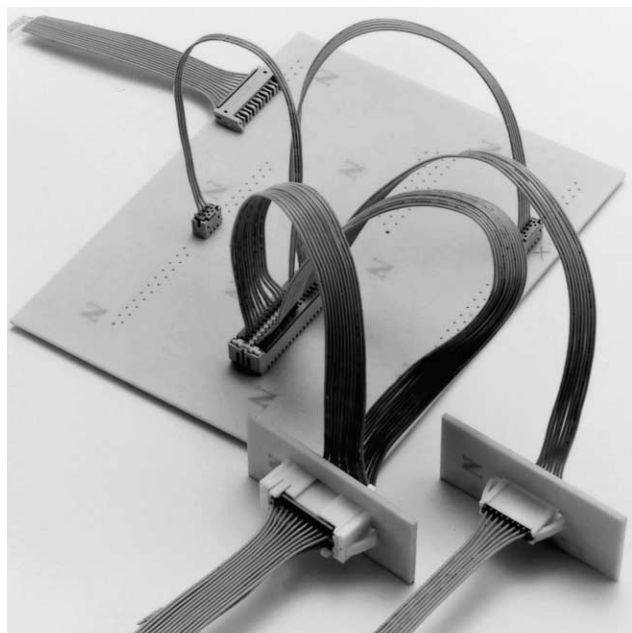
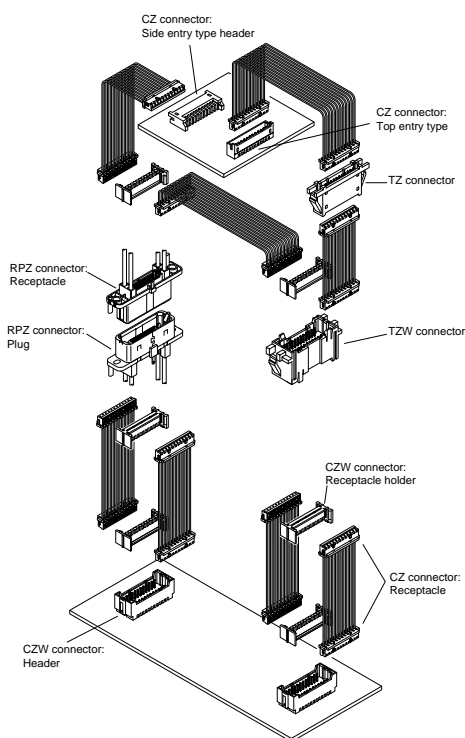


CZ FAMILY SERIES/CZ·CZW·TZ·TZW

Disconnectable Insulation displacement connectors



Based upon the 1.5mm (.059") 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.



Features

CZ connector

- **Distortion resistant construction**

The header is fully shrouded and thus protects the receptacle from damage that could be caused by mating the connectors at an angle or by otherwise mismatching the connectors.

- **Compact and low profile**

The CZ connector features a mounting height of just 6.7mm (.264") for top entry type, and 4.4mm (.173") for side entry type.

CZW connector

- **Low insertion force**

Insertion force is only about 70N for 40-circuit connector.

- **Locking construction**

The CZW holder has friction locks to be securely held by the CZW header.

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

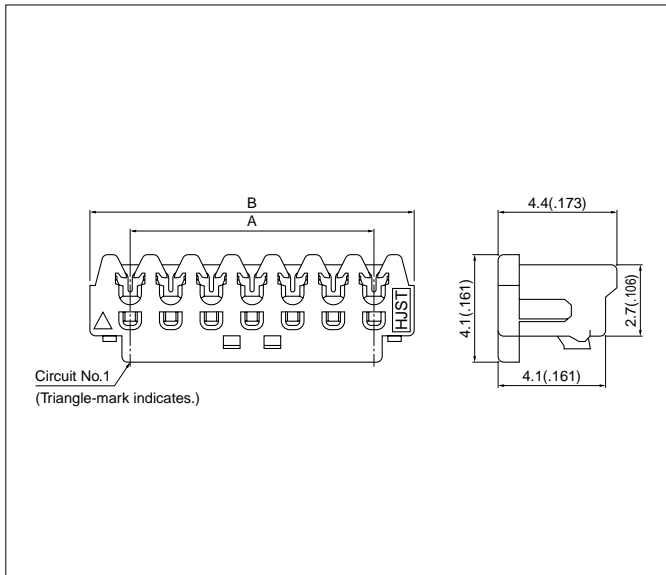
Item	Series	CZ · CZW connector	TZ · TZW connector
Current rating		2A AC, DC(AWG#26)	
Voltage rating		100V AC, DC	
Temperature rise		-25°C to +85°C(including temperature rise)	
Contact resistance		Initial value / 10m Ω max. After environmental testing / 20m Ω max.	Initial value / 20m Ω max. After environmental 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, tin-coated annealed copper Insulation O.D. / 0.7 to 0.83mm(.028" to .033")	—
Applicable PC board thickness		1.6mm(.063")	—
Applicable panel thickness		—	0.5 to 2.0mm(.020" to .079")

