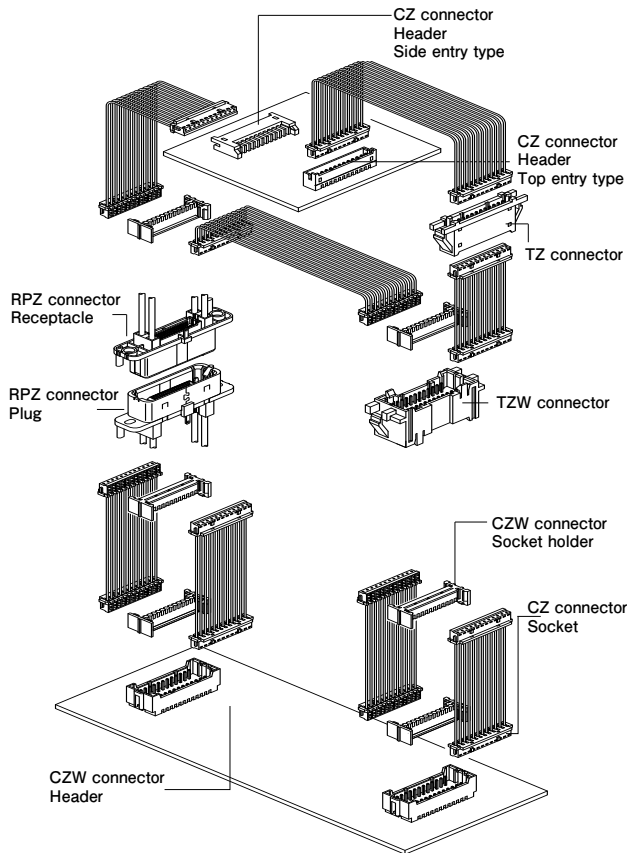




# CZ FAMILY/CZ·CZH·CZW·CZHW·TZ·TZW CONNECTORS

1.5 mm pitch/Wire-to-Board connectors/Wire-to-Wire connectors/IDC, Crimp, and Mating styles



\* The harness configuration shown above can also be used with CZH connector.

## 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 tests/ 20 mΩ max.		Initial value/ 20 mΩ max. After environmental tests/ 40 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 range	UL10272 (Please contact JST for details regarding the use of other UL style wires.) AWG #28, #26 Conductor/ 7-strands, tincoated annealed copper Insulation O.D./ φ0.7 mm to φ0.83 mm	AWG#28 to AWG#26	—
Applicable PC board thickness	1.6 mm		—
Applicable panel thickness	—		0.5 mm to 2 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.

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

- 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.

### 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

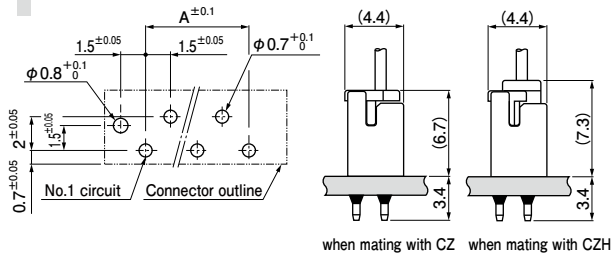
- The TZ connector is applicable to single-row connection, while the TZW connector is for dual-row connection.
- Applicable to wide range of panel thickness
- The design of the panel lock part does not allow the wires to be caught there before mounting on the panel.

