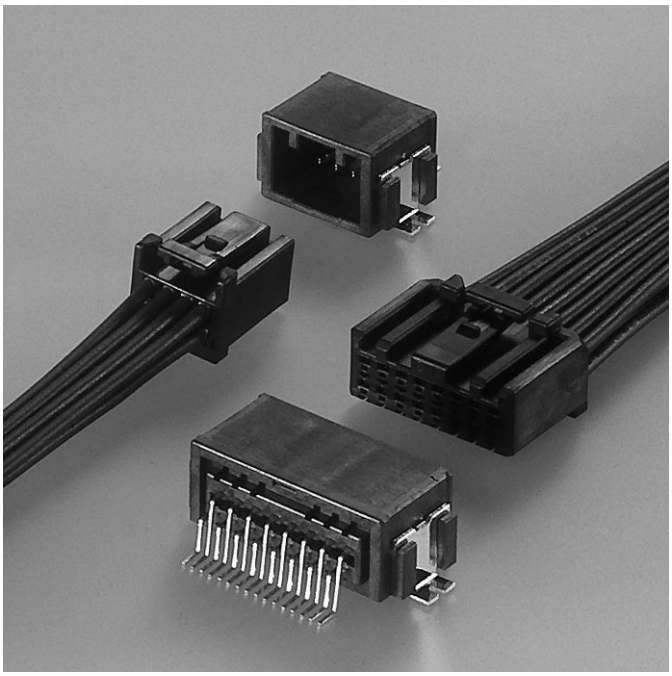
CPT CONNECTOR

Board-to-wire

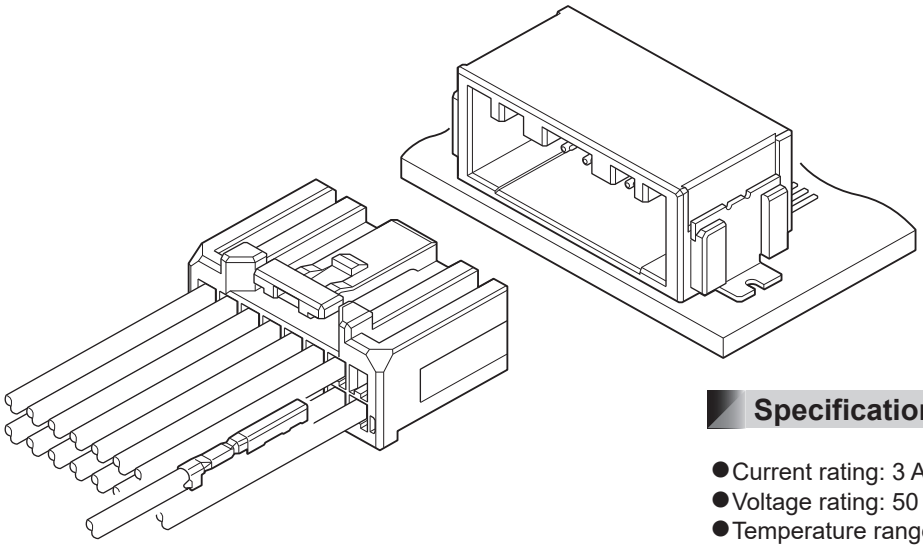


Developed in pursuit of miniaturization and low profile as PC board connector for automobile.
This connector is surface mounting type connector having the spring structure on male terminal disproving the conventional concept.

Features

●Compact design
2.0 mm pitch is realized miniaturization and low profile as the connector for automobile.

●Terminal construction
Female terminal is designed for simple box structure by having spring structure on male terminal.

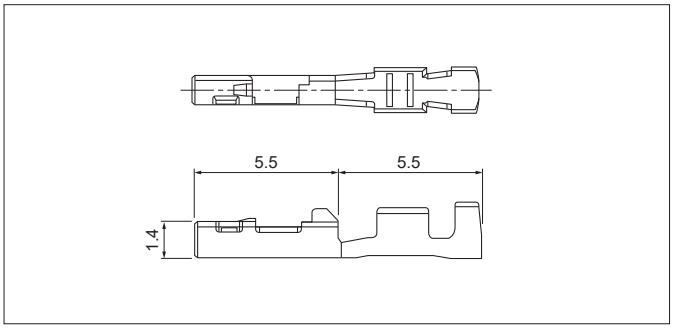


Specifications

- Current rating: 3 A AC, DC (0.3 mm^2, Single circuit)
- Voltage rating: 50 V AC, DC
- Temperature range: –40°C to +100°C
  (including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 8 mΩ max.
  After environmental tests/ 16 mΩ max.
- Insulation resistance: 100 MΩ min.
- Withstanding voltage: 1,000 VAC/minute
- Applicable wire: AESSX-f/ AVSS
  0.3 mm^2

* Compliant with ELV/RoHS2.
* Contact JST for details.