* Contact JST if Lead-Free product is required.

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

* Contact JST for details.

CZ connector receptacle

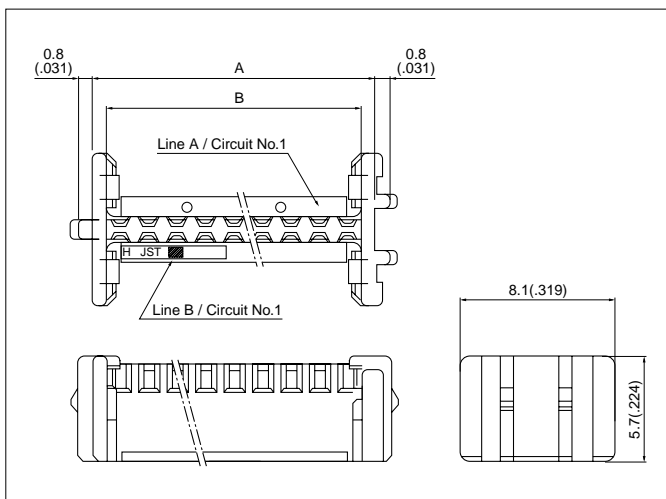


Circuits	Model No.		Dimensions mm(in.)		Q'ty / box
	Gray	Yellow	A	B	
2	02CZ-6H	02CZ-6Y	1.5(.059)	4.5(.177)	2,000
3	03CZ-6H	03CZ-6Y	3.0(.118)	6.0(.236)	2,000
4	04CZ-6H	04CZ-6Y	4.5(.177)	7.5(.295)	2,000
5	05CZ-6H	05CZ-6Y	6.0(.236)	9.0(.354)	2,000
6	06CZ-6H	06CZ-6Y	7.5(.295)	10.5(.413)	2,000
7	07CZ-6H	07CZ-6Y	9.0(.354)	12.0(.472)	2,000
8	08CZ-6H	08CZ-6Y	10.5(.413)	13.5(.531)	2,000
9	09CZ-6H	09CZ-6Y	12.0(.472)	15.0(.591)	1,000
10	10CZ-6H	10CZ-6Y	13.5(.531)	16.5(.650)	1,000
11	11CZ-6H	11CZ-6Y	15.0(.591)	18.0(.709)	1,000
12	12CZ-6H	12CZ-6Y	16.5(.650)	19.5(.768)	1,000
13	13CZ-6H	13CZ-6Y	18.0(.709)	21.0(.827)	1,000
14	14CZ-6H	14CZ-6Y	19.5(.768)	22.5(.886)	1,000
15	15CZ-6H	15CZ-6Y	21.0(.827)	24.0(.945)	1,000
16	16CZ-6H	16CZ-6Y	22.5(.886)	25.5(1.004)	1,000
17	17CZ-6H	17CZ-6Y	24.0(.945)	27.0(1.063)	1,000
18	18CZ-6H	18CZ-6Y	25.5(1.004)	28.5(1.122)	1,000
19	19CZ-6H	19CZ-6Y	27.0(1.063)	30.0(1.181)	1,000
20	20CZ-6H	20CZ-6Y	28.5(1.122)	31.5(1.240)	1,000

Material and Finish

Contact: Copper alloy, tin-plated
Housing: Glass-filled nylon 66, UL94V-0

CZW connector holder



Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
		A	B	
16	CZWH-16-S	14.9(.587)	13.5(.531)	1,000
18	CZWH-18-S	16.4(.646)	15.0(.591)	1,000
20	CZWH-20-S	17.9(.705)	16.5(.650)	1,000
22	CZWH-22-S	19.4(.764)	18.0(.709)	1,000
24	CZWH-24-S	20.9(.823)	19.5(.768)	1,000
26	CZWH-26-S	22.4(.882)	21.0(.827)	1,000
28	CZWH-28-S	23.9(.941)	22.5(.886)	1,000
30	CZWH-30-S	25.4(1.000)	24.0(.945)	1,000
32	CZWH-32-S	26.9(1.059)	25.5(1.004)	1,000
34	CZWH-34-S	28.4(1.118)	27.0(1.063)	1,000
36	CZWH-36-S	29.9(1.177)	28.5(1.122)	1,000
38	CZWH-38-S	31.4(1.236)	30.0(1.181)	1,000
40	CZWH-40-S	32.9(1.295)	31.5(1.240)	1,000

