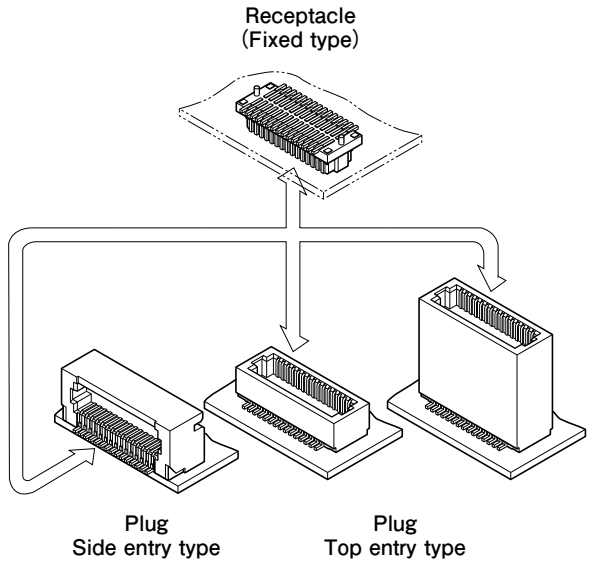
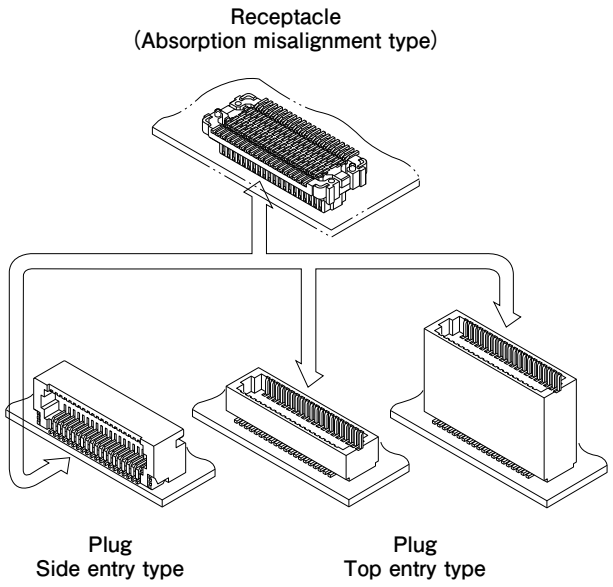
JMC CONNECTOR

0.5 mm pitch/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

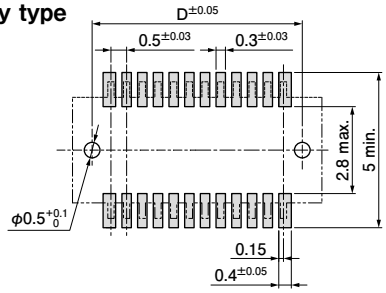
■ Specifications

- 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: 100 VAC/minute

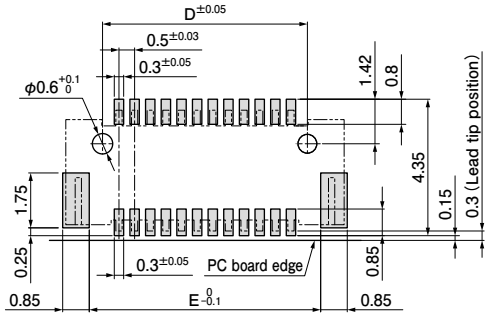
∗ Contact JST for nitrogen (N2) reflow soldering.
∗ In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).
∗ RoHS2 compliance
∗ Dimensional unit: mm
∗ Contact JST for details.

