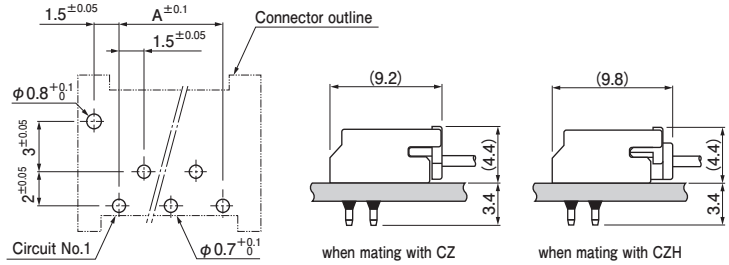
PC board layout and Assembly layout

<CZ connector : Through-hole type Header>

Top entry type

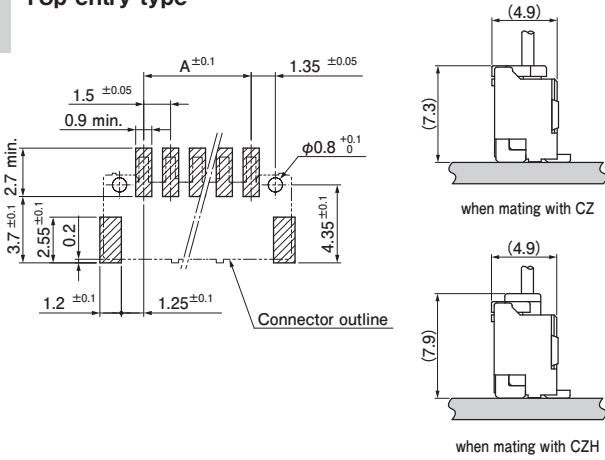


Side entry type

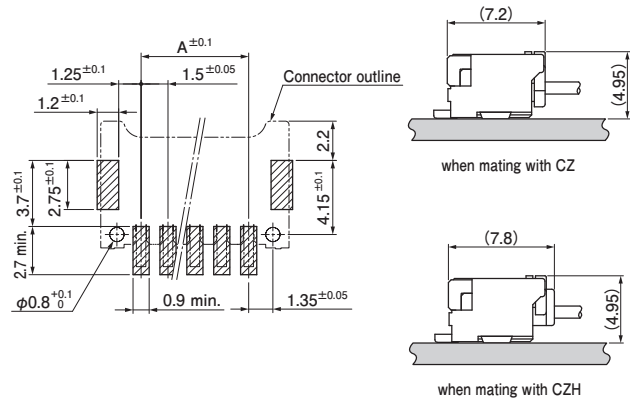


<CZ connector : SMT type Header>

Top entry type

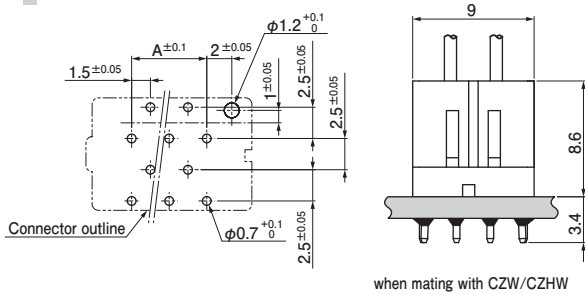


Side entry type

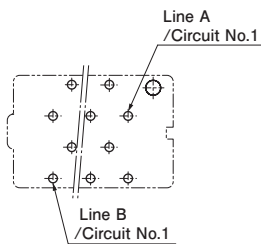
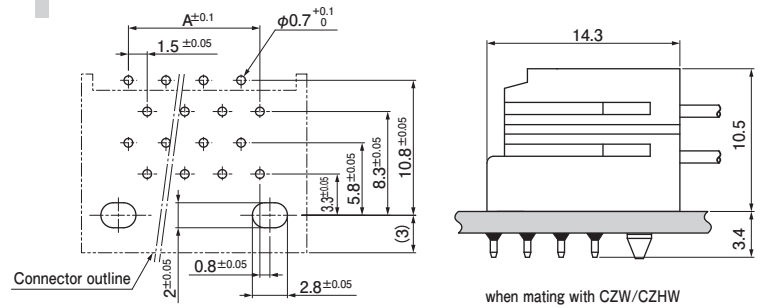