Female terminal



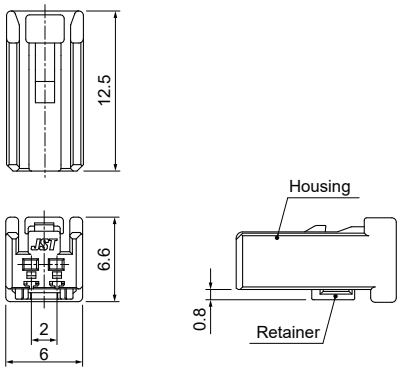
Model No.	Applicable wire range		Q'ty/reel
	Conductor (mm²)	Insulation O.D. (mm)	
SCPT-A021GF-0.5	0.3	1.4	15,000

Material and Finish
Brass, nickel-undercoated, Contact area; gold-plated Barrel area; tin-plated

Female connector

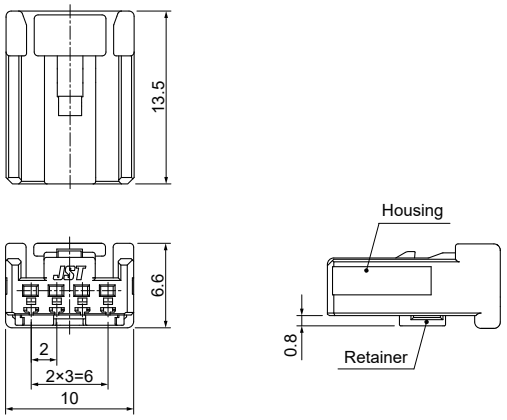
Single row

●**2 circuits**

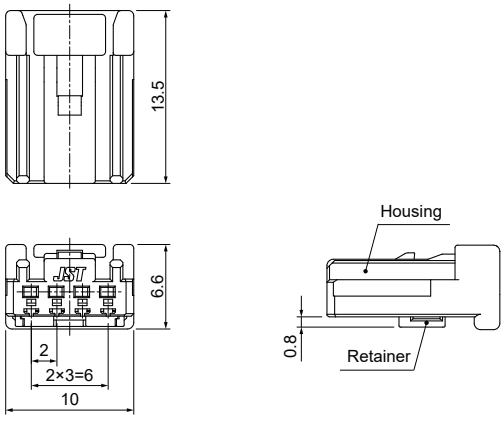


●**4 circuits**

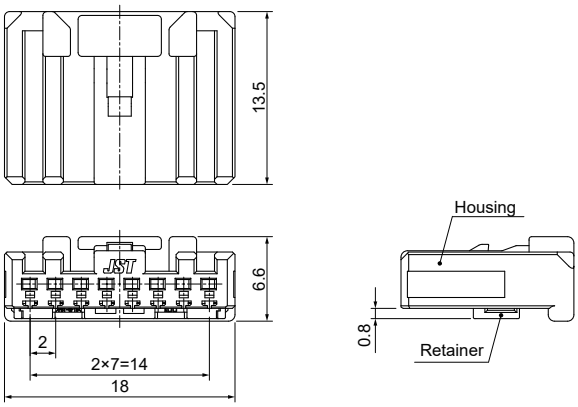
04CPT-B1-2A



04CPT-B1-2B



●**8 circuits**



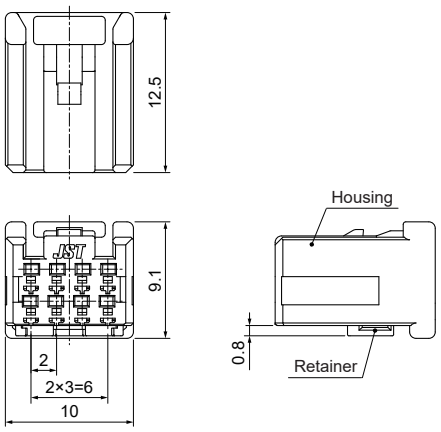
Circuits	Model No.	Q'ty/box
2	**02CPT-B-2A**	500
4	**04CPT-B1-2A**	600
	04CPT-B1-2B	
8	**08CPT-B1-2A**	400

Material and Finish
Housing: Glass-filled PBT, Black Retainer: Glass-filled PBT, Blue