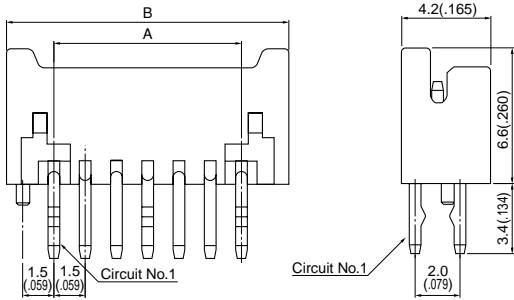
Material

PBT, UL94V-0, natural (white)

CZ FAMILY SERIES/CZ·CZW·TZ·TZW

CZ connector through-hole type shrouded header

Top entry type

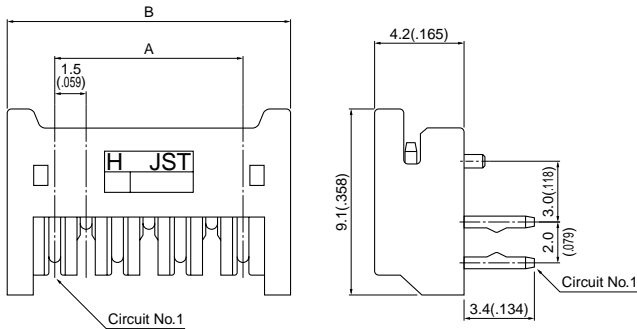


Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
	Top entry type	A	B	
2	B02B-CZHK-B-1	1.5(.059)	6.0(.236)	2,072
3	B03B-CZHK-B-1	3.0(.118)	7.5(.295)	1,624
4	B04B-CZHK-B-1	4.5(.177)	9.0(.354)	1,344
5	B05B-CZHK-B-1	6.0(.236)	10.5(.413)	1,176
6	B06B-CZHK-B-1	7.5(.295)	12.0(.472)	1,008
7	B07B-CZHK-B-1	9.0(.354)	13.5(.531)	896
8	B08B-CZHK-B-1	10.5(.413)	15.0(.591)	784
9	B09B-CZHK-B-1	12.0(.472)	16.5(.650)	728
10	B10B-CZHK-B-1	13.5(.531)	18.0(.709)	672
11	B11B-CZHK-B-1	15.0(.591)	19.5(.768)	616
12	B12B-CZHK-B-1	16.5(.650)	21.0(.827)	560
13	B13B-CZHK-B-1	18.0(.709)	22.5(.886)	504
14	B14B-CZHK-B-1	19.5(.768)	24.0(.945)	504
15	B15B-CZHK-B-1	21.0(.827)	25.5(1.004)	448
16	B16B-CZHK-B-1	22.5(.886)	27.0(1.063)	448
17	B17B-CZHK-B-1	24.0(.945)	28.5(1.122)	392
18	B18B-CZHK-B-1	25.5(1.004)	30.0(1.181)	392
19	B19B-CZHK-B-1	27.0(1.063)	31.5(1.240)	392
20	B20B-CZHK-B-1	28.5(1.122)	33.0(1.299)	336

Material and Finish

Pin: Copper alloy, copper-undercoated, tin/lead-plated
Housing: Glass-filled nylon 66, UL94V-0, natural (grayish color)
Note: Models B()B-CZHK-B are the headers without the boss.

