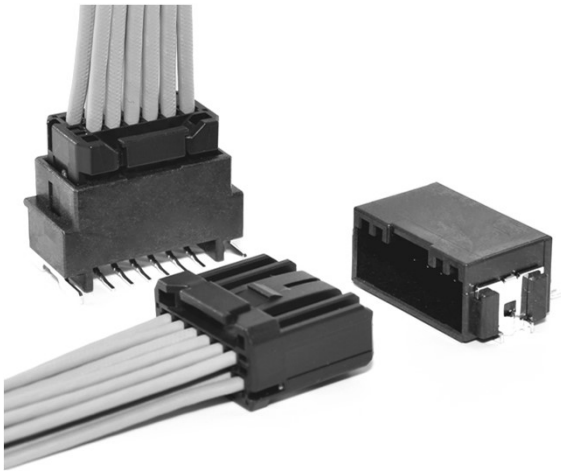
CPM CONNECTOR

Wire-to-Board



Miniaturized and low profile surface mounting type connector for automotive.
0.50 terminal with 2.0 mm pitch realized its miniaturization.

■ Features

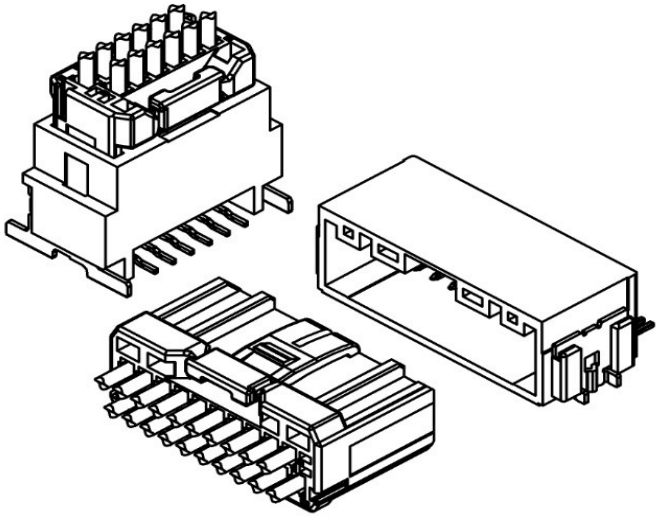
●Miniaturized and Low Profile
Miniaturized and low profile automotive connector which pitch is width: 2.0 mm and length: 2.5 mm by using the 0.5 terminal.

●High Heat Resistance 125℃
Conforming a heat resistant temperature of 125℃.

●Lock Flip-up Prevention Mechanism
Low profile connector which has the mechanism to prevent the lock damage by catching the wire cables.

●Conforming to UL94 V-0
Using UL94 V-0 material to meet the increasing market demand of the flame-retardant requirement.

●Same PCB Pattern as CPT
Applying the same PCB layout of CPT connector.



■ Specifications

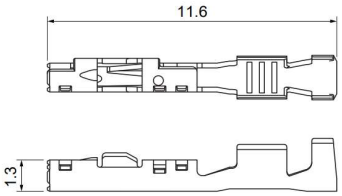
Item	Standard	Condition
●Current rating	3A AC,DC Max	Applying 0.3mm^2
●Temperature range	−40℃～＋125℃	Including temperature rise in applying electrical current
●Applicable wire	UL3265 0.3mm^2 AESSX 0.3mm^2 (Equivalent of AWG#22)	Coating OD: Φ1.5mm max
●Frame resistance	V-0	UL94
●Contact resistance	Initial 25mΩ max After environmental test 25mΩ max	DC 100mA
●Insulation resistance	100MΩ min	DC 500V
●Withstand voltage	No dielectric breakdown	AC 1,000V / min.
●Locking force	110N min	In case pulling to mating direct

■ Test Result

Item	Test Result	Condition
●Heat resistance	Initial 15mΩ max	Under 125℃, Abandoned for 1,008 hours
●Thermal shock resistance	Initial 15mΩ max	-40℃/125℃ 30 min / 1000cyc / each
●Vibration resistance	Initial 15mΩ max	USCAR2 V2

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

Female Terminal

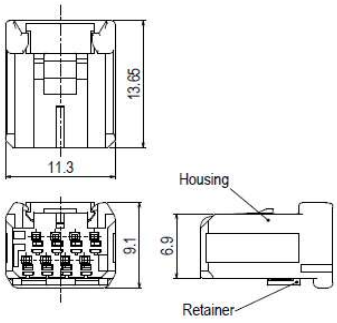


Model No.	Applicable wire range		Q'ty/reel
	Conductor (mm²)	Insulation O.D. (mm)	
SMEC-A021T-M0.5	0.3	1.5 max.	10,000