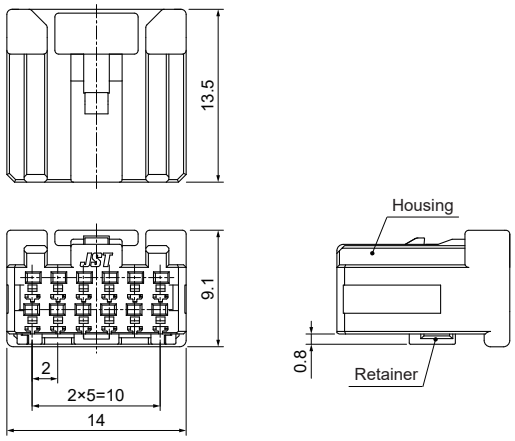
Female connector

Dual row

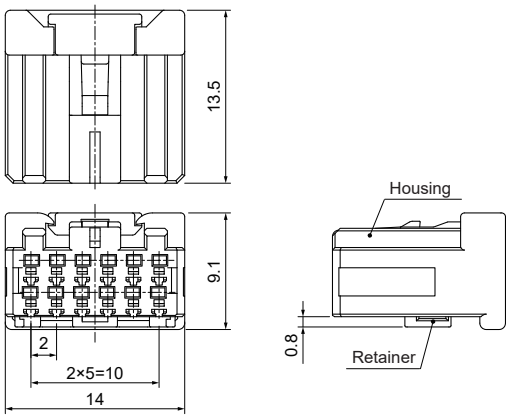
●8 circuits



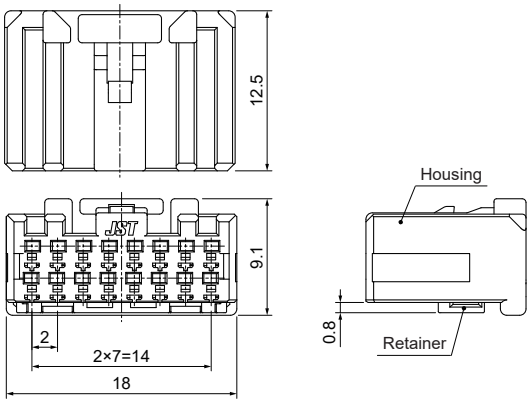
●12 circuits
12CPT-B-2A



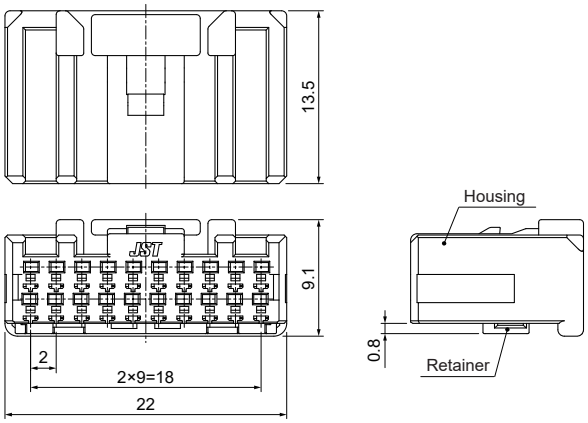
●12 circuits
12CPT-B-2A-FL



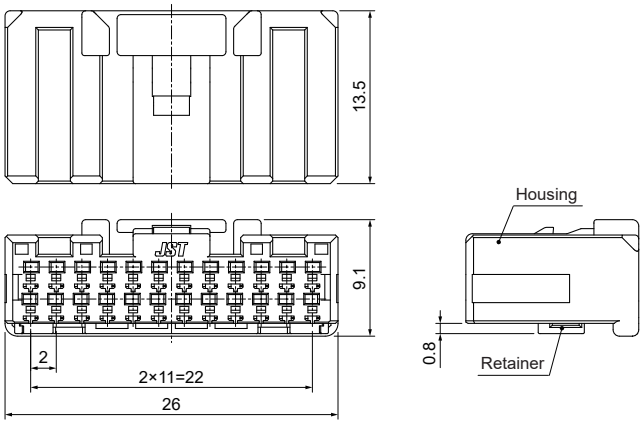
●16 circuits



●20 circuits



●24 circuits



Circuits	Model No.	Q'ty/box
8	**08CPT-B-2A**	500
12	**12CPT-B-2A**	300
	12CPT-B-2A-FL	
16	**16CPT-B-2A**	250
20	**20CPT-B-2A**	250
24	**24CPT-B-2A**	200