PC board layout and Assembly layout

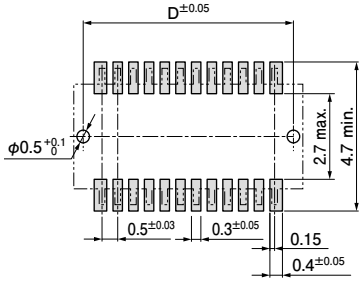
Plug
Top entry type



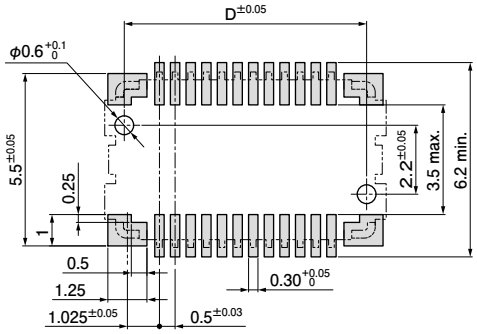
Plug
Side entry type



Receptacle
(Fixed type)



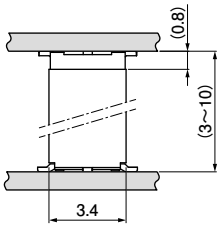
Receptacle
(Absorption misalignment type)



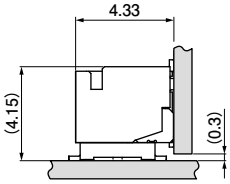
Note: 1. The above figure is the figure viewed from the connector mounting side.
2. Tolerances of pattern pitch on the PC board shall be ± 0.03 mm and not be acumulative over the entire area.
3. D dimension: See each section on pages 3 to 5.
E dimension: See the table of Plug side entry type on page 4.
4. 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

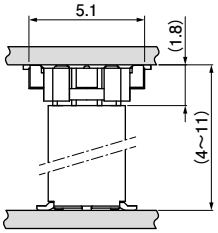


- **Vertical connection**

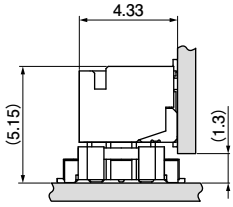


Receptacle
(Absorption misalignment type)

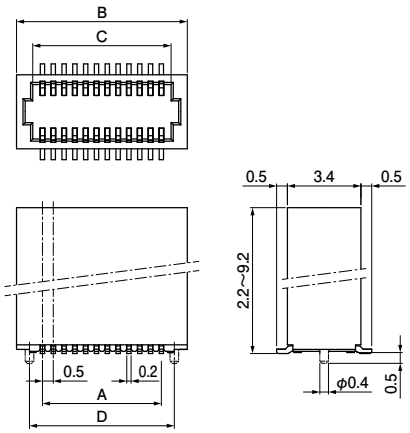
- **Parallel connection**
  Stacking height 4 mm to 11 mm
  *** Each stacking height using absorption misalignment type receptacle is 1 mm larger compared with using the fixed type.**