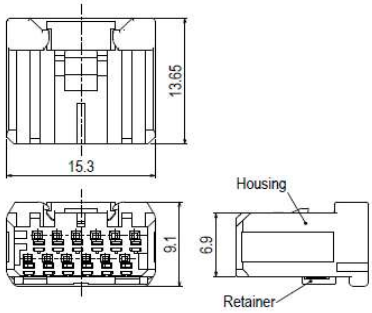
Material and Finish
Copper alloy, tin-plated

Female Connector

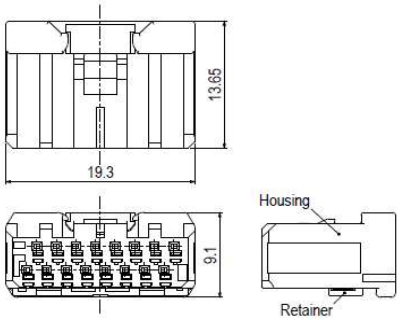
● **8 circuits**



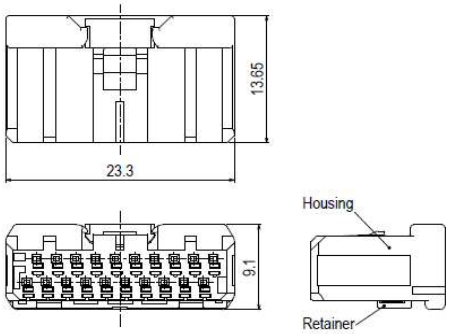
● **12 circuits**



● **16 circuits**



● **20 circuits**



Circuits	Model No.	Housing Color	Q'ty/box
8	**08CPM-BVK-2-AA**	Black	4,800
12	**12CPM-BVK-2-AA**	Black	3,600
16	**16CPM-BVK-2-AA**	Black	2,400
20	**20CPM-BVK-2-AA**	Black	1,200

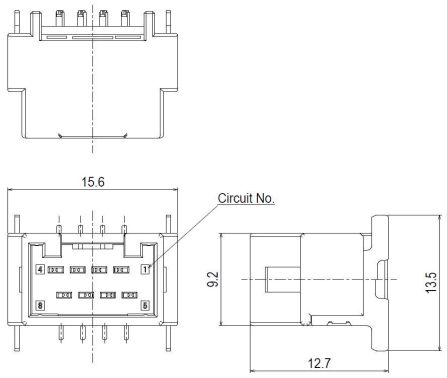
Material and Finish
Housing: Glass-filled PBT Retainer: Glass-filled PBT, Natural (White)

Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

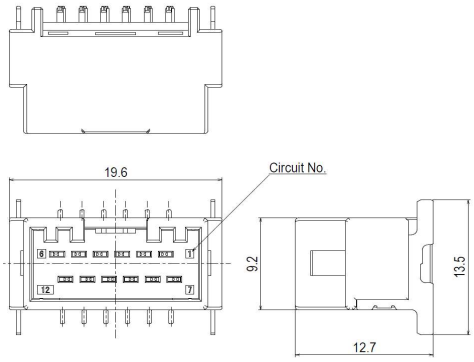
Male Connector

Top Type

● 8 circuits



● 12 circuits



Circuits	Model No.	Housing Color	Q'ty/box
8	**BM08B-CPMK-2AA-TB**	Black	1,100
12	**BM12B-CPMK-2AA-TB**	Black	880

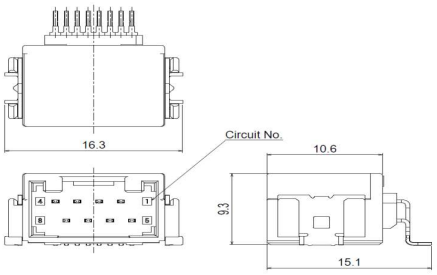
Material and Finish
Housing: Glass-filled LCP Suction cap: PA9T Male Terminal: Copper alloy, tin-plated Tab: Copper alloy, tin-plated

Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

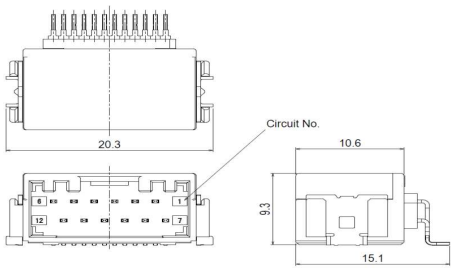
Male Connector

Side Type

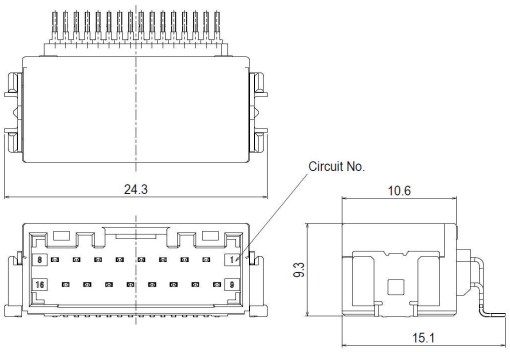
● 8 circuits



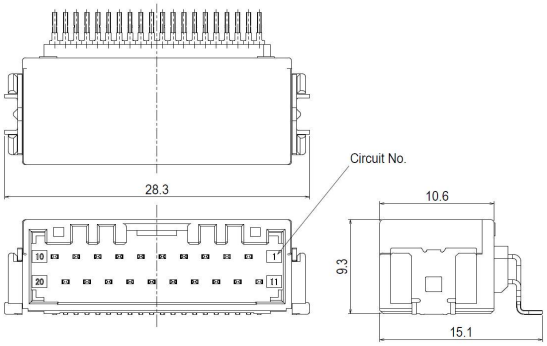
● 12 circuits



● 16 circuits



● 20 circuits



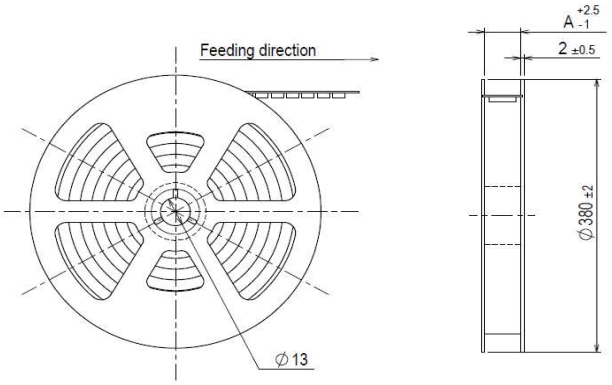
Circuits	Model No.	Housing Color	Q'ty/box
8	**SM08B-CPMK-2AA-TB**	Black	1,600
12	**SM12B-CPMK-2AA-TB**	Black	1,280
16	**SM16B-CPMK-2AA-TB**	Black	1,280
20	**SM20B-CPMK-2AA-TB**	Black	1,280

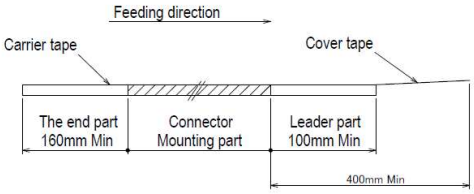
Material and Finish
Housing: Glass-filled LCP Male Terminal: Copper alloy, tin-plated Tab: Copper alloy, tin-plated

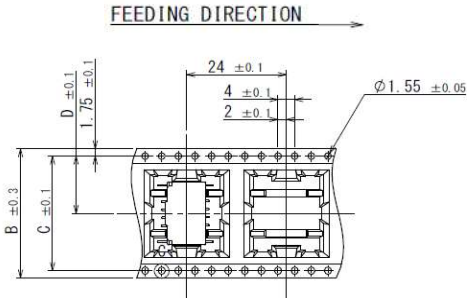
Note: Color/Key codes other than above-mentioned housing are also available. Contact JST for details.

