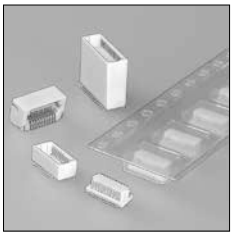
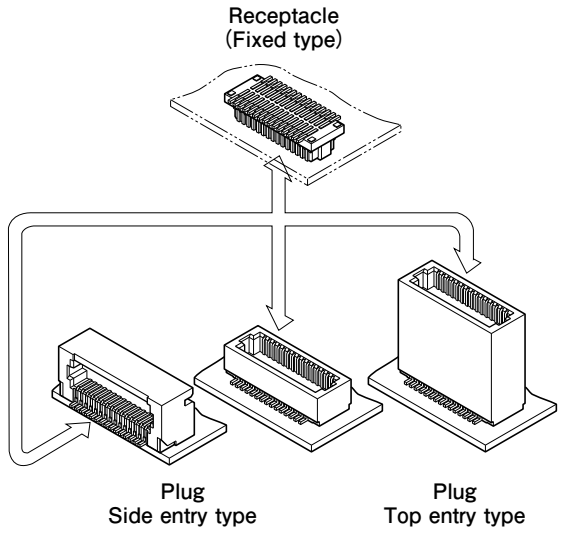
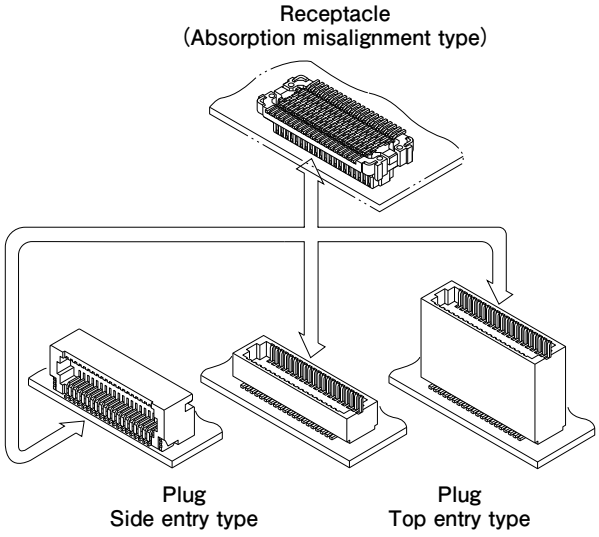


JMC CONNECTOR

0.5 mm pitch/For PC board/Board-to-board connectors/Mating type





This JMC connector is 0.5 mm pitch SMT type board-to-board connector which realizes miniaturizing and space saving.
Plug connector has the various connection types such as top/side entry types including the stacking height variation and receptacle connector has the fixed/absorption misalignment types.

- Secure mating performance
- Distortion preventive structure
- Available for veriaous number of circuits, and the stacking height of various size
- Absorbing misalignment after mating connector

■ Standards

:Recognized E 60389

■ Specifications

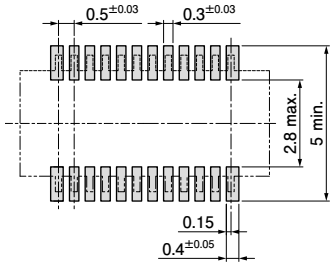
- Current rating: 0.5 A AC/DC
- Voltage rating: 50 V AC/DC
- Temperature range: −25℃ to +85℃
  (including temperature rise in applying electrical current)
- Contact resistance:
  Initial value/ 50 mΩ max.
  After environmental tests/ 100 mΩ max.
- Insulation resistance: 50 MΩ min.
- Withstanding voltage:
  There shall be no breakdown or flashover while applying 100 VAC for one minute.

* Contact JST for nitrogen (N2) reflow soldering.
* 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.

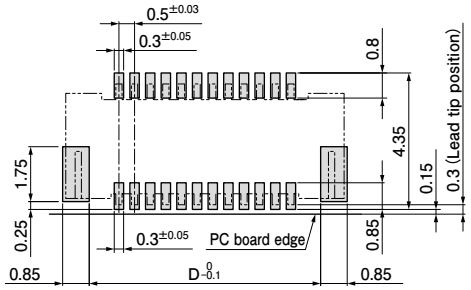
JST

PC board layout and Assembly layout

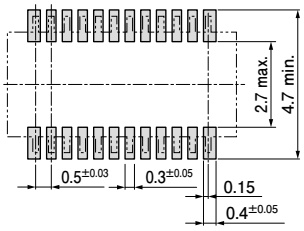
Plug
Top entry type



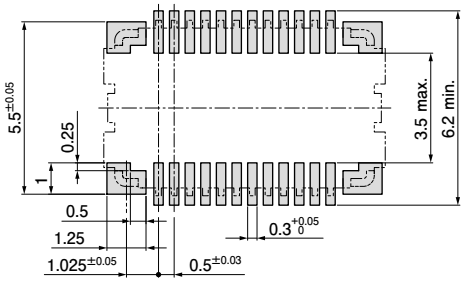
Plug
Side entry type



Receptacle
(Fixed type)