Side entry type



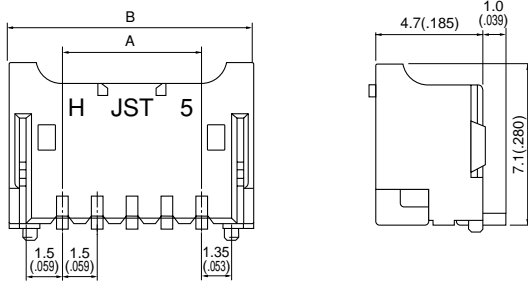
Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
	Side entry type	A	B	
2	S02B-CZHK-B-1	1.5(.059)	6.0(.236)	1,480
3	S03B-CZHK-B-1	3.0(.118)	7.5(.295)	1,160
4	S04B-CZHK-B-1	4.5(.177)	9.0(.354)	960
5	S05B-CZHK-B-1	6.0(.236)	10.5(.413)	840
6	S06B-CZHK-B-1	7.5(.295)	12.0(.472)	720
7	S07B-CZHK-B-1	9.0(.354)	13.5(.531)	640
8	S08B-CZHK-B-1	10.5(.413)	15.0(.591)	560
9	S09B-CZHK-B-1	12.0(.472)	16.5(.650)	520
10	S10B-CZHK-B-1	13.5(.531)	18.0(.709)	480
11	S11B-CZHK-B-1	15.0(.591)	19.5(.768)	440
12	S12B-CZHK-B-1	16.5(.650)	21.0(.827)	400
13	S13B-CZHK-B-1	18.0(.709)	22.5(.886)	360
14	S14B-CZHK-B-1	19.5(.768)	24.0(.945)	360
15	S15B-CZHK-B-1	21.0(.827)	25.5(1.004)	320
16	S16B-CZHK-B-1	22.5(.886)	27.0(1.063)	320
17	S17B-CZHK-B-1	24.0(.945)	28.5(1.122)	280
18	S18B-CZHK-B-1	25.5(1.004)	30.0(1.181)	280
19	S19B-CZHK-B-1	27.0(1.063)	31.5(1.240)	280
20	S20B-CZHK-B-1	28.5(1.122)	33.0(1.299)	240

Material and Finish

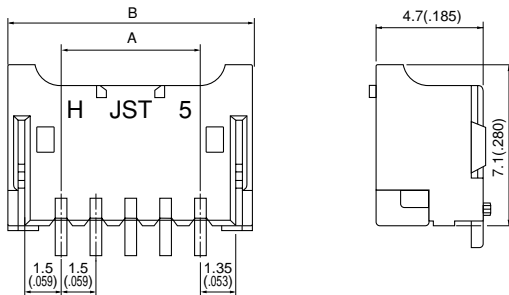
Pin: Copper alloy, copper-undercoated, tin/lead-plated
Housing: Glass-filled nylon 66, UL94V-0, natural (grayish color)
Note: Models S()B-CZHK-B are the headers without the boss.

CZ connector SMT type shrouded header

Top entry type



Side entry type



Cir- cuits	Model No.		Dimensions mm(in.)		Qty / 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(.059)	6.0(.236)	800	1,250
4	BM04B-CZSS-1-TF	SM04B-CZSS-1-TB	4.5(.177)	9.0(.354)	800	1,250
5	BM05B-CZSS-1-TF	SM05B-CZSS-1-TB	6.0(.236)	10.5(.413)	800	1,250
6	BM06B-CZSS-1-TF	—	7.5(.295)	12.0(.472)	800	—
8	BM08B-CZSS-1-TF	—	10.5(.413)	15.0(.591)	800	—
10	BM10B-CZSS-1-TF	SM10B-CZSS-1-TB	13.5(.531)	18.0(.709)	800	1,250
13	BM13B-CZSS-1-TF	—	18.0(.709)	22.5(.886)	800	—
17	BM17B-CZSS-1-TF	—	24.0(.945)	28.5(1.122)	800	—
20	BM20B-CZSS-1-TF	—	28.5(1.122)	33.0(1.299)	800	—

Material and Finish

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

Housing: Polyamide resin, UL94V-0, natural (ivory)

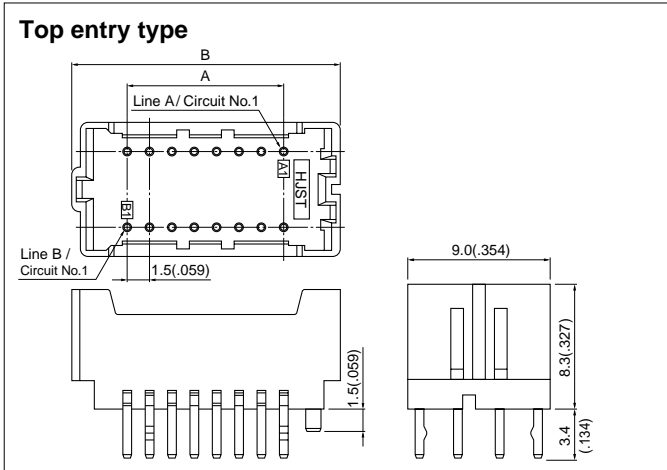
Solder tab: Copper alloy, copper-undercoated, tin/lead-plated

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

Side entry type ...Models SM()B-CZSS-TF are the headers without the boss.