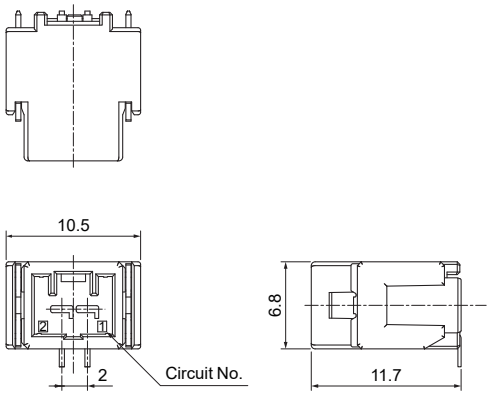
Material and Finish
Housing: Glass-filled PBT, Black Retainer: Glass-filled PBT, Blue

Male connector

Top entry type

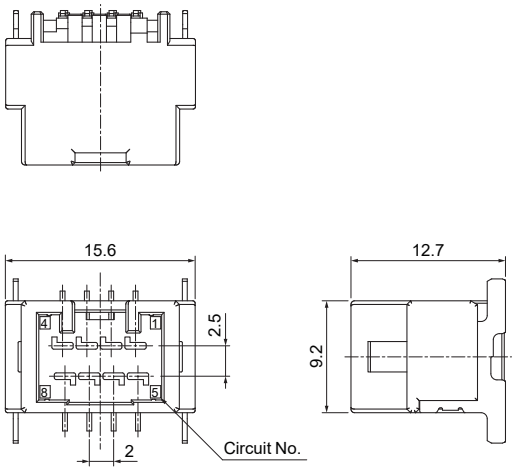
Single row

●2 circuits

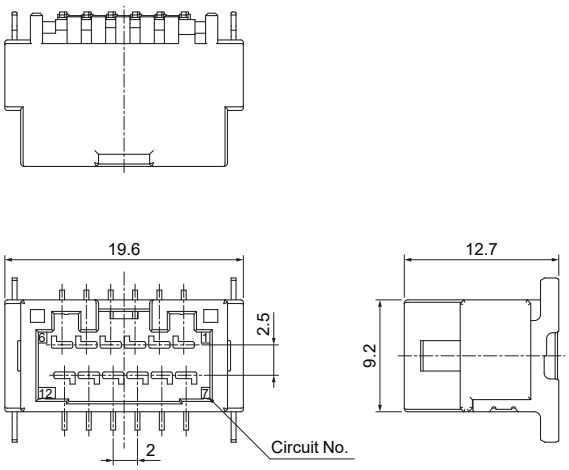


Dual row

●8 circuits



●12 circuits



Type		Circuits	Model No.	Q'ty/reel
Top	Single row	2	**BM02B-CPTK-1A-TB**	370
	Dual row	8	**BM08B-CPTK-1A-TB**	240
		12	**BM12B-CPTK-1A-TB**	

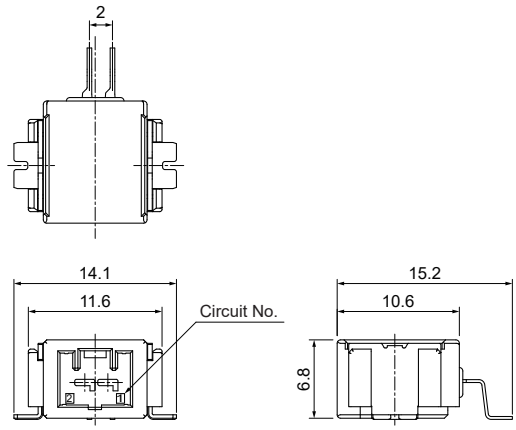
Material and Finish
Terminal: Copper alloy, nickel-undercoated, Contact area; gold-plated Solder tail; tin-plated (reflow treatment)
Housing: Glass-filled LCP, Black
Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