<CZW connector : Through-hole type Header>

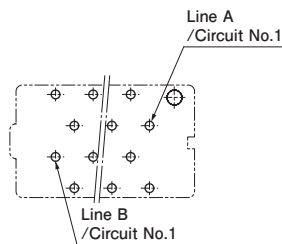
Top entry type



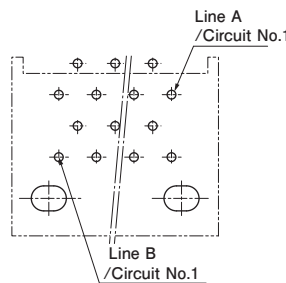
Side entry type



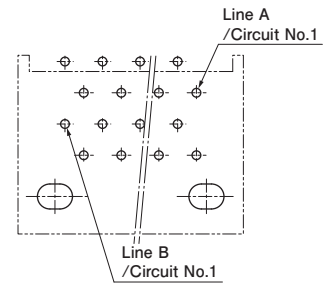
When the number of circuits in one side row is odd.



When the number of circuits in one side row is even.



When the number of circuits in one side row is odd.



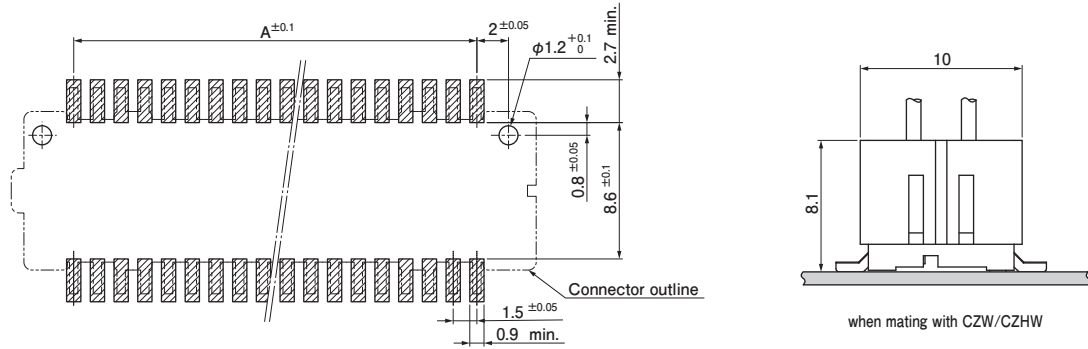
When the number of circuits in one side row is even.

- Note: 1. The above figure is the figure viewed from the connector mounting side.
 2. Tolerance of pitch for the drilling hole or land on PCB shall be ± 0.05 throughout, and shall not be cumulative over than ± 0.1 .
 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 / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