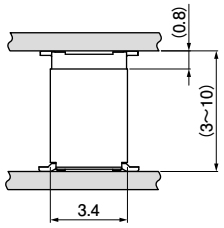
Receptacle
(Absorption misalignment type)



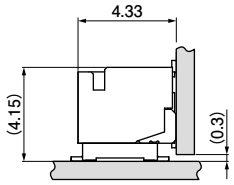
Note: 1. The above figure is the figure viewed from the connector mounting side.
Tolerances of pattern pitch on the PC board shall be ± 0.03 mm and not be acumulative over the entire area.
2. Dimension D: See the table of Plug side entry type on page 4.
3. Please contact JST for details as the dimensions shown in the above figure are reference values.

Receptacle
(Fixed type)

- **Parallel connection**
  Stacking height: 3 mm to 10 mm

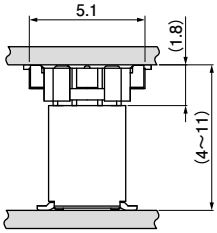


- **Vertical connection**

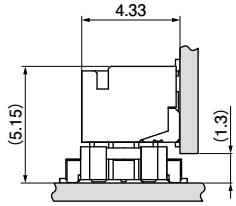


Receptacle
(Absorption misalignment type)

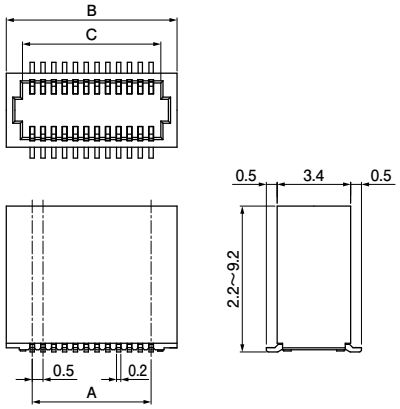
- **Parallel connection**
  Stacking height: 4 mm to 11 mm
  ＊ Each stacking height using absorption misalignment type receptacle is 1 mm larger compared with using the fixed type.



- **Vertical connection**
  ＊ The mounting height using absorption misalignment type receptacle is 1 mm larger compared with using the fixed type.



Plug Top entry type



No. of circuits	Model No.				Dimensions (mm)		
	Stacking height 3.0 (4.0) mm Note1)	Stacking height 3.5 (4.5) mm Note1)	Stacking height 4.0 (5.0) mm Note1)	Stacking height 4.5 (5.5) mm Note1)	A	B	C
14	14P3.0-JMCS-GAN-A-TF	—	—	—	3.0	5.4	3.9
18	18P3.0-JMCS-GAN-A-TF	—	—	—	4.0	6.4	4.9
20	20P3.0-JMCS-GAN-A-TF	20P3.5-JMCS-GAN-A-TF	—	20P4.5-JMCS-GAN-A-TF	4.5	6.9	5.4
24	—	24P3.5-JMCS-GAN-A-TF	24P4.0-JMCS-GAN-A-TF	—	5.5	7.9	6.4
30	30P3.0-JMCS-GAN-A-TF	30P3.5-JMCS-GAN-A-TF	30P4.0-JMCS-GAN-A-TF	—	7.0	9.4	7.9
40	40P3.0-JMCS-GAN-A-TF	40P3.5-JMCS-GAN-A-TF	40P4.0-JMCS-GAN-A-TF	—	9.5	11.9	10.4
42	—	42P3.5-JMCS-GAN-A-TF	—	—	10.0	12.4	10.9
50	50P3.0-JMCS-GAN-A-TF	—	50P4.0-JMCS-GAN-A-TF	50P4.5-JMCS-GAN-A-TF	12.0	14.4	12.9
60	60P3.0-JMCS-GAN-A-TF	—	60P4.0-JMCS-GAN-A-TF	60P4.5-JMCS-GAN-A-TF	14.5	16.9	15.4
Q'ty/reel	3,400	2,800	2,500	2,200			