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

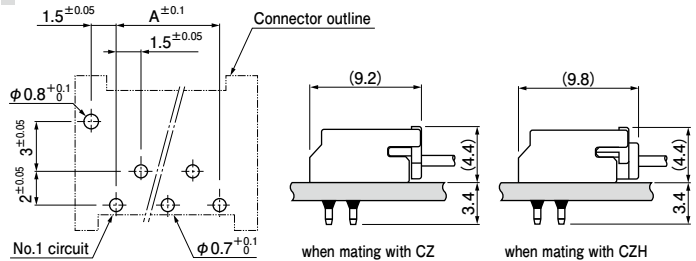
## PC board layout and Assembly layout

### <CZ connector : Through-hole type Header>

#### Top entry type

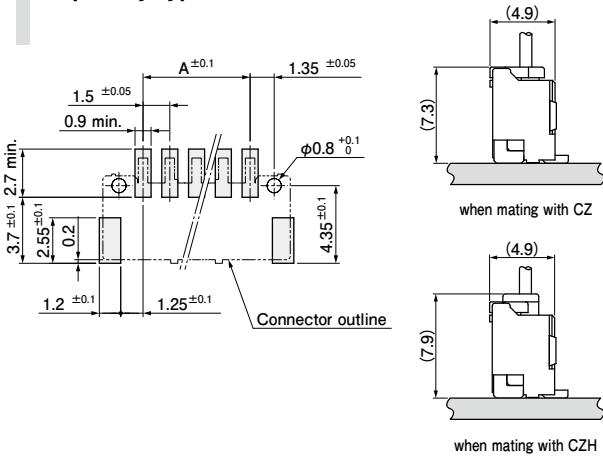


#### Side entry type

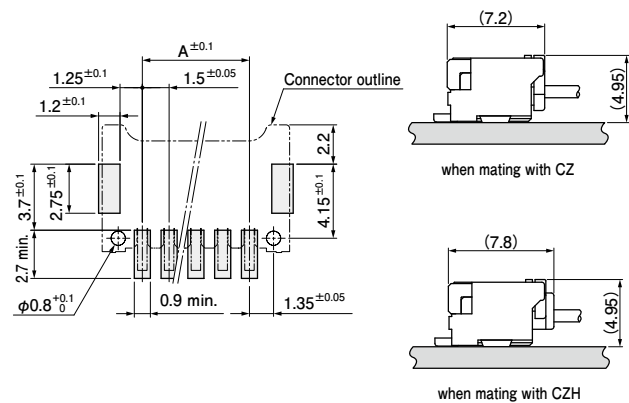


### <CZ connector : SMT type Header>

#### Top entry type

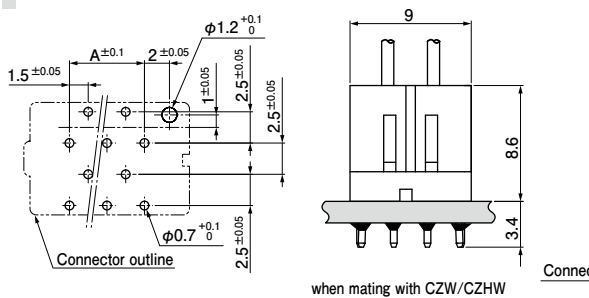


#### Side entry type

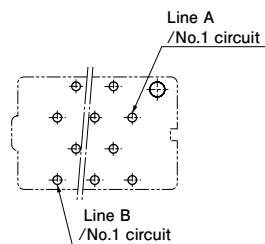
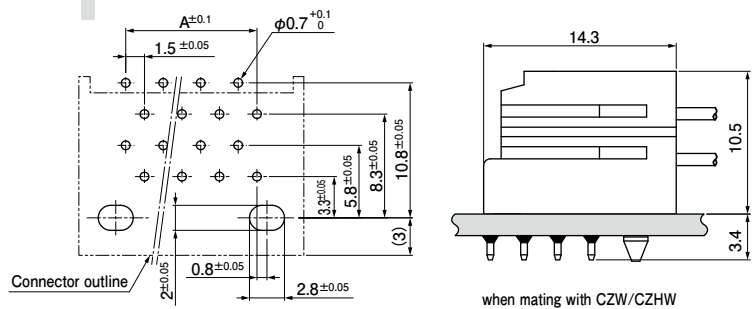


### <CZW connector : Through-hole type Header>

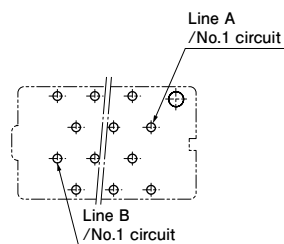
#### Top entry type



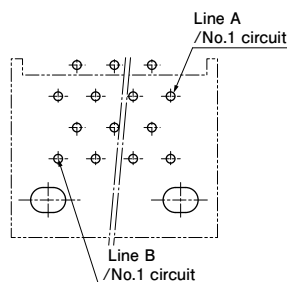
#### Side entry type



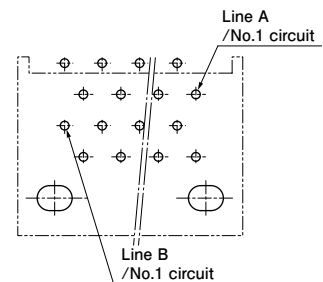
When the number of circuits in one side row is odd.



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



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



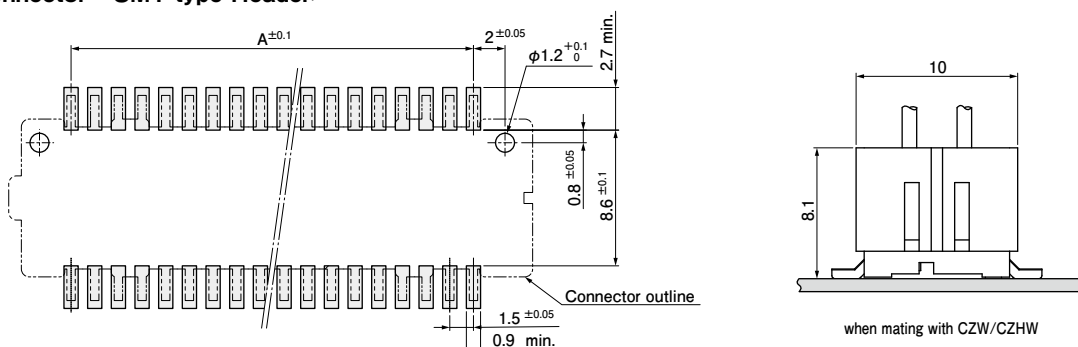
When the number of circuits in one side row is even.