PC board layout and Assembly layout

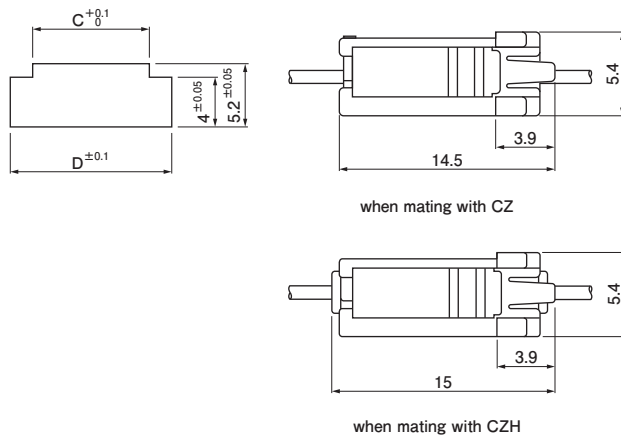
<CZW connector : SMT type Header>



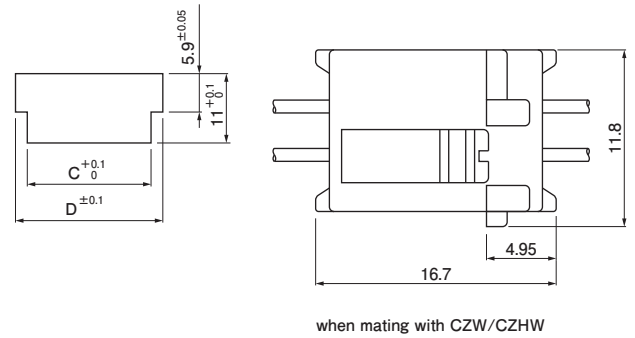
- Note: 1. The above figure is the figure viewed from the connector mounting side.
 2. Tolerance of pitch for the land on PCB shall be ± 0.05 throughout, and shall not be cumulative over than ± 0.1 .
 3. Hole dimensions differ according to the type of PC board and piercing method.
 The dimensions above should serve as a guideline. Contact JST for details.

Panel layout and Assembly layout

<TZ connector>



<TZW connector>

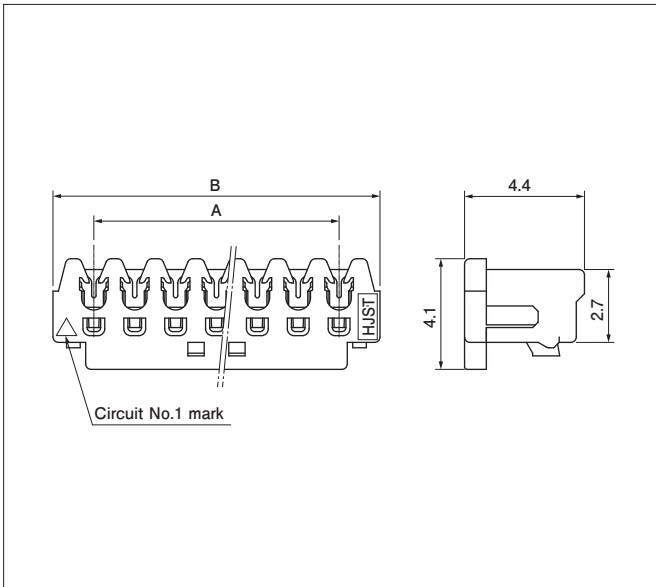


Note) C and D dimensions: See the section of TZW connector (Page 8).

Note) C and D dimensions: See the section of TZ connector (Page 8).

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

CZ connector Socket



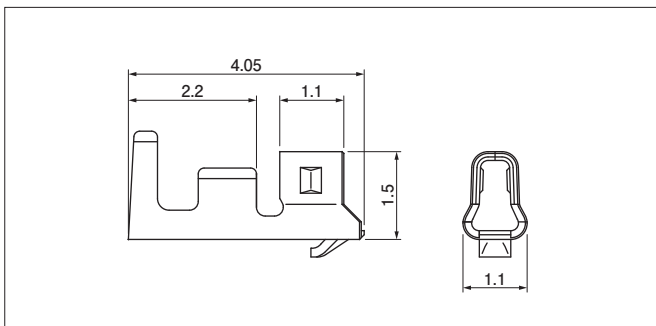
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Gray	Yellow	A	B	
2	02CZ-6H	02CZ-6Y	1.5	4.5	2,000
3	03CZ-6H	03CZ-6Y	3.0	6.0	2,000
4	04CZ-6H	04CZ-6Y	4.5	7.5	2,000
5	05CZ-6H	05CZ-6Y	6.0	9.0	2,000
6	06CZ-6H	06CZ-6Y	7.5	10.5	2,000
7	07CZ-6H	07CZ-6Y	9.0	12.0	2,000
8	08CZ-6H	08CZ-6Y	10.5	13.5	2,000
9	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
Housing: Glass-filled PA 66, UL94V-0