CZ FAMILY SERIES/CZ·CZW·TZ·TZW

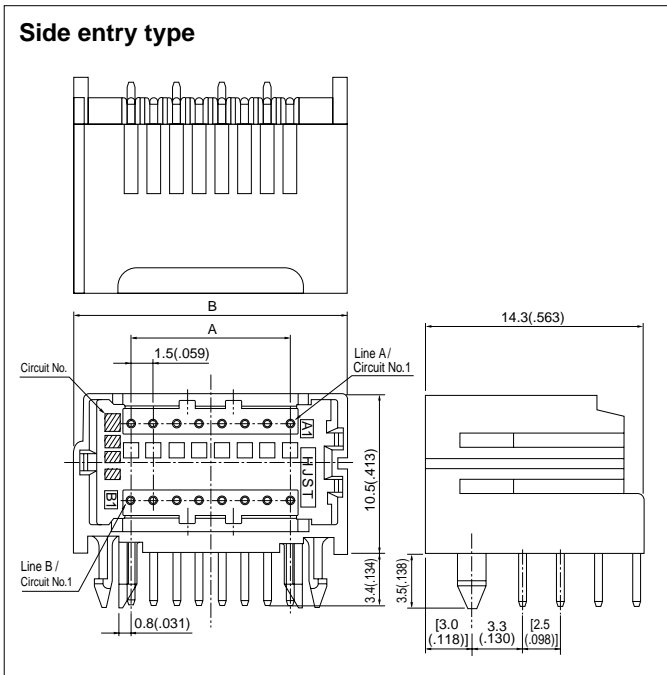
CZW connector through-hole type shrouded header



Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
		A	B	
16	B16B-CZWHK-B-1	10.5(.413)	18.0(.709)	420
18	B18B-CZWHK-B-1	12.0(.472)	19.5(.768)	385
20	B20B-CZWHK-B-1	13.5(.531)	21.0(.827)	350
22	B22B-CZWHK-B-1	15.0(.591)	22.5(.886)	315
24	B24B-CZWHK-B-1	16.5(.650)	24.0(.945)	315
26	B26B-CZWHK-B-1	18.0(.709)	25.5(1.004)	280
28	B28B-CZWHK-B-1	19.5(.768)	27.0(1.063)	280
30	B30B-CZWHK-B-1	21.0(.827)	28.5(1.122)	245
32	B32B-CZWHK-B-1	22.5(.886)	30.0(1.181)	245
34	B34B-CZWHK-B-1	24.0(.945)	31.5(1.240)	245
36	B36B-CZWHK-B-1	25.5(1.004)	33.0(1.299)	210
38	B38B-CZWHK-B-1	27.0(1.063)	34.5(1.358)	210
40	B40B-CZWHK-B-1	28.5(1.122)	36.0(1.417)	210

Material and Finish

Pin: Copper alloy, copper-undercoated, tin/lead-plated
 Housing: Glass-filled nylon 66, UL94V-0, natural (grayish color)
 Note: Models B()B-CZWHK-B are the headers without the boss.