- Note: 1. The PC board layout is the figure viewed from the connector mounting side.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.1$ .  
 3. Hole dimensions differ according to the type of PC board and piercing method.  
 The above dimensions are reference values. Please contact JST for details.

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

## PC board layout and Assembly layout

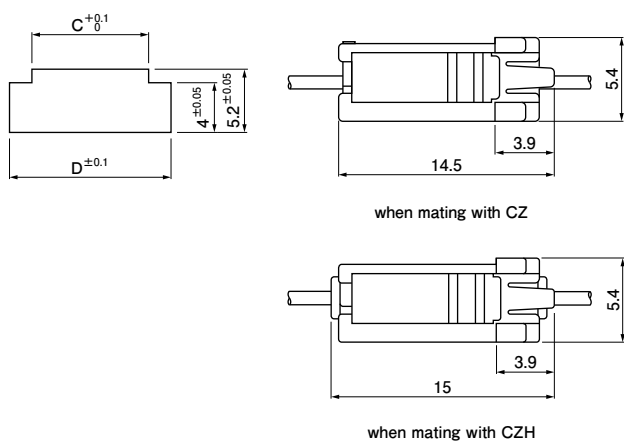
### <CZW connector : SMT type Header>



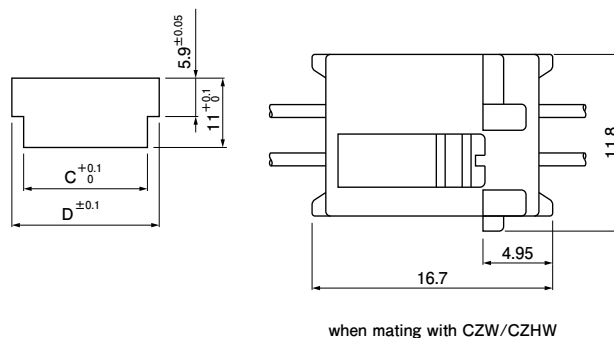
- Note 1. The PC board layout is the figure viewed from the connector mounting side.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$  and shall not accumulate.  
 3. Hole dimensions differ according to the type of PC board and piercing method.  
 The above dimensions are reference values. Please contact JST for details.

## Panel layout and Assembly layout

### <TZ connector>



### <TZW connector>

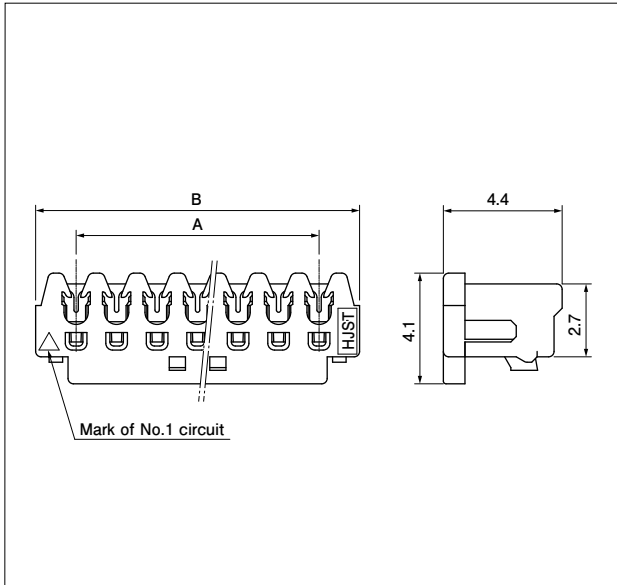


Note) Dimensions C and D: See TZ connector section (Page 8).

Note) Dimensions C and D: See TZ connector section (Page 8).

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

## CZ connector / Socket



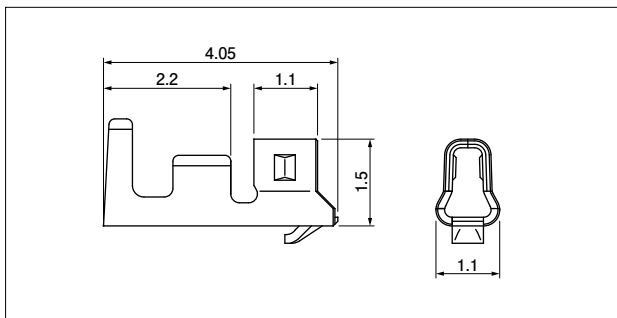
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Natural	Black	A	B	
2	02CZ-6H	02CZ-6K	1.5	4.5	2,000
3	03CZ-6H	03CZ-6K	3.0	6.0	2,000
4	04CZ-6H	04CZ-6K	4.5	7.5	2,000
5	05CZ-6H	05CZ-6K	6.0	9.0	2,000
6	06CZ-6H	06CZ-6K	7.5	10.5	2,000
7	07CZ-6H	07CZ-6K	9.0	12.0	2,000
8	08CZ-6H	08CZ-6K	10.5	13.5	2,000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

Material and Surface finish, etc.

