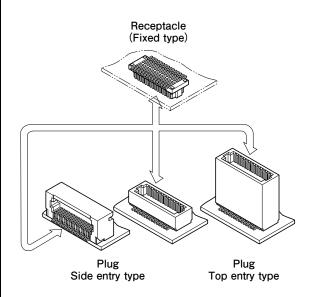
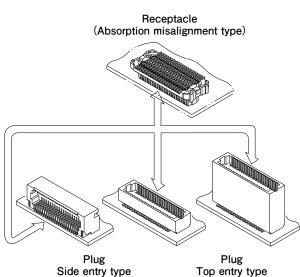


JMC CONNECTOR

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°C to +85°C

(including temperature rise in applying electrical current)

· Contact resistance:

Initial value/ $50 \text{ m}\Omega$ max.

After environmental tests/ 100 m Ω max.

- Insulation resistance: 50 $M\Omega\,$ min.
- · Withstanding voltage:

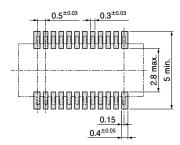
There shall be no breakdown or flashover while applying 100 VAC for one minute.

- * 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.

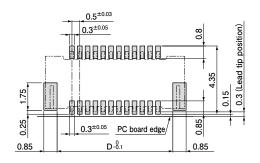
JST

PC board layout and Assembly layout

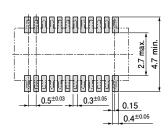
Plug Top entry type



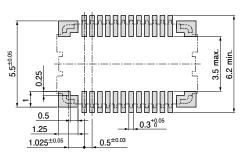
Plug Side entry type



Receptacle (Fixed type)



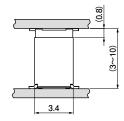
Receptacle (Absorption misalignment type)



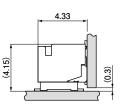
- Note: 1. The above figure is the figure viewed from the connector mounting side.
 - Tolerances of pattern pitch on the PC board shall be \pm 0.03 mm and not be acumulative over the entire area.
 - 2. Dimension D: See the table of Plug side entry type on page 4.
 - 3. Please contact JST for details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



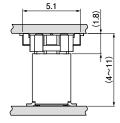
Receptacle

(Absorption misalignment type)

Parallel connection

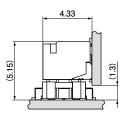
Stacking height: 4 mm to 11 mm

* Each stacking height using absorption misalignment type receptacle is 1 mm larger compared with using the fixed type.

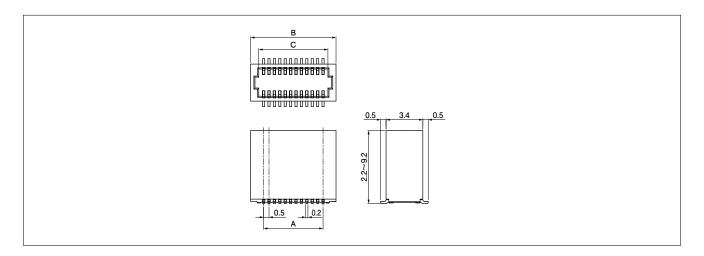


Vertical connection

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



Plug Top entry type



| No. of | Model No. | | | | | Dimensions (mm) | | |
|-----------|---|---|---|--|------|-----------------|------|--|
| circuits | 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) | Α | В | С | |
| 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) | Α | В | С | |
| 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'tv/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) | Α | В | O | |
| 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.

JST

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) | _ | _ | Α | В | O | |
| 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

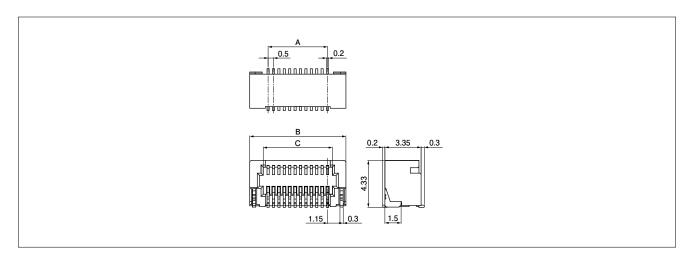
Contact: Brass, nickel-undercoated, gold-plated Housing: Modified 6T Nylon, UL94V-0

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 | Model No. | | Oly (mal | | | |
|----------|----------------------|------|----------|------|------|-----------|
| circuits | | Α | В | С | D | Q'ty/reel |
| 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 0 0 0 0 0 0 0 0 0 0 0 0 0 В 0.5 0.18 Absorption misalignment type 000000000000 000000000000 0.5 0.18 0.25 В

Fixed type

| No. of | Model No. | Dim | Q'ty/ | | |
|----------|-----------------|------|-------|------|-------|
| circuits | | Α | В | С | reel |
| 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. | Dim | Q'ty/ | | |
|-----------------|--------------------|------|-------|------|-------|
| | woder No. | Α | В | С | reel |
| 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

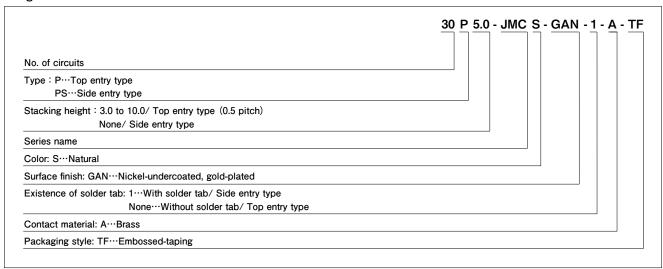
Solder tab: Brass, copper-undercoated, tin-plated

RoHS2 compliance

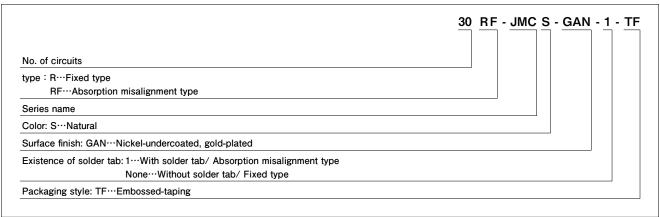
Note: The product listed above is supplied on embossed-tape.

Model number allocation

Plug



Receptaacle



JST