- **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	D
Without boss	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	—	—	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	—
	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	—
With boss	14	14P3.0-JMCS-GAN-B-A-TF	—	—	—	3.0	5.4	3.9	4.2
	20	20P3.0-JMCS-GAN-B-A-TF	20P3.5-JMCS-GAN-B-A-TF	—	20P4.5-JMCS-GAN-B-A-TF	4.5	6.9	5.4	5.7
	24	—	—	24P4.0-JMCS-GAN-B-A-TF	—	5.5	7.9	6.4	6.7
	30	—	30P3.5-JMCS-GAN-B-A-TF	30P4.0-JMCS-GAN-B-A-TF	—	7.0	9.4	7.9	8.2
	40	40P3.0-JMCS-GAN-B-A-TF	40P3.5-JMCS-GAN-B-A-TF	40P4.0-JMCS-GAN-B-A-TF	—	9.5	11.9	10.4	10.7
	42	—	42P3.5-JMCS-GAN-B-A-TF	—	—	10.0	12.4	10.9	11.2
	50	50P3.0-JMCS-GAN-B-A-TF	—	50P4.0-JMCS-GAN-B-A-TF	—	12.0	14.4	12.9	13.2
	60	60P3.0-JMCS-GAN-B-A-TF	—	60P4.0-JMCS-GAN-B-A-TF	—	14.5	16.9	15.4	15.7
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	D
Without boss	14	14P5.0-JMCS-GAN-A-TF	—	—	—	3.0	5.4	3.9	—
	20	20P5.0-JMCS-GAN-A-TF	—	20P6.0-JMCS-GAN-A-TF	—	4.5	6.9	5.4	—
	30	—	—	—	30P6.5-JMCS-GAN-A-TF	7.0	9.4	7.9	—
	40	40P5.0-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	—	60P5.5-JMCS-GAN-A-TF	—	—	14.5	16.9	15.4	—
With boss	14	14P5.0-JMCS-GAN-B-A-TF	—	—	—	3.0	5.4	3.9	4.2
	20	20P5.0-JMCS-GAN-B-A-TF	20P5.5-JMCS-GAN-B-A-TF	20P6.0-JMCS-GAN-B-A-TF	—	4.5	6.9	5.4	5.7
	30	30P5.0-JMCS-GAN-B-A-TF	—	—	30P6.5-JMCS-GAN-B-A-TF	7.0	9.4	7.9	8.2
	40	40P5.0-JMCS-GAN-B-A-TF	—	40P6.0-JMCS-GAN-B-A-TF	40P6.5-JMCS-GAN-B-A-TF	9.5	11.9	10.4	10.7
	50	50P5.0-JMCS-GAN-B-A-TF	—	—	—	12.0	14.4	12.9	13.2
	60	60P5.0-JMCS-GAN-B-A-TF	—	60P6.0-JMCS-GAN-B-A-TF	—	14.5	16.9	15.4	15.7
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) mm Note1)	Stacking height 8.0 (9.0) mm Note1)	Stacking height 8.5 (9.5) mm Note1)	A	B	C	D
Without boss	20	20P7.0-JMCS-GAN-A-TF	—	—	—	4.5	6.9	5.4	—
	50	50P7.0-JMCS-GAN-A-TF	—	—	—	12.0	14.4	12.9	—
With boss	34	—	—	—	34P8.5-JMCS-GAN-B-A-TF	8.0	10.4	8.9	9.2
	50	50P7.0-JMCS-GAN-B-A-TF	50P7.5-JMCS-GAN-B-A-TF	50P8.0-JMCS-GAN-B-A-TF	—	12.0	14.4	12.9	13.2
	64	—	—	64P8.0-JMCS-GAN-B-A-TF	—	15.5	17.9	16.4	16.7
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	D
Without boss	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	—
	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	—
With boss	20	—	20P10.0-JMCS-GAN-B-A-TF	—	—	4.5	6.9	5.4	5.7
	24	—	24P10.0-JMCS-GAN-B-A-TF	—	—	5.5	7.9	6.4	6.7
	30	30P9.0-JMCS-GAN-B-A-TF	—	—	—	7.0	9.4	7.9	8.2
	40	40P9.0-JMCS-GAN-B-A-TF	40P10.0-JMCS-GAN-B-A-TF	—	—	9.5	11.9	10.4	10.7
	50	50P9.0-JMCS-GAN-B-A-TF	—	—	—	12.0	14.4	12.9	13.2
	60	60P9.0-JMCS-GAN-B-A-TF	—	—	—	14.5	16.9	15.4	15.7
Q'ty/reel		800	700	—	—				