Contact: Copper alloy, tin-plated  
Housing: Thermoplastic resin

※ 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).

## CZH connector / Contact



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

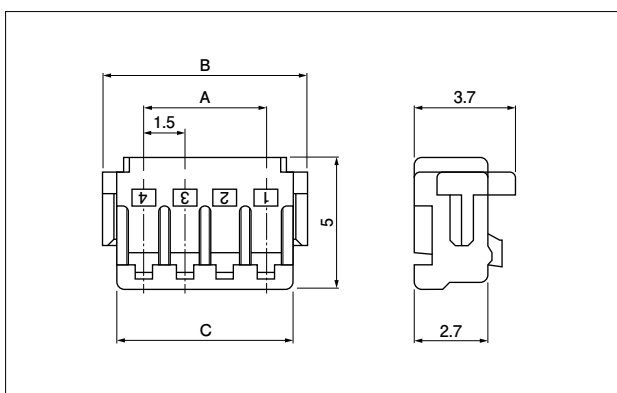
Material and Surface finish, etc.

Copper alloy, tin-plated

Contact	Crimping machine	Applicator	Crimp applicator with dies
SCZH-002T-P0.5	AP-K2N	MKS-L	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

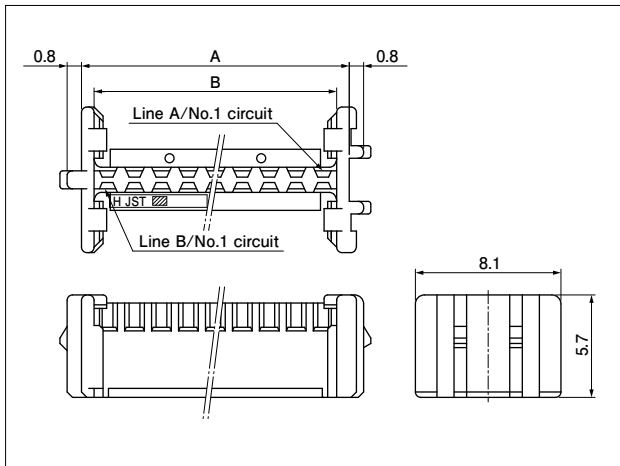
Material and Surface finish, etc.

Thermoplastic resin, natural

※ 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).

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

## CZW connector / Socket holder



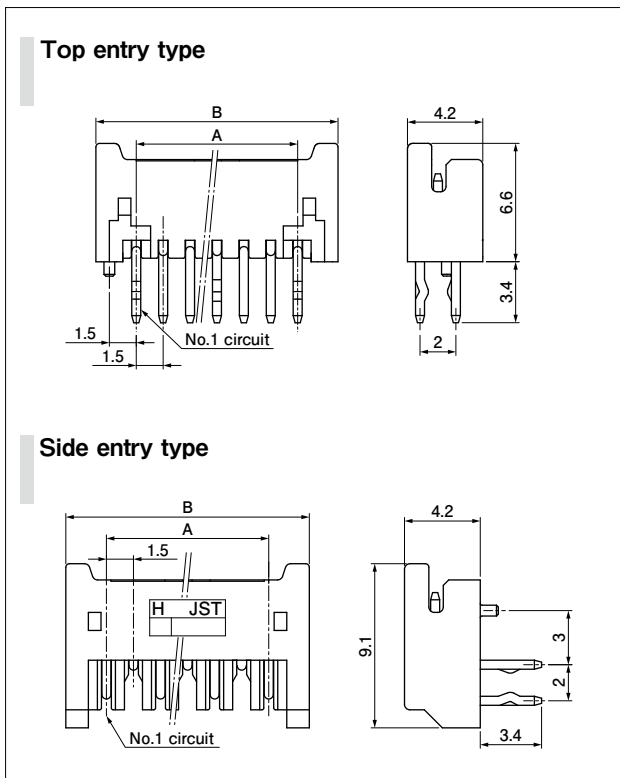
No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
16	CZWH-16-S	14.9	13.5	1,000
18	CZWH-18-S	16.4	15.0	1,000
20	CZWH-20-S	17.9	16.5	1,000
22	CZWH-22-S	19.4	18.0	1,000
24	CZWH-24-S	20.9	19.5	1,000
26	CZWH-26-S	22.4	21.0	1,000
28	CZWH-28-S	23.9	22.5	1,000
30	CZWH-30-S	25.4	24.0	1,000
32	CZWH-32-S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

Thermoplastic resin, natural

※ 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).