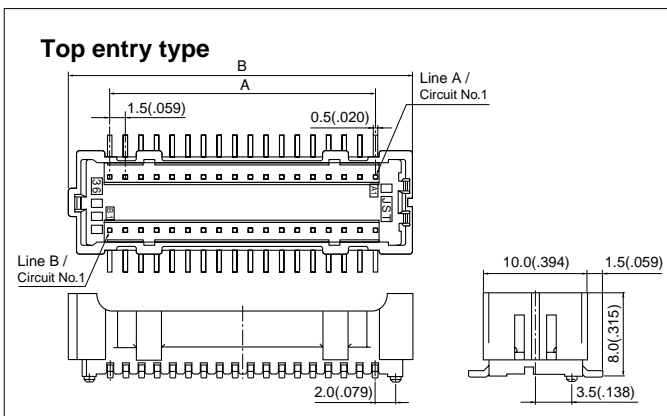


Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
		A	B	
16	—	10.5(.413)	18.0(.709)	—
18	—	12.0(.472)	19.5(.768)	—
20	S20B-CZWHS-B-1	13.5(.531)	21.0(.827)	280
22	—	15.0(.591)	22.5(.886)	—
24	—	16.5(.650)	24.0(.945)	—
26	S26B-CZWHS-B-1	18.0(.709)	25.5(1.004)	224
28	—	19.5(.768)	27.0(1.063)	—
30	—	21.0(.827)	28.5(1.122)	—
32	—	22.5(.886)	30.0(1.181)	—
34	—	24.0(.945)	31.5(1.240)	—
36	—	25.5(1.004)	33.0(1.299)	—
38	—	27.0(1.063)	34.5(1.358)	—
40	S40B-CZWHS-B-1	28.5(1.122)	36.0(1.417)	168

Material and Finish

Pin: Copper alloy, copper-undercoated, tin/lead-plated
 Housing: Glass-filled nylon 66, UL94V-0, natural (grayish color)

CZW connector SMT type shrouded header



Circuits	Model No.	Dimensions mm(in.)		Q'ty / box
		A	B	
36	BM36B-CZWSS-1-TF	25.5(1.004)	33.0(1.299)	300
40	BM40B-CZWSS-1-TF	28.5(1.122)	36.0(1.417)	300

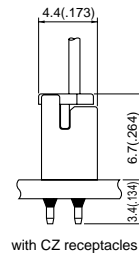
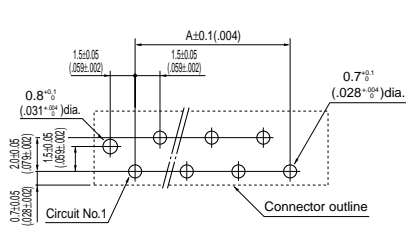
Material and Finish

Pin: Copper alloy, copper-undercoated, tin/lead-plated
 Housing: Polyamide resin, UL94V-0, natural (ivory)
 Note: Models BM()B-CZWSS-TF are the headers without the boss.

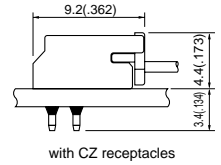
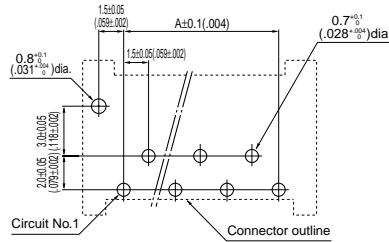
PC board layout (viewed from component side) and Assembly layout

<CZ connector (through-hole type)>

Top entry type

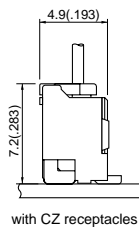
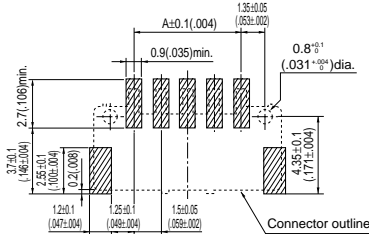


Side entry type

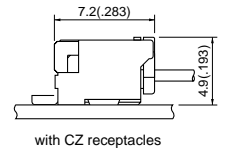
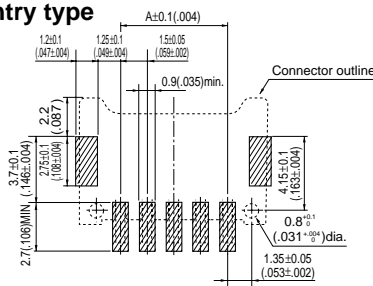


<CZ connector (SMT type)>

Top entry type

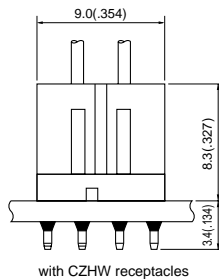
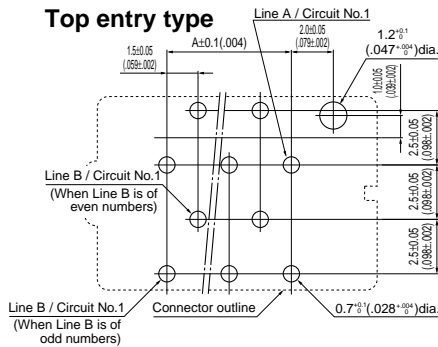