Male connector

Side entry type

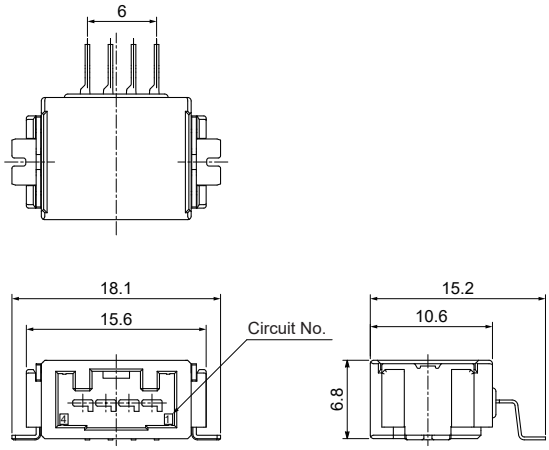
Single row

●2circuits

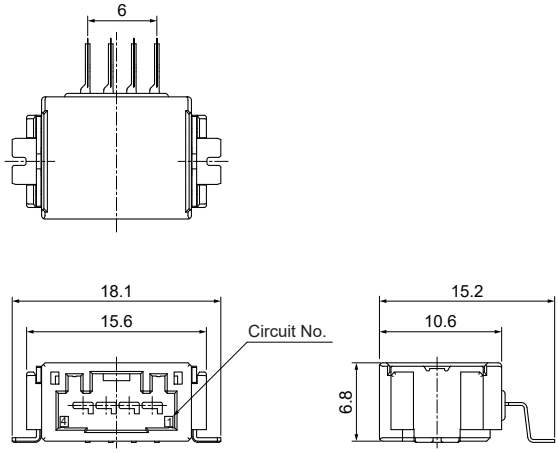


●4 circuits

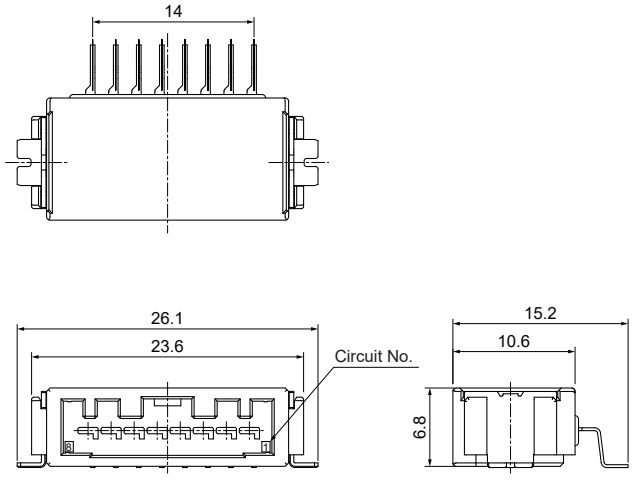
SM04B1-CPTK-1A-TB



SM04B1-CPTK-1B-TB



●8 circuits



Type		Circuits	Model No.	Q'ty/reel
Side	Single row	2	**SM02B-CPTK-1A-TB**	500
		4	**SM04B1-CPTK-1A-TB**	
			SM04B1-CPTK-1B-TB	
		8	**SM08B1-CPTK-1A-TB**	

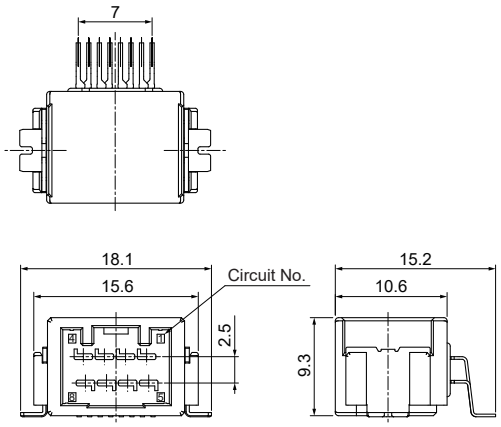
Material and Finish
Terminal: Copper alloy, nickel-undercoated, Contact area; gold-plated Solder tail; tin-plated (reflow treatment)
Housing: Glass-filled LCP, Black
Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