## 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 Surface finish, etc.

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

Wafer: Thermoplastic resin, natural

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

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

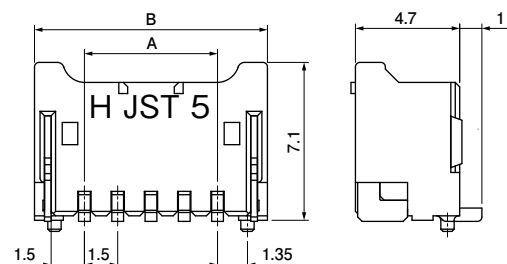
Side entry type (Without boss) : S ( ) B-CZHK-B

※ 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).

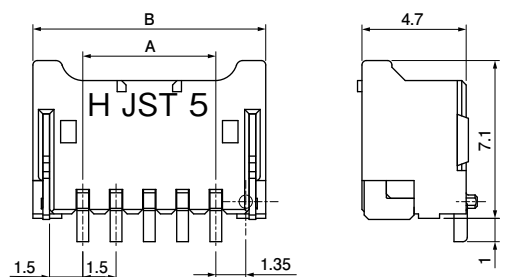
# CZ FAMILY / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

## 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 Surface finish, etc.

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

Wafer: Thermoplastic resin, natural

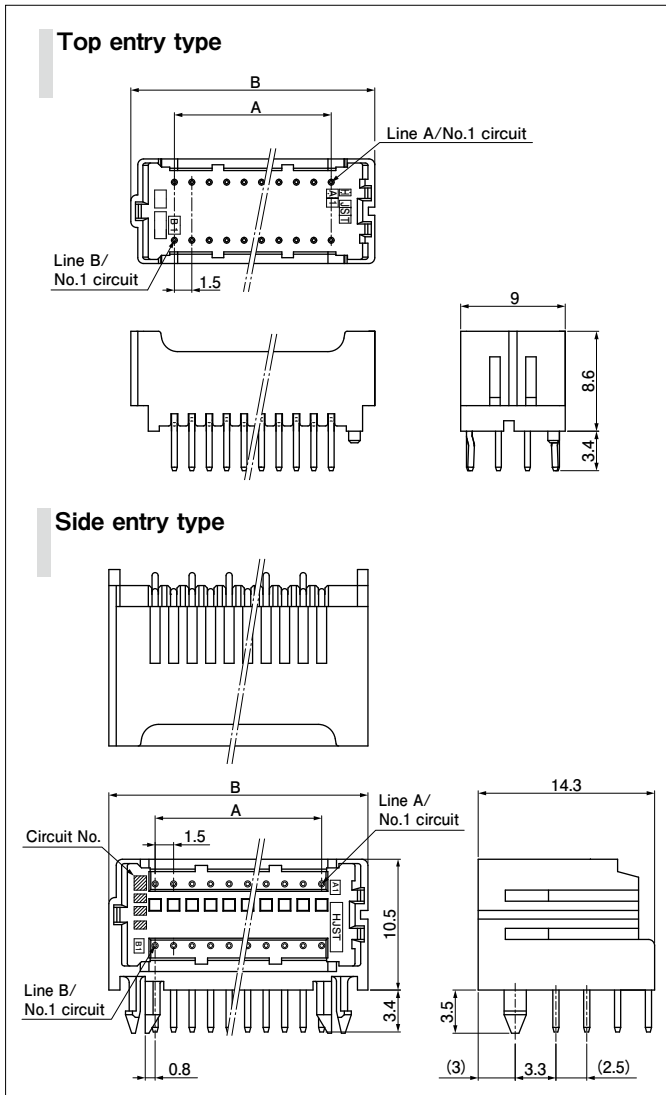
Solder tab: Copper alloy, copper-undercoated, tin-plated

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

※ 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).

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

## CZW 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
20	B20B-CZWVK-V-B-1	S20B-CZWHS-B-1	13.5	21.0	350	280
22	B22B-CZWVK-V-B-1	—	15.0	22.5	315	—
24	B24B-CZWVK-V-B-1	—	16.5	24.0	315	—
26	B26B-CZWVK-V-B-1	S26B-CZWHS-B-1	18.0	25.5	280	224
28	B28B-CZWVK-V-B-1	—	19.5	27.0	280	—
30	B30B-CZWVK-V-B-1	—	21.0	28.5	245	—
32	B32B-CZWVK-V-B-1	—	22.5	30.0	245	—
34	B34B-CZWVK-V-B-1	—	24.0	31.5	245	—
36	B36B-CZWVK-V-B-1	—	25.5	33.0	210	—
38	B38B-CZWVK-V-B-1	—	27.0	34.5	210	—
40	B40B-CZWVK-V-B-1	S40B-CZWHS-B-1	28.5	36.0	210	168