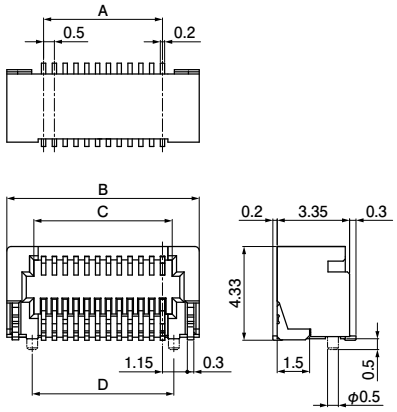
Material and Finish

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	E	
Without boss	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
	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
With boss	20	20PS-JMCS-GAN-1B-A-TF	4.5	7.9	5.4	5.55	6.4	2,000
	24	24PS-JMCS-GAN-1B-A-TF	5.5	8.9	6.4	6.55	7.4	2,000
	30	30PS-JMCS-GAN-1B-A-TF	7.0	10.4	7.9	8.05	8.9	2,000
	34	34PS-JMCS-GAN-1B-A-TF	8.0	11.4	8.9	9.05	9.9	2,000
	40	40PS-JMCS-GAN-1B-A-TF	9.5	12.9	10.4	10.55	11.4	2,000
	46	46PS-JMCS-GAN-1B-A-TF	11.0	14.4	11.9	12.05	12.9	2,000
	50	50PS-JMCS-GAN-1B-A-TF	12.0	15.4	12.9	13.05	13.9	2,000
	60	60PS-JMCS-GAN-1B-A-TF	14.5	17.9	15.4	15.55	16.4	2,000

Material and Finish

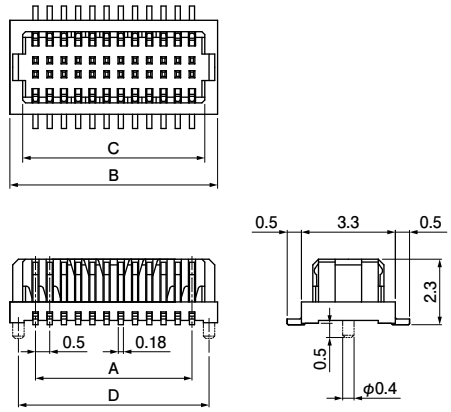
Contact: Brass, nickel-undercoated, gold-plated
Housing: Modified 6T Nylon, UL94V-0
Solder tab: Brass, tin-plated

RoHS2 compliance

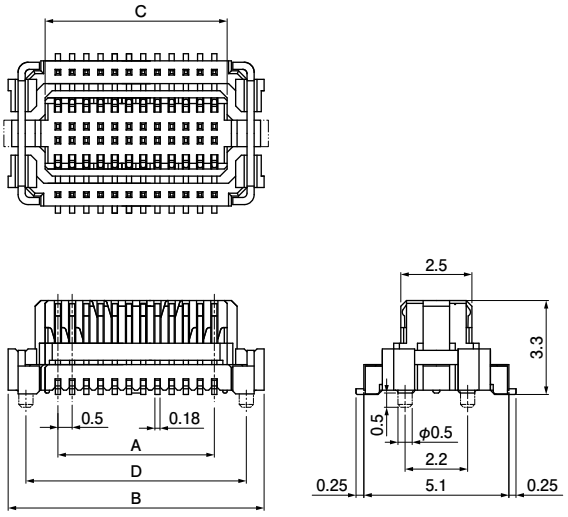
Note: The product listed above is supplied on embossed-tape.

Receptacle

Fixed type



Absorption misalignment type



Fixed type

No. of circuits	Model No.		Dimensions (mm)				Q'ty/ reel
	Without boss	With boss	A	B	C	D	
14	14R-JMCS-GAN-TF	14R-JMCS-GAN-B-TF	3.0	4.8	3.9	4.2	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	20R-JMCS-GAN-B-TF	4.5	6.3	5.4	5.7	3,200
24	24R-JMCS-GAN-TF	24R-JMCS-GAN-B-TF	5.5	7.3	6.4	6.7	3,200
30	30R-JMCS-GAN-TF	30R-JMCS-GAN-B-TF	7.0	8.8	7.9	8.2	3,200
34	34R-JMCS-GAN-TF	34R-JMCS-GAN-B-TF	8.0	9.8	8.9	9.2	3,200
40	40R-JMCS-GAN-TF	40R-JMCS-GAN-B-TF	9.5	11.3	10.4	10.7	3,200
42	42R-JMCS-GAN-TF	42R-JMCS-GAN-B-TF	10.0	11.8	10.9	11.2	3,200
46	46R-JMCS-GAN-TF	46R-JMCS-GAN-B-TF	11.0	12.8	11.9	12.2	3,200
50	50R-JMCS-GAN-TF	50R-JMCS-GAN-B-TF	12.0	13.8	12.9	13.2	3,200
60	60R-JMCS-GAN-TF	60R-JMCS-GAN-B-TF	14.5	16.3	15.4	15.7	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