Male connector

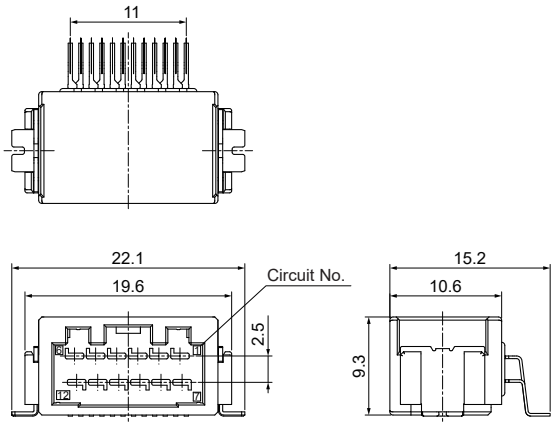
Side entry type

Dual row

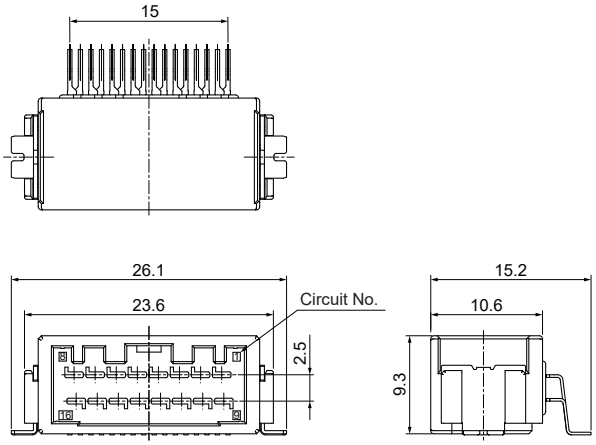
●8 circuits



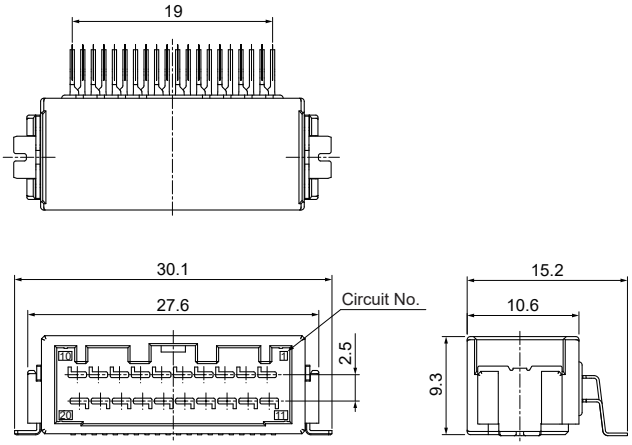
●12 circuits



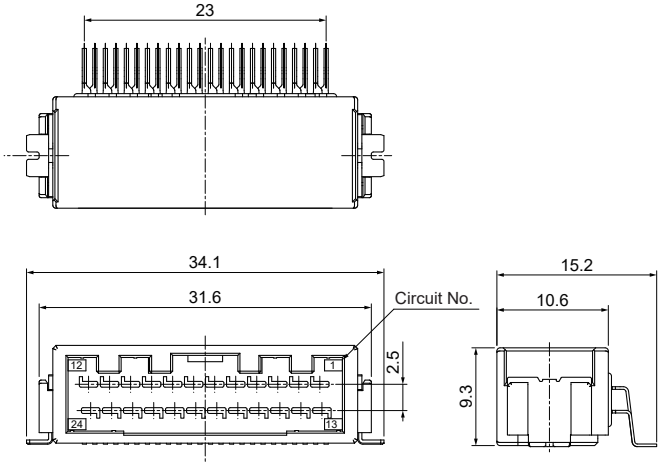
●16 circuits



●20 circuits



●24 circuits



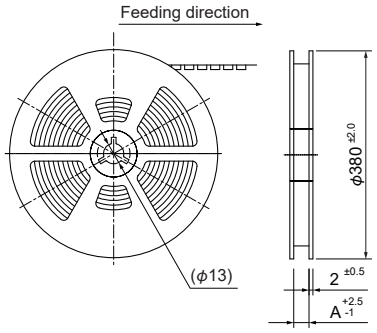
Type		Circuits	Model No.	Q'ty/reel
Side	Dual row	8	**SM08B-CPTK-1A-TB**	390
		12	**SM12B-CPTK-1A-TB**	
		16	**SM16B-CPTK-1A-TB**	
		20	**SM20B-CPTK-1A-TB**	
		24	**SM24B-CPTK-1A-TB**	

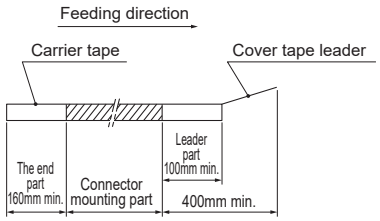
Material and Finish
Terminal: Copper alloy, nickel-undercoated, Contact area; gold-plated Solder tail; tin-plated (reflow treatment) Housing: Glass-filled LCP, Black Peg: Brass, nickel-undercoated, tin-plated (reflow treatment)