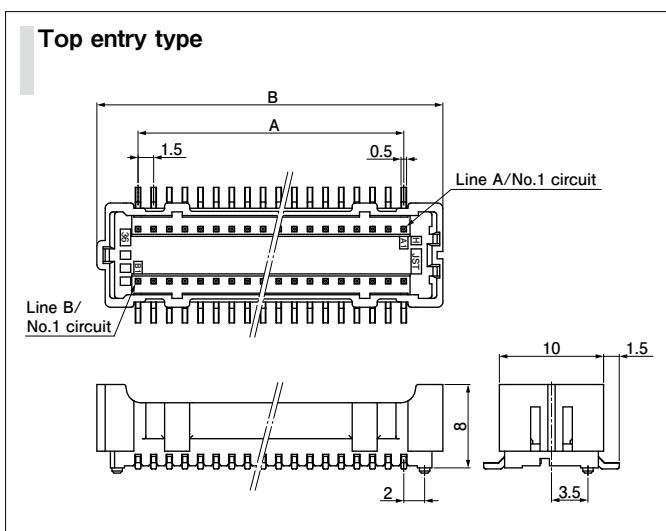
### Material and Surface finish, etc.

Pin: Copper alloy, copper-undercoated, tin-plated  
Wafer: Thermoplastic resin, natural

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

※ 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).

## CZW connector / SMT type Header



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 Surface finish

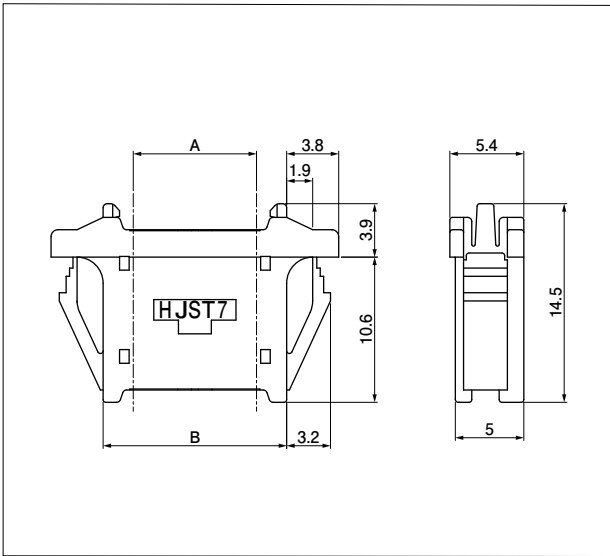
Press pin: Copper alloy, copper-undercoated, tin-plated  
Wafer: Thermoplastic resin, natural

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

※ 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).

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

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



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 Surface finish, etc.

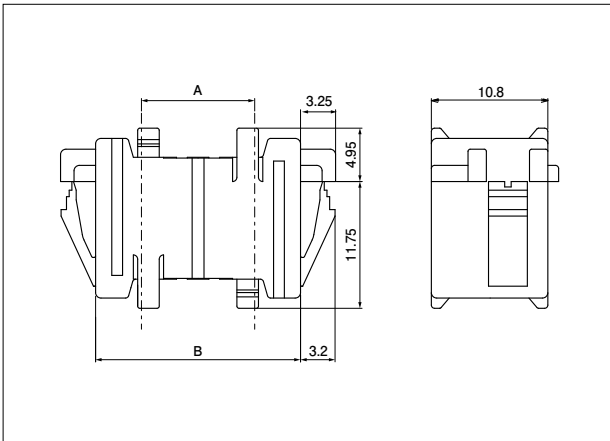
Pin: Copper alloy, copper-undercoated, tin-plated  
Housing: Thermoplastic resin, natural

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

Note) Dimensions C and D: See the panel layout of TZ connector (Page 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).

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



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 Surface finish, etc.

Pin: Copper alloy, copper-undercoated, tin-plated  
Housing: Thermoplastic resin, natural

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

Note) Dimensions C and D: See the panel layout of TZW connector (Page 3).

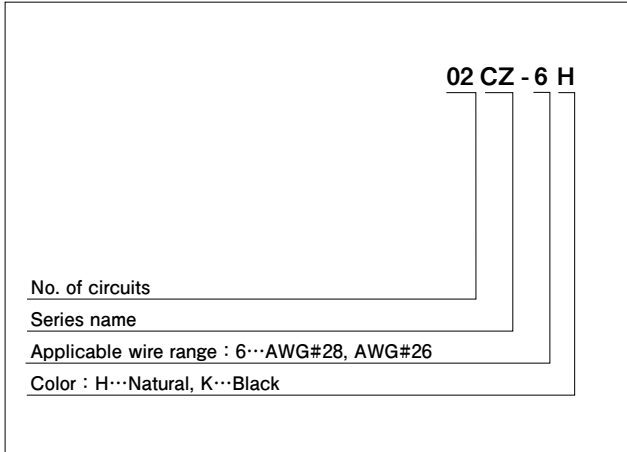
※ For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).