RoHS2 compliance

CZH connector Contact



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

Material and Finish

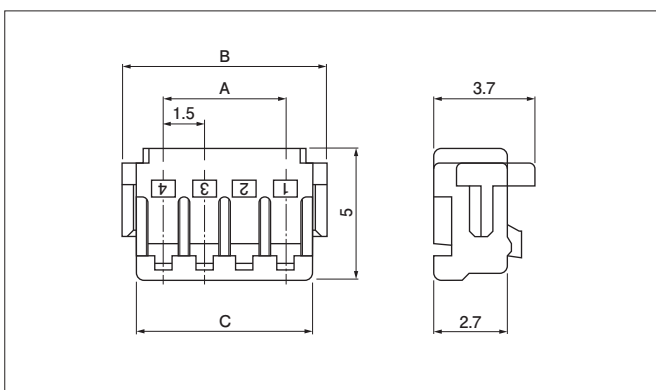
Phosphor bronze, tin-plated

RoHS2 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

Note: Contact JST for fully automatic crimping applicator.

CZH connector Housing



No. of circuits	Model No.	Dimensions (mm)			Q'ty/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
18	CZHR-18V-S	25.5	28.5	27.5	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

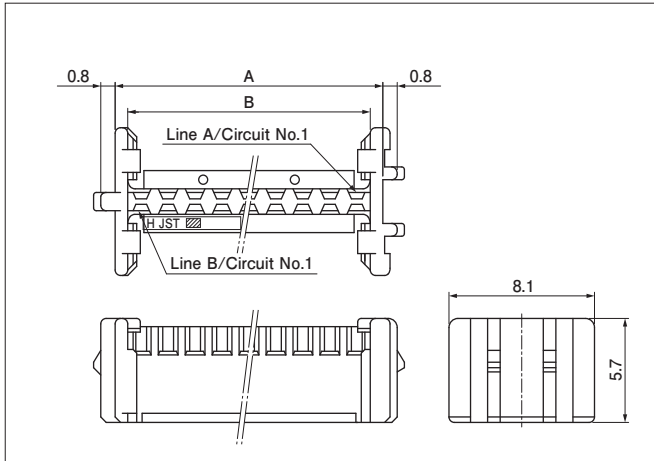
Material and Finish

Thermoplastic resin, UL94V-0, natural (white)

RoHS2 compliance

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

CZW connector Socket holder



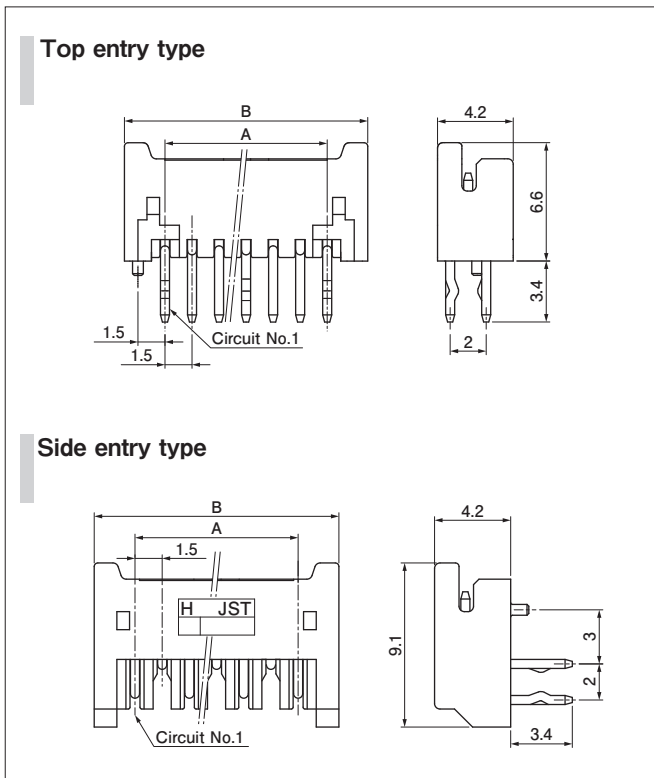
No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
16	CZWH-16-S	14.9	13.5	1,000
18	CZWH-18-S	16.4	15.0	1,000
20	CZWH-20-S	17.9	16.5	1,000
22	CZWH-22-S	19.4	18.0	1,000
24	CZWH-24-S	20.9	19.5	1,000
26	CZWH-26-S	22.4	21.0	1,000
28	CZWH-28-S	23.9	22.5	1,000
30	CZWH-30-S	25.4	24.0	1,000
32	CZWH-32-S	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 and Finish