No. of circuits	Model No.				Dimensions (mm)		
	Stacking height 5.0 (6.0) mm Note1)	Stacking height 5.5 (6.5) mm Note1)	Stacking height 6.0 (7.0) mm Note1)	Stacking height 6.5 (7.5) mm Note1)	A	B	C
14	14P5.0-JMCS-GAN-A-TF	—	—	—	3.0	5.4	3.9
20	20P5.0-JMCS-GAN-A-TF	20P5.5-JMCS-GAN-A-TF	20P6.0-JMCS-GAN-A-TF	—	4.5	6.9	5.4
30	30P5.0-JMCS-GAN-A-TF	—	—	30P6.5-JMCS-GAN-A-TF	7.0	9.4	7.9
40	40P5.0-JMCS-GAN-A-TF	—	40P6.0-JMCS-GAN-A-TF	40P6.5-JMCS-GAN-A-TF	9.5	11.9	10.4
50	50P5.0-JMCS-GAN-A-TF	—	—	—	12.0	14.4	12.9
60	60P5.0-JMCS-GAN-A-TF	60P5.5-JMCS-GAN-A-TF	60P6.0-JMCS-GAN-A-TF	—	14.5	16.9	15.4
Q'ty/reel	2,000	1,800	1,500	1,500			

No. of circuits	Model No.				Dimensions (mm)		
	Stacking height 7.0 (8.0) mm Note1)	Stacking height 7.5 (8.5)注1) mm Note1)	Stacking height 8.0 (9.0) mm Note1)	Stacking height 8.5 (9.5) mm Note1)	A	B	C
20	20P7.0-JMCS-GAN-A-TF	—	—	—	4.5	6.9	5.4
34	—	—	—	34P8.5-JMCS-GAN-A-TF	8.0	10.4	8.9
50	50P7.0-JMCS-GAN-A-TF	50P7.5-JMCS-GAN-A-TF	50P8.0-JMCS-GAN-A-TF	—	12.0	14.4	12.9
64	—	—	64P8.0-JMCS-GAN-A-TF	—	15.5	17.9	16.4
Q'ty/reel	1,500	1,000	800	800			

Material and Finish
Contact: Brass, nickel-undercoated, gold-plated Housing: Modified 6T Nylon, UL94V-0

RoHS2 compliance

Note: 1. The number without parentheses means the stacking height when mating with the fixed type receptacle and the number with parentheses means it when mating with absorption misalignment type receptacle.
2. The product listed above is supplied on embossed-tape.

Plug Top entry type

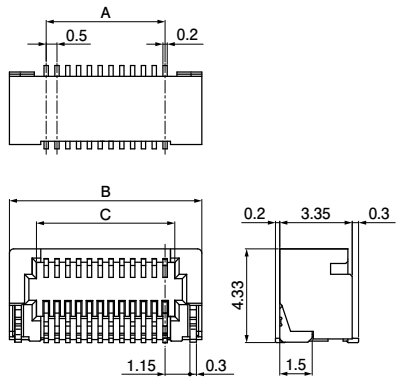
No. of circuits	Model No.				Dimensions (mm)		
	Stacking height 9.0 (10.0) mm Note1)	Stacking height 10.0 (11.0) mm Note1)	—	—	A	B	C
20	—	20P10.0-JMCS-GAN-A-TF	—	—	4.5	6.9	5.4
24	—	24P10.0-JMCS-GAN-A-TF	—	—	5.5	7.9	6.4
30	30P9.0-JMCS-GAN-A-TF	—	—	—	7.0	9.4	7.9
40	40P9.0-JMCS-GAN-A-TF	40P10.0-JMCS-GAN-A-TF	—	—	9.5	11.9	10.4
50	50P9.0-JMCS-GAN-A-TF	—	—	—	12.0	14.4	12.9
60	60P9.0-JMCS-GAN-A-TF	—	—	—	14.5	16.9	15.4
Q'ty/reel	800	700	—	—			

Material and Finish
Contact: Brass, nickel-undercoated, gold-plated Housing: Modified 6T Nylon, UL94V-0

RoHS2 compliance

Note: 1. The number without parentheses means the stacking height when mating with the fixed type receptacle and the number with parentheses means it when mating with absorption misalignment type receptacle.
2. The product listed above is supplied on embossed-tape.