Taping Specifications

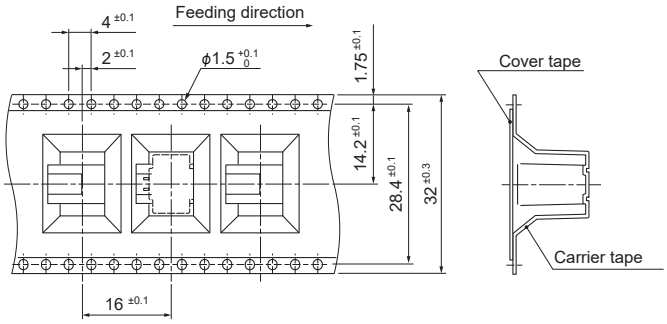
Top entry type

●2, 8, 12 circuits

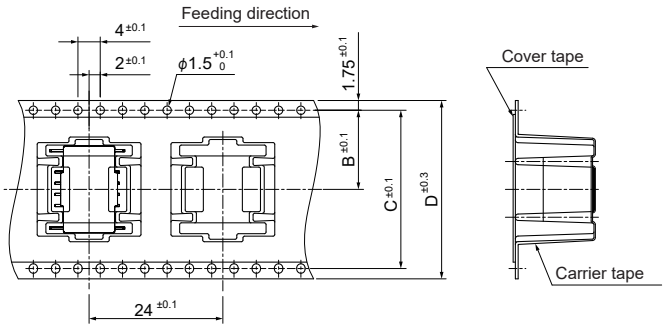




●2 circuits



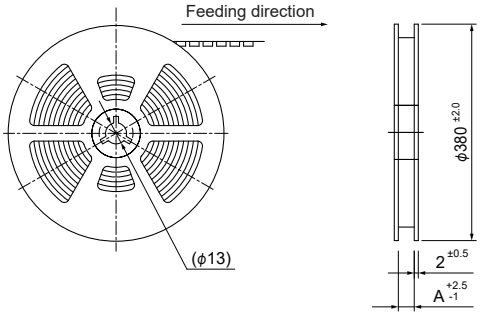
●8, 12 circuits

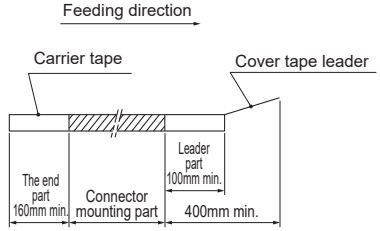


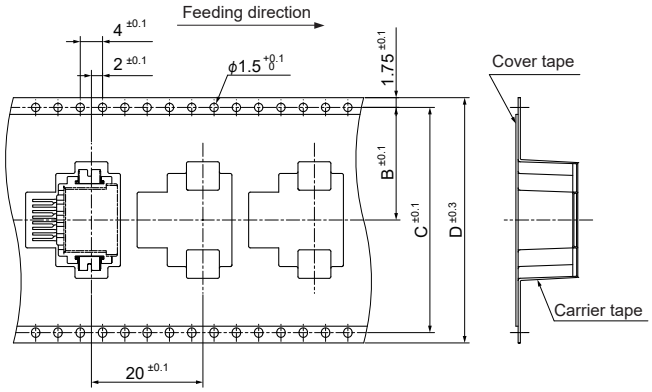
Type	Circuits	A	B	C	D
Single row	2	33.5	—	—	—
Dual row	8	33.5	14.2	28.4	32
	12	45.5	20.2	40.4	44

Side entry type

●2, 4, 8, 12, 16, 20, 24 circuits







Type	Circuits	A	B	C	D
Single row	2	33.5	14.2	28.4	32
	4	33.5	14.2	28.4	32
	8	45.5	20.2	40.4	44
Dual row	8	45.5	20.2	40.4	44
	12	45.5	20.2	40.4	44
	16	45.5	20.2	40.4	44
	20	45.5	20.2	40.4	44
	24	57.5	26.2	52.4	56