Thermoplastic resin, UL94V-0, natural (white)

RoHS2 compliance

CZ connector Through-hole type Header



No. of 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
Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

RoHS2 compliance This product displays (LF) (SN) on a label.

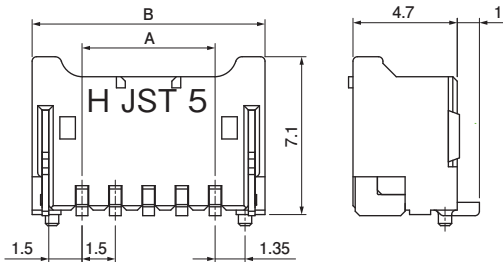
Note) Top entry type (Without boss) : B () B-CZHK-B

Side entry type (Without boss) : S () B-CZHK-B

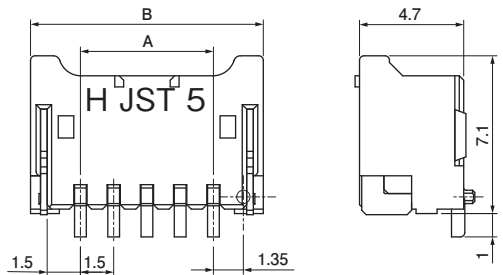
CZ FAMILY / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

CZ connector SMT type Header

Top entry type



Side entry type



Top entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/reel
	With boss	Without boss	A	B	
2	BM02B-CZSS-1-TF	BM02B-CZSS-TF	1.5	6.0	800
4	BM04B-CZSS-1-TF	BM04B-CZSS-TF	4.5	9.0	800
5	BM05B-CZSS-1-TF	BM05B-CZSS-TF	6.0	10.5	800
6	BM06B-CZSS-1-TF	BM06B-CZSS-TF	7.5	12.0	800
8	BM08B-CZSS-1-TF	BM08B-CZSS-TF	10.5	15.0	800
10	BM10B-CZSS-1-TF	BM10B-CZSS-TF	13.5	18.0	800
13	BM13B-CZSS-1-TF	BM13B-CZSS-TF	18.0	22.5	800
14	BM14B-CZSS-1-TF	BM14B-CZSS-TF	19.5	24.0	800
15	BM15B-CZSS-1-TF	BM15B-CZSS-TF	21.0	25.5	800
16	BM16B-CZSS-1-TF	BM16B-CZSS-TF	22.5	27.0	800
17	BM17B-CZSS-1-TF	BM17B-CZSS-TF	24.0	28.5	800
20	BM20B-CZSS-1-TF	BM20B-CZSS-TF	28.5	33.0	800

Side entry type

No. of circuits	Model No.		Dimensions (mm)		Q'ty/reel
	With boss	Without boss	A	B	
2	SM02B-CZSS-1-TB	SM02B-CZSS-TB	1.5	6.0	1,250
4	SM04B-CZSS-1-TB	SM04B-CZSS-TB	4.5	9.0	1,250
5	SM05B-CZSS-1-TB	SM05B-CZSS-TB	6.0	10.5	1,250
6	SM06B-CZSS-1-TB	SM06B-CZSS-TB	7.5	12.0	1,250
8	SM08B-CZSS-1-TB	SM08B-CZSS-TB	10.5	15.0	1,250
10	SM10B-CZSS-1-TB	SM10B-CZSS-TB	13.5	18.0	1,250
13	SM13B-CZSS-1-TB	SM13B-CZSS-TB	18.0	22.5	1,250
16	SM16B-CZSS-1-TB	SM16B-CZSS-TB	22.5	27.0	1,250

Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated

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

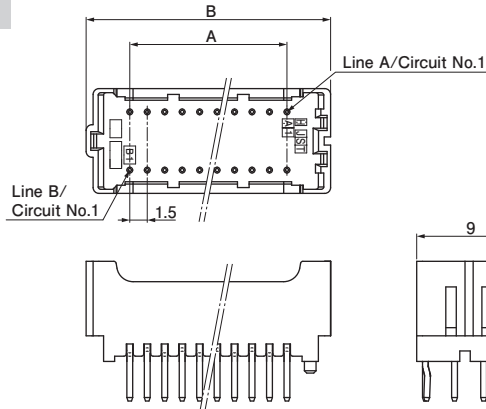
Solder tab: Copper alloy, copper-undercoated, tin-plated

RoHS2 compliance This product displays (LF) (SN) on a label.

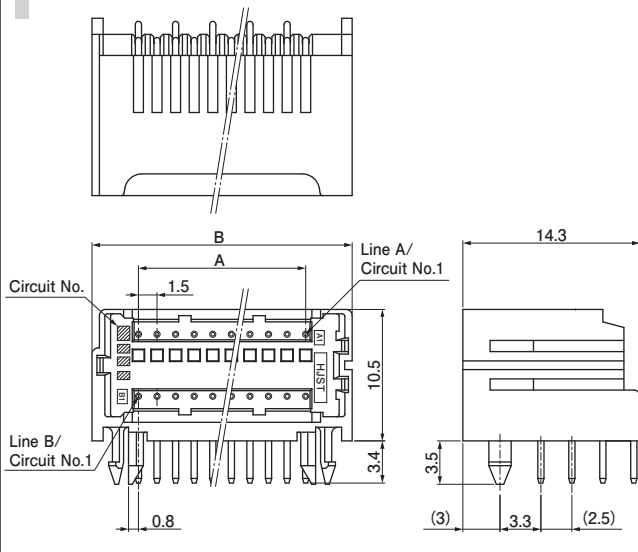
CZ FAMILY / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

CZW connector Through-hole type Header

Top entry type



Side entry type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box	
	Top entry type	Side entry type	A	B	Top entry type	Side entry type
20	B20B-CZWHK-V-B-1	S20B-CZWHS-B-1	13.5	21.0	350	280
22	B22B-CZWHK-V-B-1	—	15.0	22.5	315	—
24	B24B-CZWHK-V-B-1	—	16.5	24.0	315	—
26	B26B-CZWHK-V-B-1	S26B-CZWHS-B-1	18.0	25.5	280	224
28	B28B-CZWHK-V-B-1	—	19.5	27.0	280	—
30	B30B-CZWHK-V-B-1	—	21.0	28.5	245	—
32	B32B-CZWHK-V-B-1	—	22.5	30.0	245	—
34	B34B-CZWHK-V-B-1	—	24.0	31.5	245	—
36	B36B-CZWHK-V-B-1	—	25.5	33.0	210	—
38	B38B-CZWHK-V-B-1	—	27.0	34.5	210	—
40	B40B-CZWHK-V-B-1	S40B-CZWHS-B-1	28.5	36.0	210	168

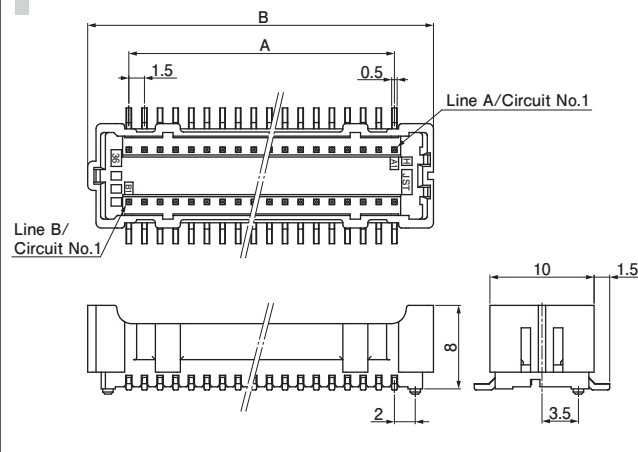
Material and Finish

Pin: Copper alloy, copper-undercoated, tin-plated
 Wafer: Glass-filled PA 66, UL94V-0, natural (grayish color)

RoHS2 compliance This product displays (LF)(SN) on a label.