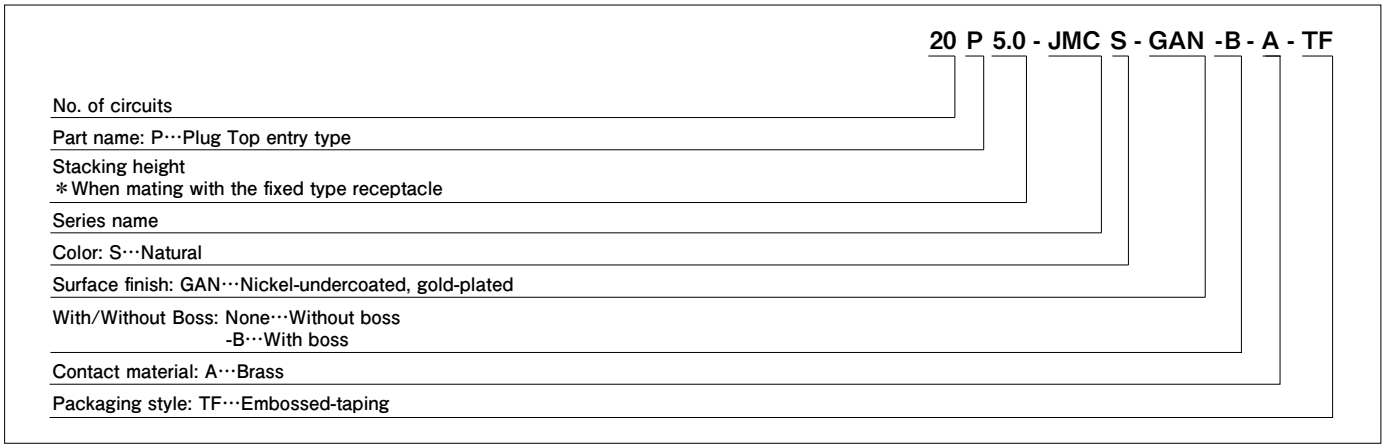
No. of circuits	Model No.		Dimensions (mm)				Q'ty/ reel
	Without boss	With boss	A	B	C	D	
20	20RF-JMCS-GAN-1-TF	20RF-JMCS-GAN-1B-TF	4.5	8.0	5.4	6.75	1,600
30	30RF-JMCS-GAN-1-TF	30RF-JMCS-GAN-1B-TF	7.0	10.5	7.9	9.25	1,600
40	40RF-JMCS-GAN-1-TF	40RF-JMCS-GAN-1B-TF	9.5	13.0	10.4	11.75	1,600
50	50RF-JMCS-GAN-1-TF	50RF-JMCS-GAN-1B-TF	12.0	15.5	12.9	14.25	1,600
60	60RF-JMCS-GAN-1-TF	60RF-JMCS-GAN-1B-TF	14.5	18.0	15.4	16.75	1,600
64	—	64RF-JMCS-GAN-1B-TF	15.5	19.0	16.4	17.75	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