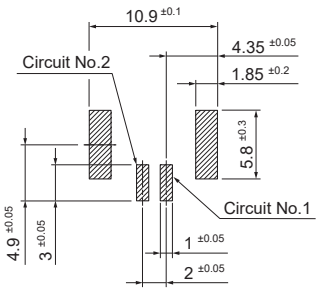
PC board layout, Assembly layout

Top entry type

PC board layout

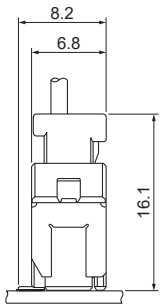
Single row

●2 circuits



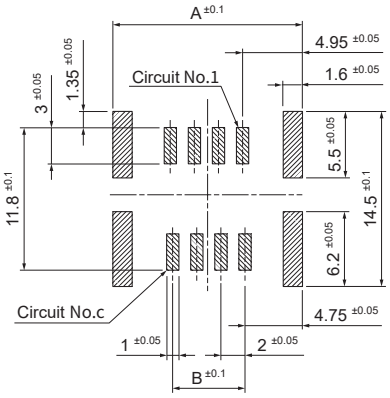
Assembly layout

●2 circuits

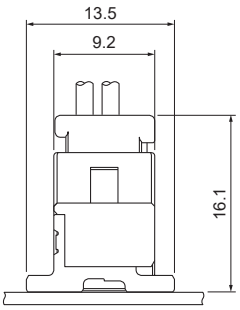


Dual row

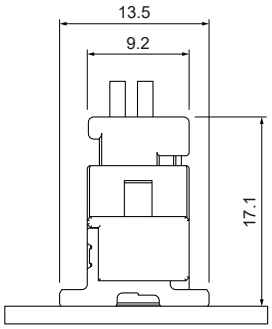
●8, 12 circuits



●8 circuits



●12 circuits



Circuits	A	B
8	15.7	6
12	19.7	10

Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers.
2. The dimensions above should serve as guideline. Contact JST for details.

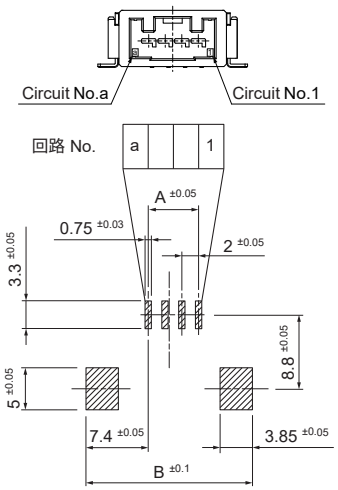
PC board layout, Assembly layout

Side entry type

PC board layout

Single row

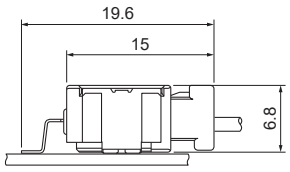
●2, 4, 8 (Single) circuits



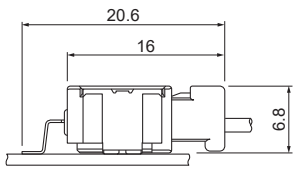
Circuits	A	B
2	2	15.8
4	6	19.8
8 (Single)	14	27.8

Assembly layout

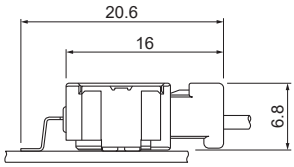
●2 circuits



●4 circuits

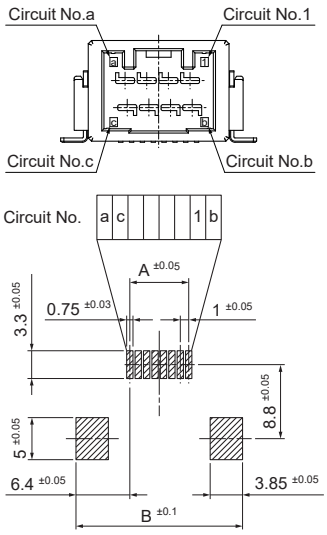


●8 (Single) circuits



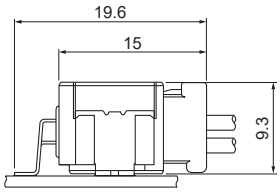
Dual row

●8 (Dual), 12, 16, 20, 24 circuits

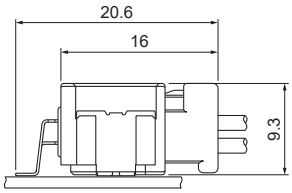


Circuits	A	B
8 (Dual)	7	19.8
12	11	23.8
16	15	27.8
20	19	31.8
24	23	35.8

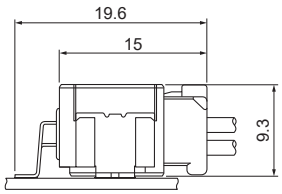
●8 (Dual) circuits



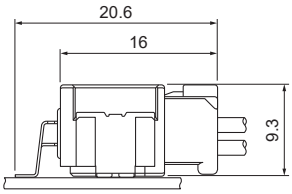
●12 circuits



●16 circuits



●20, 24 circuits



Note: 1. Tolerances are non-cumulative: ±0.05 mm for all centers.
2. The dimensions above should serve as guideline. Contact JST for details.

Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SCPT-A021GF-0.5	AP-K2N	MK/SCPT-A021-05	APLMK SCPT-A021-05

Note: When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.