CZW connector SMT type Header

Top entry type



No. of circuits	Model No.	Dimensions (mm)		Q'ty/reel
		A	B	
36	BM36B-CZWSS-1-TF	25.5	33.0	300
40	BM40B-CZWSS-1-TF	28.5	36.0	300

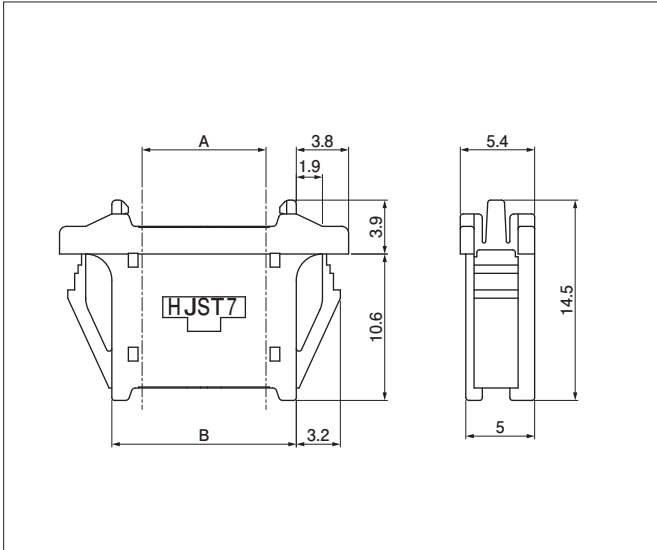
Material and Finish

Press pin: Copper alloy, copper-undercoated, tin-plated
 Wafer: PA, UL94V-0, natural (ivory)

RoHS2 compliance This product displays (LF)(SN) on a label.

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

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



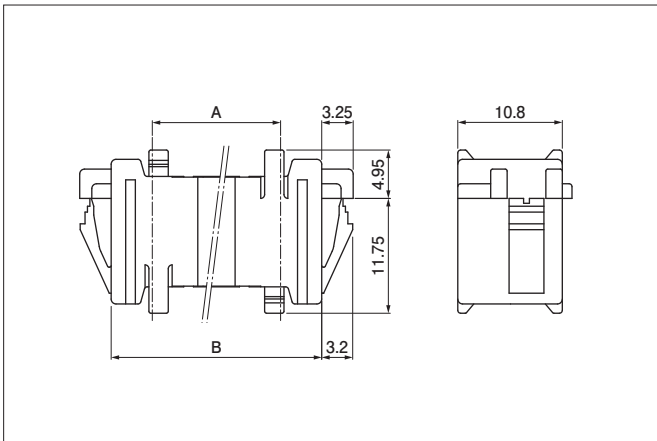
No. of circuits	Model No.	Dimensions (mm)				Q'ty/box
		A	B	C	D	
2	BU02P-TZ-S	1.5	5.9	6.3	9.9	500
3	BU03P-TZ-S	3.0	7.4	7.8	11.4	500
4	BU04P-TZ-S	4.5	8.9	9.3	12.9	500
5	BU05P-TZ-S	6.0	10.4	10.8	14.4	500
6	BU06P-TZ-S	7.5	11.9	12.3	15.9	250
7	BU07P-TZ-S	9.0	13.4	13.8	17.4	250
8	BU08P-TZ-S	10.5	14.9	15.3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

Material and Finish

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

RoHS2 compliance This product displays (LF)(SN) on a label.
Note) C and D dimensions: See the panel layout of TZ connector (Page 3).