Side entry type

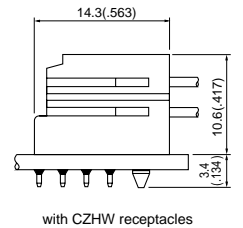
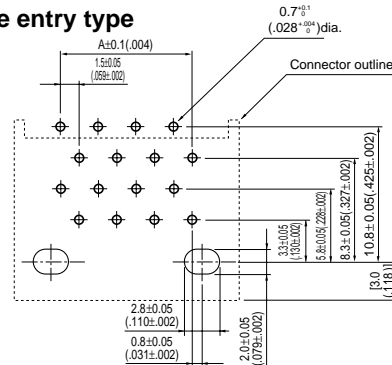


<CZW connector (through-hole type)>

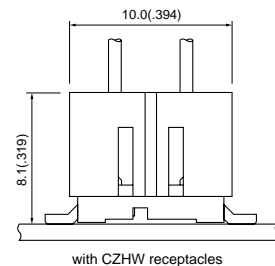
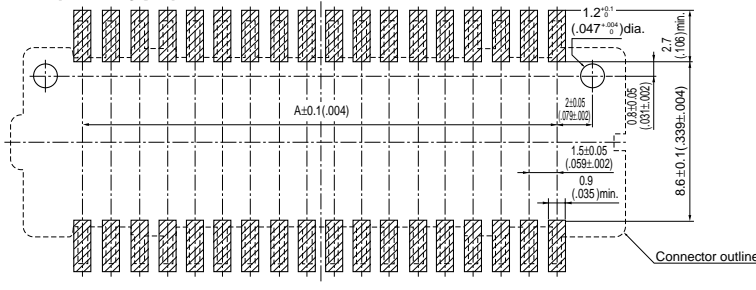
Top entry type



Side entry type



<CZW connector (SMT type)>

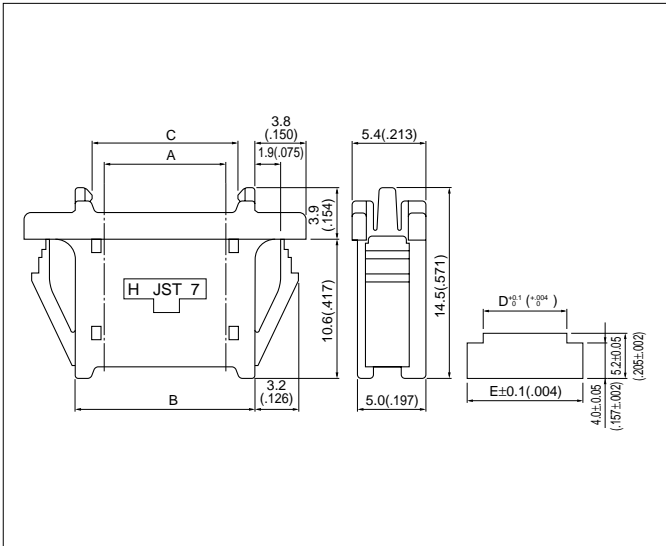


Note:

1. Tolerances are non-cumulative: $\pm 0.05\text{mm}$ ($\pm 0.002''$) 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·TZ·TZW

