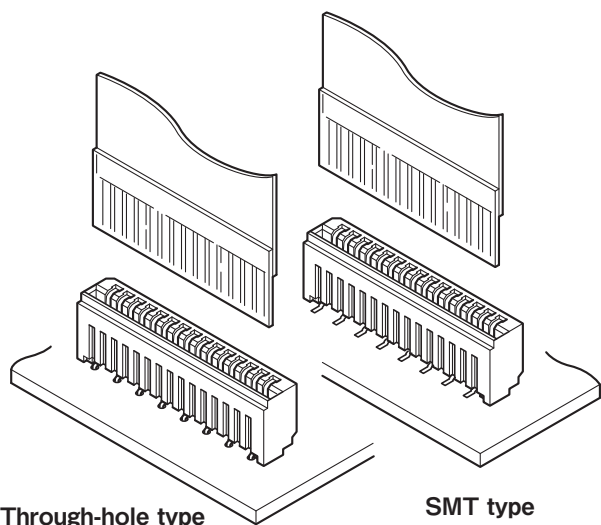


FMN CONNECTOR

1.0 mm pitch/ Board-to-FFC connector/ Non-ZIF type



Through-hole type

SMT type

This is a 1.0 mm pitch FFC connector with single-sided contacts, available in 4 to 40 positions. Both through-hole and SMT types are available in top and side entry configurations. In addition, the FMN connector comes in both normal and reverse style solder lead arrangements.

The diverse features of this connector series contribute to greater flexibility in board design.

- Small size, high density
- Single-sided contact structure
- Available in 4 to 40 positions
- Multiple configurations
- Embossed taping for automatic mounting (SMT type)

■ Specifications

- Current rating: 0.5 A DC
- Voltage rating: 50 V DC
- Temperature range: -25°C to +85°C
(including temperature rise in applying electrical current)
- Contact resistance: Initial value/ 30 mΩ max.
After test/ 50 mΩ max.
- Insulation resistance: 500 MΩ min.
- Withstanding voltage:
There shall be no breakdown or flashover while applying 500 VAC for one minute.
- Applicable FFC: Conductor pitch/ 1.0 mm
Conductor width/ 0.7 mm
Mating part thickness / 0.3 ± 0.05 mm
- Applicable PC board thickness: 1.6 mm
- * Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
- * RoHS2 compliance
- * Dimensional unit: mm
- * Contact JST for details.

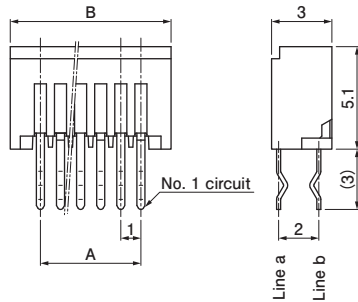
■ Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

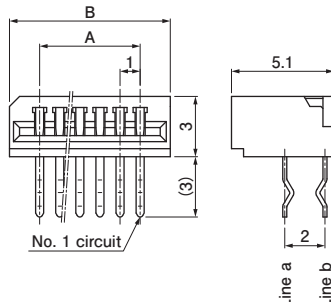
- * Specifications registered to overseas standards may differ from the general specifications listed above.

Connector/ Through-hole type

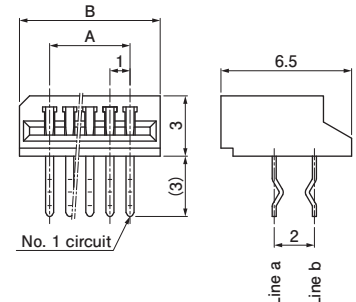
Top entry type



Side entry type



Side entry type with stopper



Note) Line a and b: See "PC board layout" section on page 4.