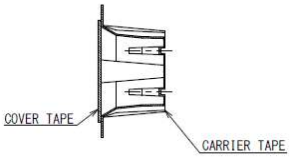
Taping Specification Top Type

● **8, 12 circuits**





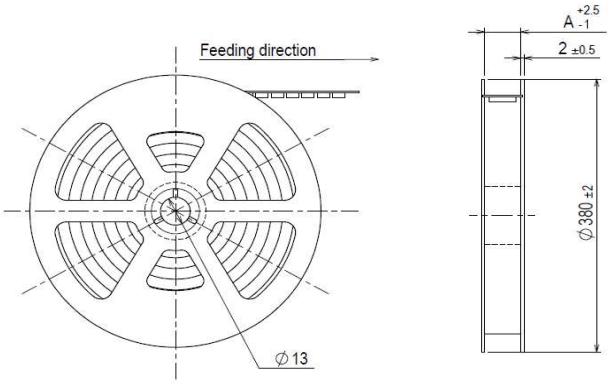


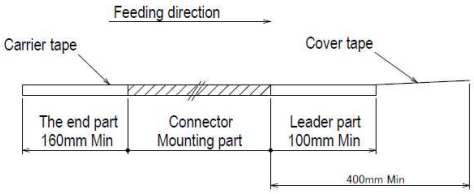


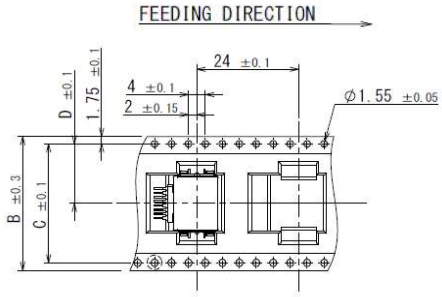
Circuits	A	B	C	D
8	33.4	32	28.4	14.2
12	45.4	44	40.4	20.2

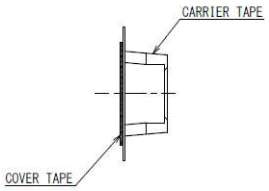
Taping Specification Side Type

● **8, 12, 16, 20 circuits**









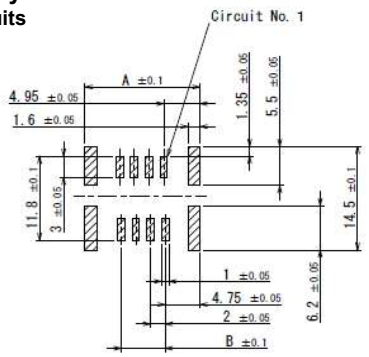
Circuits	A	B	C	D
8	33.4	32	28.4	14.2
12~20	45.4	44	40.4	20.2

PC board layout (Viewed from component side), Assembly layout

Top Type

PC board layout

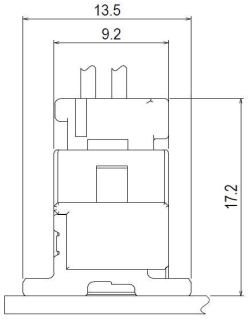
● 8, 12 circuits



Circuits	A	B
8	15.7	6
12	19.7	10

Assembly layout

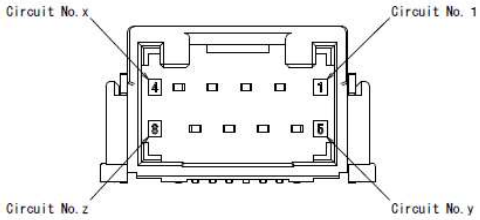
● 8, 12 circuits

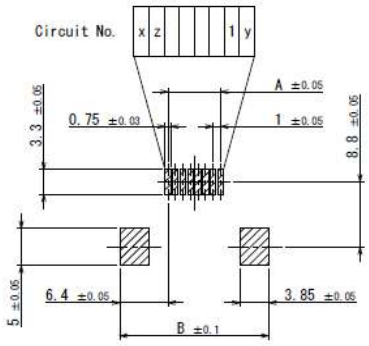


Side Type

PC board layout

● 8, 12, 16, 20 circuits

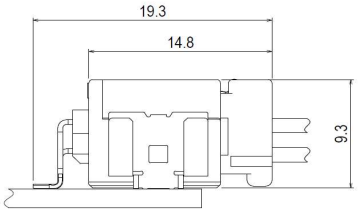




Circuits	A	B
8	7	19.8
12	11	23.8
16	15	27.8
20	19	31.8

Assembly layout

● 8, 12, 16, 20 circuits



Crimping machine, Applicator

Strip terminal	Crimping machine	Crimp applicator MKS-L	
		Dies	Crimp applicator with dies
SMEC-A021T-M0.5	AP-K2N	MK/SMEC-A021-05	APLMK SMEC-A021-05

Note: 1. Contact JST for details.
2. When crimping operation is conducted using an applicator and die set other than the above, JST cannot guarantee the performance of the terminal.