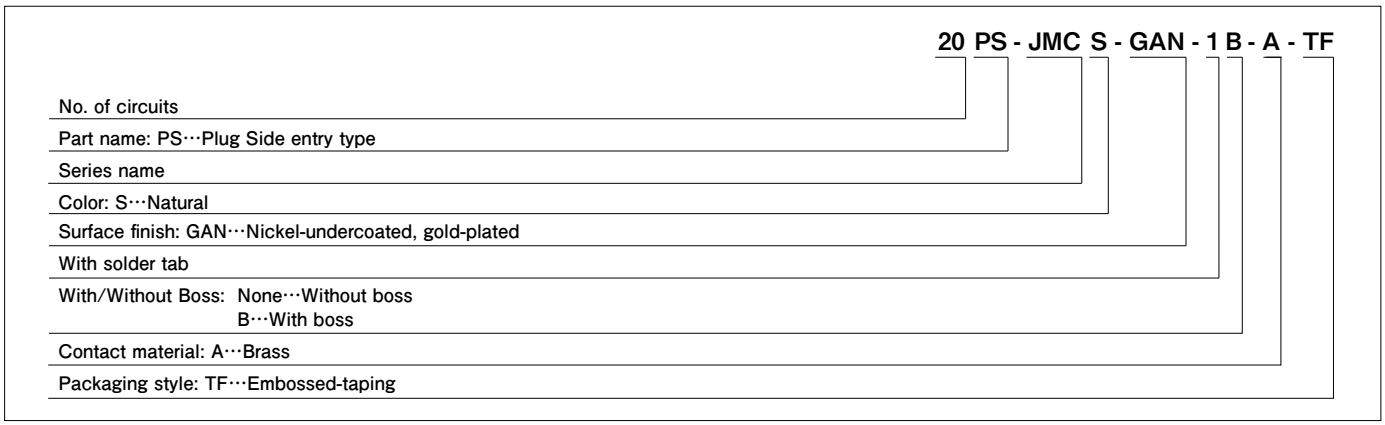
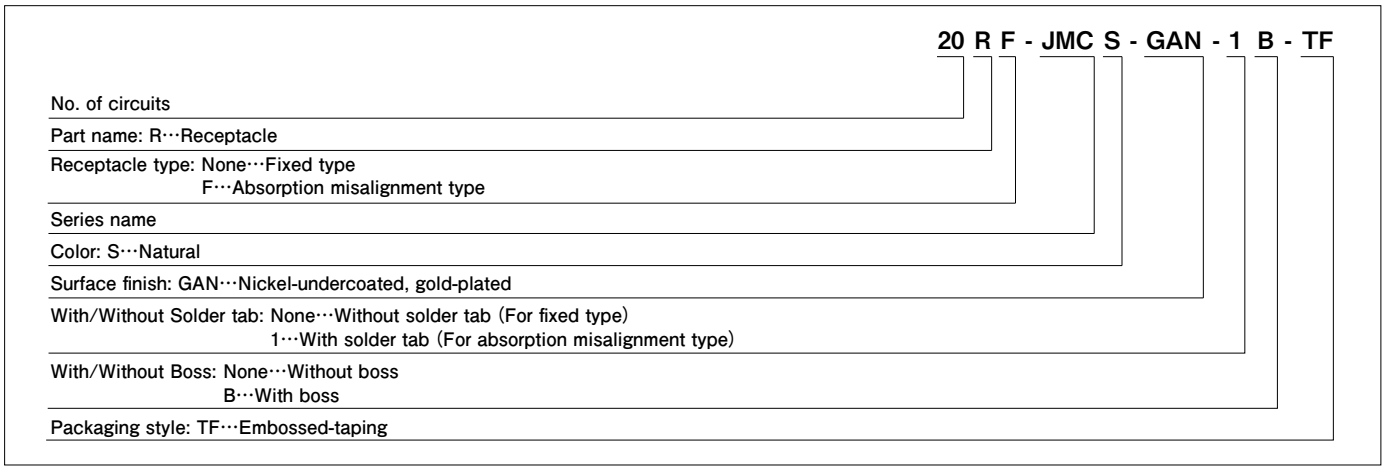
RoHS2 compliance
Note: The product listed above is supplied on embossed-tape.

Model number allocation

Plug Top entry type



Plug Side entry type



Receptacle