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



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

Material and Finish

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

RoHS2 compliance This product displays (LF)(SN) on a label.
Note) C and D dimensions: See the panel layout of TZW connector (Page 3).

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

Model number allocation

CZ connector Socket (Insulation displacement type)

02 CZ - 6 H

No. of circuits : 2 to 20
 Series name
 Applicable wire : 6...AWG #28, #26
 Color : H...Natural (Grayish color), Y...Yellow

CZH connector Contact (Crimp type)

S CZH - 002 T - P 0.5

Form : S...Strip form
 Series name
 Applicable wire : 002...AWG #28 to #26
 Surface finish : T...Tin-plated
 Material : P...Copper alloy
 Terminal size

CZH connector Housing (Crimp type)

CZH R - 02 V - S

Series name
 Part name : R...Socket housing
 No. of circuits : 2 to 20
 Flammability : V...UL94V-0
 Color : S...Natural (White), H...Gray, Y...Yellow, K...Black

CZW connector Socket holder

CZW H - 16 - S

Series name
 Part name : H...Socket holder
 No. of circuits : 16, 18, 20, 22, 24, 26, 28,
 30, 32, 34, 36, 38, 40
 Color : S...Natural (White)

CZ connector Through-hole type Header (Single-row type)

B 02 B - CZ H K - B - 1

Shape of assembled product :
 B...Top entry type
 S...Side entry type
 No. of circuits : 2 to 20
 Part name : B...Header
 Series name
 Color : H...Natural (Grayish color), Y...Yellow, K...Black
 Indication of clinch : K...Clinched, S...Straight pin
 Lead arrangement : B...Staggered
 Boss's existence : 1...With boss, None...Without boss

CZ connector SMT type Header (Single-row type)

BM 02 B - CZ S S - 1 - TF

Shape of assembled product :
 BM...Top entry type
 SM...Side entry type
 No. of circuits :
 Top entry type...2, 4 to 6, 8, 10,
 13 to 17, 20
 Side entry type...2, 4 to 6, 8, 10, 13, 16
 Part name : B...Header
 Series name
 Color : H...Natural (Ivory), H...Gray
 Auxiliary display
 Boss's existence : 1...With boss, None...Without boss
 Packaging style : TF...Embossed-taping (Top entry type)
 TB...Embossed-taping (Side entry type)

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

Model number allocation

CZW connector Through-hole type Header (Dual-row type)

B 20 B - CZW H K - V - B - 1

Shape of assembled product :
 B···Top entry type
 S···Side entry type

No. of circuits : 20, 22, 24, 26, 28, 30,
 32, 34, 36, 38, 40

Part name : B···Header

Series name

Color : H···Natural (Grayish color),
 Y···Yellow

Indication of clinch : K···Clinched, S···Straight pin

Identification

Lead arrangement : B···Staggered

Boss's existence : 1···With boss, None···Without boss

CZW connector SMT type Header (Dual-row type)

BM 36 B - CZW S S - 1 - TF

Shape of assembled product :
 BM···Top entry type

No. of circuits : 36, 40

Part name : B···Header

Series name

Color : S···Natural (Ivory)

Auxiliary display

Boss's existence : 1···With boss, None···Without boss

Packaging style : TF···Embossed-taping

TZ connector

(Unit for wire-to-wire connection / Single-row type)

BU 02 P - T Z - S

Shape of assembled product :
 BU···Unit for wire-to-wire

No. of circuits : 2 to 20

Part name : P···Plug

Series name

Color : S···Natural (White), H···Gray

TZW connector

(Unit for wire-to-wire connection / Dual-row-row type)

BU 16 P - TZW - S

Shape of assembled product :
 BU···Unit for wire-to-wire

No. of circuits : 16, 18, 20, 22, 24, 26, 28,
 30, 32, 34, 36, 38, 40

Part name : P···Plug

Series name

Color : S···Natural (Ivory), H···Gray