Plug Side entry type



No. of circuits	Model No.	Dimensions (mm)				Q'ty/reel
		A	B	C	D	
16	16PS-JMCS-GAN-1-A-TF	3.5	6.9	4.4	5.4	2,000
20	20PS-JMCS-GAN-1-A-TF	4.5	7.9	5.4	6.4	2,000
24	24PS-JMCS-GAN-1-A-TF	5.5	8.9	6.4	7.4	2,000
30	30PS-JMCS-GAN-1-A-TF	7.0	10.4	7.9	8.9	2,000
34	34PS-JMCS-GAN-1-A-TF	8.0	11.4	8.9	9.9	2,000
40	40PS-JMCS-GAN-1-A-TF	9.5	12.9	10.4	11.4	2,000
46	46PS-JMCS-GAN-1-A-TF	11.0	14.4	11.9	12.9	2,000
50	50PS-JMCS-GAN-1-A-TF	12.0	15.4	12.9	13.9	2,000
60	60PS-JMCS-GAN-1-A-TF	14.5	17.9	15.4	16.4	2,000

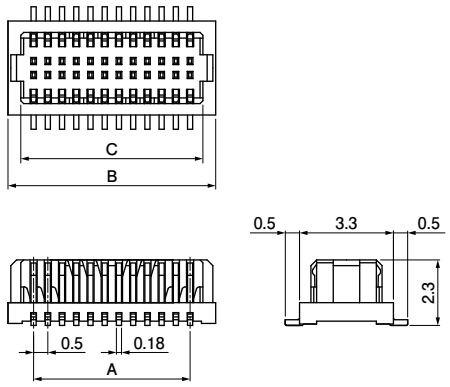
Material and Finish
Contact: Brass, nickel-undercoated, gold-plated Housing: Modified 6T Nylon, UL94V-0 Solder tab: Brass, tin-plated

RoHS2 compliance

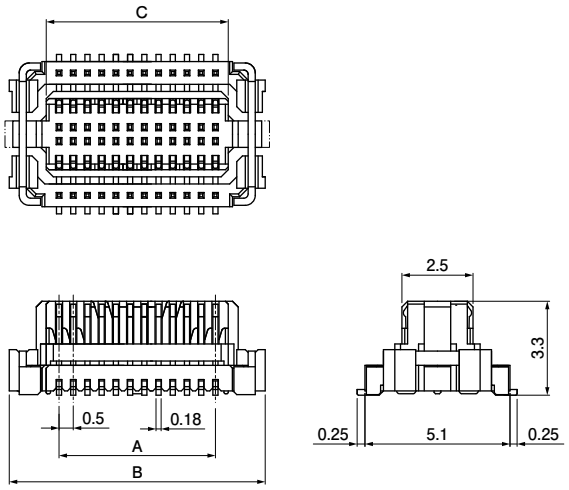
Note: 1. Dimension D: See the PC board layout of Plug side entry type on page 2.
2. The product listed above is supplied on embossed-tape.

Receptacle

Fixed type



Absorption misalignment type



Fixed type

No. of circuits	Model No.	Dimensions (mm)			Q'ty/ reel
		A	B	C	
14	14R-JMCS-GAN-TF	3.0	4.8	3.9	3,200
16	16R-JMCS-GAN-TF	3.5	5.3	4.4	3,200
18	18R-JMCS-GAN-TF	4.0	5.8	4.9	3,200
20	20R-JMCS-GAN-TF	4.5	6.3	5.4	3,200
24	24R-JMCS-GAN-TF	5.5	7.3	6.4	3,200
30	30R-JMCS-GAN-TF	7.0	8.8	7.9	3,200
34	34R-JMCS-GAN-TF	8.0	9.8	8.9	3,200
40	40R-JMCS-GAN-TF	9.5	11.3	10.4	3,200
42	42R-JMCS-GAN-TF	10.0	11.8	10.9	3,200
46	46R-JMCS-GAN-TF	11.0	12.8	11.9	3,200
50	50R-JMCS-GAN-TF	12.0	13.8	12.9	3,200
60	60R-JMCS-GAN-TF	14.5	16.3	15.4	3,200

Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated
Housing: Modified 6T Nylon, UL94V-0

RoHS2 compliance
Note: The product listed above is supplied on embossed-tape.