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

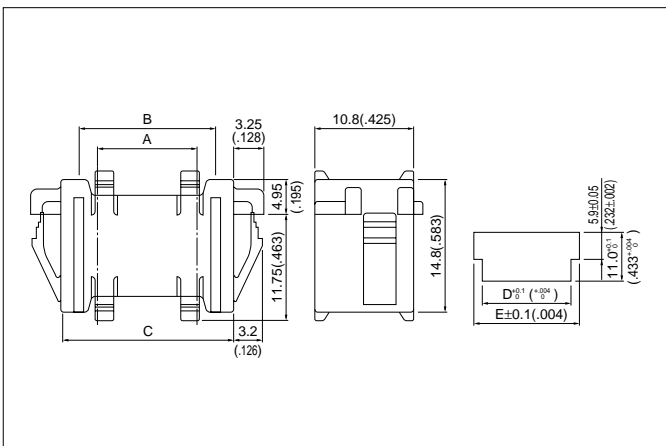


Circuits	Model No.	Dimensions mm(in.)					Qty / box
		A	B	C	D	E	
2	BU02P-TZ-S	1.5(.059)	5.9(.232)	3.5(.138)	6.3(.248)	9.9(.390)	500
3	BU03P-TZ-S	3.0(.118)	7.4(.291)	5.0(.197)	7.8(.307)	11.4(.449)	500
4	BU04P-TZ-S	4.5(.177)	8.9(.350)	6.5(.256)	9.3(.366)	12.9(.508)	500
5	BU05P-TZ-S	6.0(.236)	10.4(.409)	8.0(.315)	10.8(.425)	14.4(.567)	500
6	BU06P-TZ-S	7.5(.295)	11.9(.469)	9.5(.374)	12.3(.484)	15.9(.626)	250
7	BU07P-TZ-S	9.0(.354)	13.4(.528)	11.0(.433)	13.8(.543)	17.4(.685)	250
8	BU08P-TZ-S	10.5(.413)	14.9(.587)	12.5(.492)	15.3(.602)	18.9(.744)	250
9	BU09P-TZ-S	12.0(.472)	16.4(.646)	14.0(.551)	16.8(.661)	20.4(.803)	250
10	BU10P-TZ-S	13.5(.531)	17.9(.705)	15.5(.610)	18.3(.720)	21.9(.862)	250
11	BU11P-TZ-S	15.0(.591)	19.4(.764)	17.0(.669)	19.8(.780)	23.4(.921)	250
12	BU12P-TZ-S	16.5(.650)	20.9(.823)	18.5(.728)	21.3(.839)	24.9(.980)	250
13	BU13P-TZ-S	18.0(.709)	22.4(.882)	20.0(.787)	22.8(.898)	26.4(1.039)	250
14	BU14P-TZ-S	19.5(.768)	23.9(.941)	21.5(.846)	24.3(.957)	27.9(1.098)	250
15	BU15P-TZ-S	21.0(.827)	25.4(1.000)	23.0(.906)	25.8(1.016)	29.4(1.157)	250
16	BU16P-TZ-S	22.5(.886)	26.9(1.059)	24.5(.965)	27.3(1.075)	30.9(1.217)	250
17	BU17P-TZ-S	24.0(.945)	28.4(1.118)	26.0(1.024)	28.8(1.134)	32.4(1.276)	250
18	BU18P-TZ-S	25.5(1.004)	29.9(1.177)	27.5(1.083)	30.3(1.193)	33.9(1.335)	150
19	BU19P-TZ-S	27.0(1.063)	31.4(1.236)	29.0(1.142)	31.8(1.252)	35.4(1.394)	150
20	BU20P-TZ-S	28.5(1.122)	32.9(1.295)	30.5(1.201)	33.3(1.311)	36.9(1.453)	100

Material and Finish

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

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



Circuits	Model No.	Dimensions mm(in.)					Qty / box
		A	B	C	D	E	
16	BU16P-TZW-S	10.5(.413)	15.0(.591)	19.0(.748)	19.4(.764)	23.0(.906)	120
18	BU18P-TZW-S	12.0(.472)	16.5(.650)	20.5(.807)	20.9(.823)	24.5(.965)	105
20	BU20P-TZW-S	13.5(.531)	18.0(.709)	22.0(.866)	22.4(.882)	26.0(1.024)	105
22	BU22P-TZW-S	15.0(.591)	19.5(.768)	23.5(.925)	23.9(.941)	27.5(1.083)	105
24	BU24P-TZW-S	16.5(.650)	21.0(.827)	25.0(.984)	25.4(1.000)	29.0(1.142)	90
26	BU26P-TZW-S	18.0(.709)	22.5(.886)	26.5(1.043)	26.9(1.059)	30.5(1.201)	90
28	BU28P-TZW-S	19.5(.768)	24.0(.945)	28.0(1.102)	28.4(1.118)	32.0(1.260)	90
30	BU30P-TZW-S	21.0(.827)	25.5(1.004)	29.5(1.161)	29.9(1.177)	33.5(1.319)	75
32	BU32P-TZW-S	22.5(.886)	27.0(1.063)	31.0(1.220)	31.4(1.236)	35.0(1.378)	75
34	BU34P-TZW-S	24.0(.945)	28.5(1.122)	32.5(1.280)	32.9(1.295)	36.5(1.437)	75
36	BU36P-TZW-S	25.5(1.004)	30.0(1.181)	34.0(1.339)	34.4(1.354)	38.0(1.496)	75
38	BU38P-TZW-S	27.0(1.063)	31.5(1.240)	35.5(1.398)	35.9(1.413)	39.5(1.555)	75
40	BU40P-TZW-S	28.5(1.122)	33.0(1.299)	37.0(1.457)	37.4(1.472)	41.0(1.614)	60

Material and Finish

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

Assembly layout