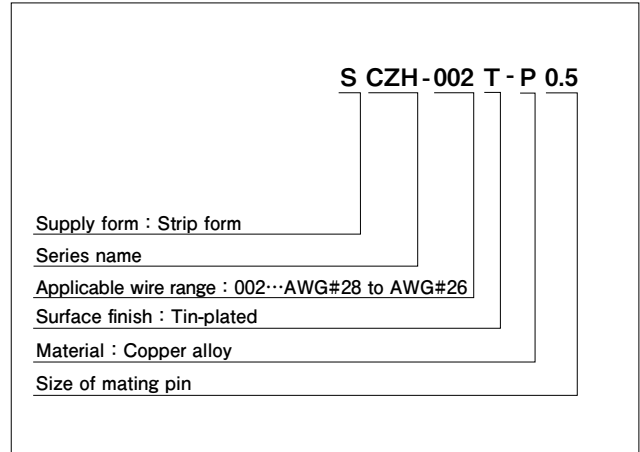
# CZ FAMILY / CZ · CZH · CZW · CZHW · TZ · TZW CONNECTORS

## Model number allocation

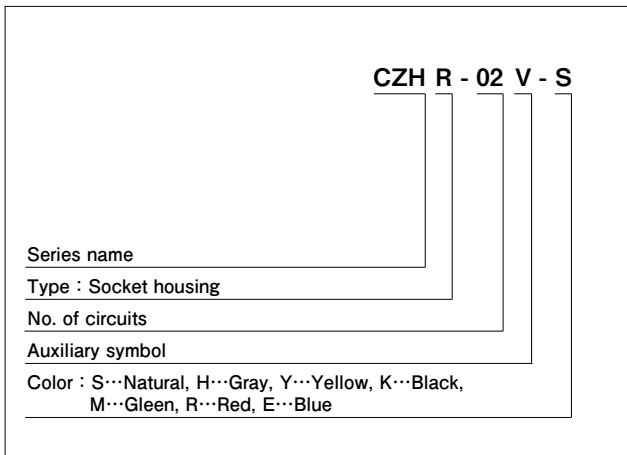
### CZ connector/Socket (IDC style)



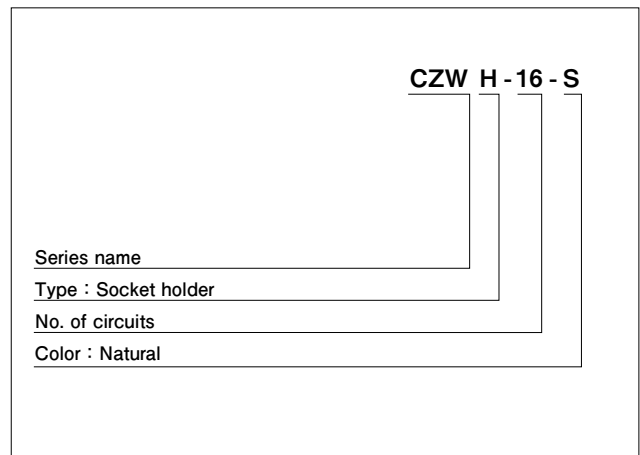
### CZH connector/Contact (Crimp style)



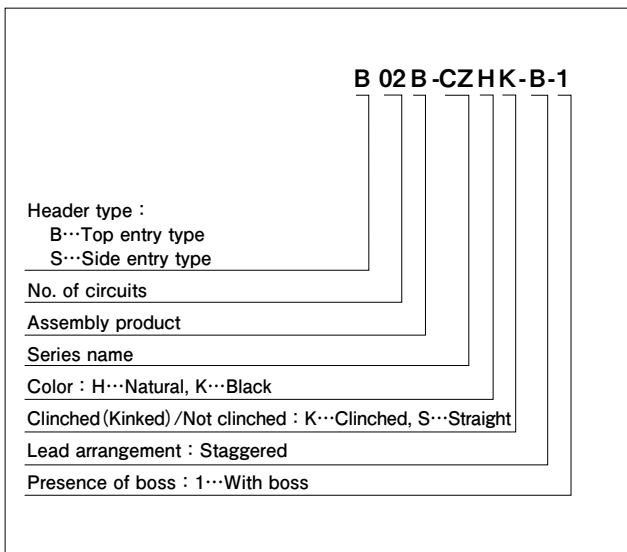
### CZH connector/Housing (Crimp style)