Absorption misalignment type

No. of circuits	Model No.	Dimensions (mm)			Q'ty/ reel
		A	B	C	
20	20RF-JMCS-GAN-1-TF	4.5	8.0	5.4	1,600
30	30RF-JMCS-GAN-1-TF	7.0	10.5	7.9	1,600
40	40RF-JMCS-GAN-1-TF	9.5	13.0	10.4	1,600
50	50RF-JMCS-GAN-1-TF	12.0	15.5	12.9	1,600
60	60RF-JMCS-GAN-1-TF	14.5	18.0	15.4	1,600
64	64RF-JMCS-GAN-1-TF	15.5	19.0	16.4	1,600

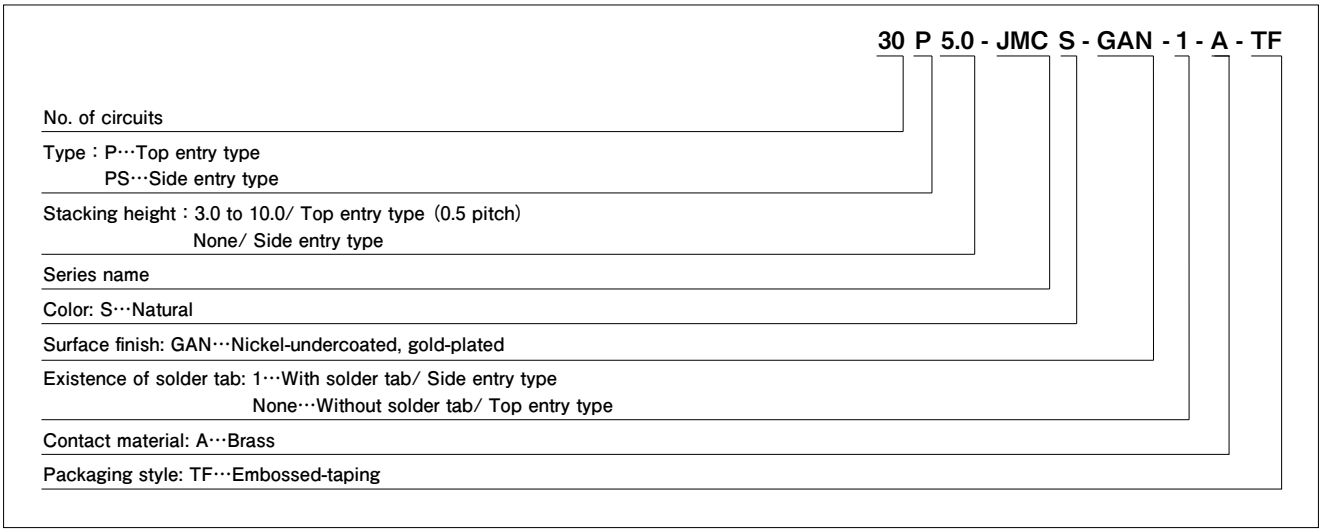
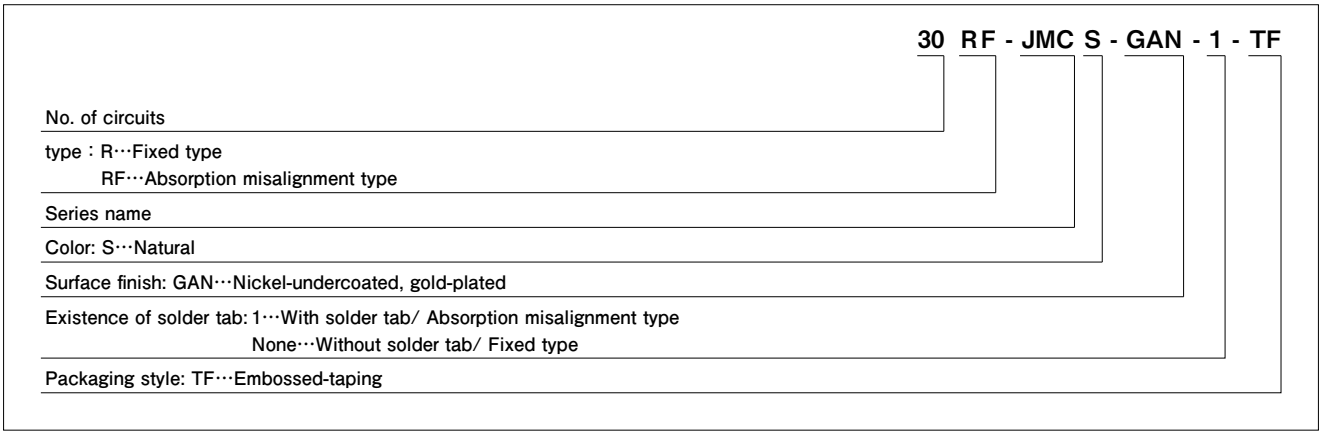
Material and Finish

Contact: Phosphor bronze, nickel-undercoated, gold-plated
Housing: Modified 6T Nylon, UL94V-0
Solder tab: Brass, copper-undercoated, tin-plated

RoHS2 compliance
Note: The product listed above is supplied on embossed-tape.

Model number allocation

Plug



Receptaacle