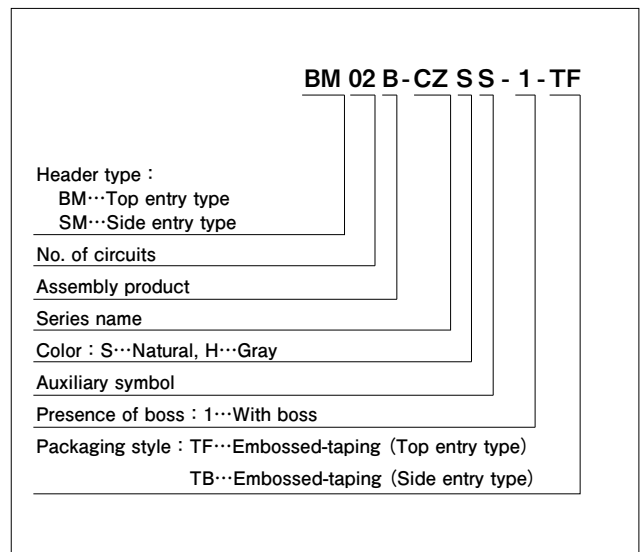
### CZW connector/Socket holder



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



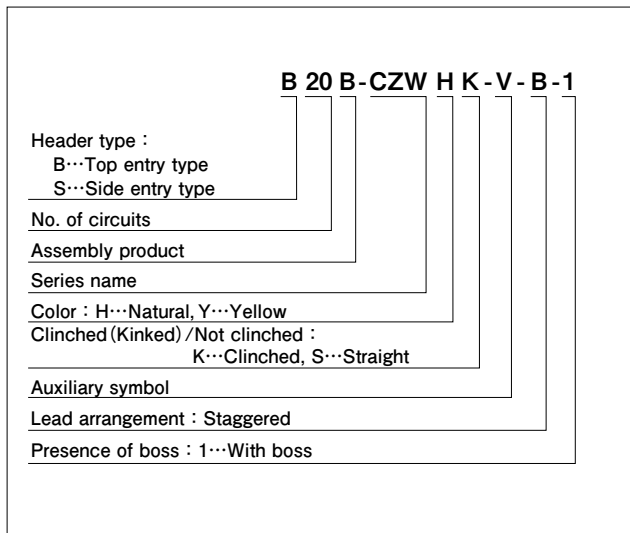
### CZ connector/SMT type Header (Single-row type)



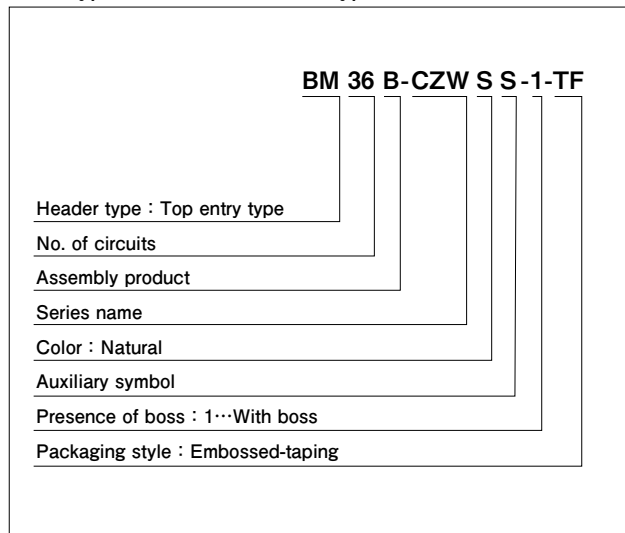
# CZ FAMILY / CZ·CZH·CZW·CZHW·TZ·TZW CONNECTORS

## Model number allocation

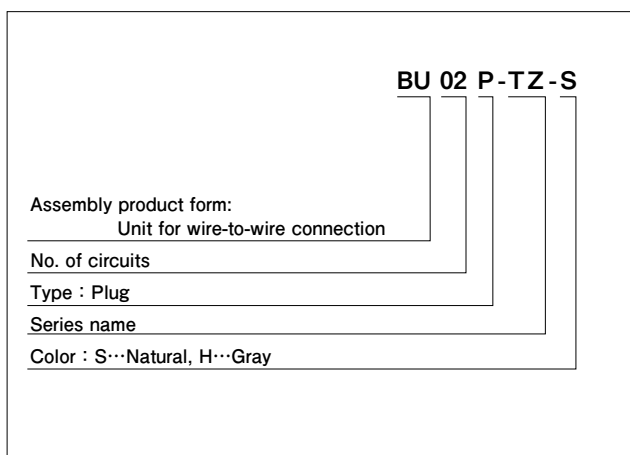
### CZW connector Through-hole type Header (Dual-row type)



### CZW connector SMT type Header (Dual-row type)



### TZ connector Unit for wire-to-wire connection (Single-row type)



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