No. of circuits	Model No.						Dimensions (mm)		Q'ty/box		
	Top entry type		Side entry type		Side entry type with stopper						
	Normal type	Reverse type	Normal type	Reverse type	Normal type	Reverse type	A	B	Top entry type	Side entry type	Side entry type with stopper
4	04FMN-BTK-A	04FMN-BTRK-A	04FMN-STK-A	04FMN-STRK-A	04FMN-SSTK-A	04FMN-SSTRK-A	3.0	6.0	3,600	2,160	2,520
5	05FMN-BTK-A	05FMN-BTRK-A	05FMN-STK-A	05FMN-STRK-A	05FMN-SSTK-A	05FMN-SSTRK-A	4.0	7.0	3,100	1,860	2,170
6	06FMN-BTK-A	06FMN-BTRK-A	06FMN-STK-A	06FMN-STRK-A	06FMN-SSTK-A	06FMN-SSTRK-A	5.0	8.0	2,700	1,620	1,890
7	07FMN-BTK-A	07FMN-BTRK-A	07FMN-STK-A	07FMN-STRK-A	07FMN-SSTK-A	07FMN-SSTRK-A	6.0	9.0	2,400	1,440	1,680
8	08FMN-BTK-A	08FMN-BTRK-A	08FMN-STK-A	08FMN-STRK-A	08FMN-SSTK-A	08FMN-SSTRK-A	7.0	10.0	2,100	1,260	1,470
9	09FMN-BTK-A	09FMN-BTRK-A	09FMN-STK-A	09FMN-STRK-A	09FMN-SSTK-A	09FMN-SSTRK-A	8.0	11.0	1,900	1,140	1,330
10	10FMN-BTK-A	10FMN-BTRK-A	10FMN-STK-A	10FMN-STRK-A	10FMN-SSTK-A	10FMN-SSTRK-A	9.0	12.0	1,800	1,080	1,260
11	11FMN-BTK-A	11FMN-BTRK-A	11FMN-STK-A	11FMN-STRK-A	11FMN-SSTK-A	11FMN-SSTRK-A	10.0	13.0	1,600	960	1,120
12	12FMN-BTK-A	12FMN-BTRK-A	12FMN-STK-A	12FMN-STRK-A	12FMN-SSTK-A	12FMN-SSTRK-A	11.0	14.0	1,500	900	1,050
13	13FMN-BTK-A	13FMN-BTRK-A	13FMN-STK-A	13FMN-STRK-A	13FMN-SSTK-A	13FMN-SSTRK-A	12.0	15.0	1,400	840	980
14	14FMN-BTK-A	14FMN-BTRK-A	14FMN-STK-A	14FMN-STRK-A	14FMN-SSTK-A	14FMN-SSTRK-A	13.0	16.0	1,300	780	910
15	15FMN-BTK-A	15FMN-BTRK-A	15FMN-STK-A	15FMN-STRK-A	15FMN-SSTK-A	15FMN-SSTRK-A	14.0	17.0	1,200	720	840
16	16FMN-BTK-A	16FMN-BTRK-A	16FMN-STK-A	16FMN-STRK-A	16FMN-SSTK-A	16FMN-SSTRK-A	15.0	18.0	1,200	720	840
17	17FMN-BTK-A	17FMN-BTRK-A	17FMN-STK-A	17FMN-STRK-A	17FMN-SSTK-A	17FMN-SSTRK-A	16.0	19.0	1,100	660	770
18	18FMN-BTK-A	18FMN-BTRK-A	18FMN-STK-A	18FMN-STRK-A	18FMN-SSTK-A	18FMN-SSTRK-A	17.0	20.0	1,000	600	700
19	19FMN-BTK-A	19FMN-BTRK-A	19FMN-STK-A	19FMN-STRK-A	19FMN-SSTK-A	19FMN-SSTRK-A	18.0	21.0	1,000	600	700
20	20FMN-BTK-A	20FMN-BTRK-A	20FMN-STK-A	20FMN-STRK-A	20FMN-SSTK-A	20FMN-SSTRK-A	19.0	22.0	900	540	630
21	21FMN-BTK-A	21FMN-BTRK-A	21FMN-STK-A	21FMN-STRK-A	21FMN-SSTK-A	21FMN-SSTRK-A	20.0	23.0	900	540	630
22	22FMN-BTK-A	22FMN-BTRK-A	22FMN-STK-A	22FMN-STRK-A	22FMN-SSTK-A	22FMN-SSTRK-A	21.0	24.0	900	540	630
23	23FMN-BTK-A	23FMN-BTRK-A	23FMN-STK-A	23FMN-STRK-A	23FMN-SSTK-A	23FMN-SSTRK-A	22.0	25.0	800	480	560
24	24FMN-BTK-A	24FMN-BTRK-A	24FMN-STK-A	24FMN-STRK-A	24FMN-SSTK-A	24FMN-SSTRK-A	23.0	26.0	800	480	560
25	25FMN-BTK-A	25FMN-BTRK-A	25FMN-STK-A	25FMN-STRK-A	25FMN-SSTK-A	25FMN-SSTRK-A	24.0	27.0	800	480	560
26	26FMN-BTK-A	26FMN-BTRK-A	26FMN-STK-A	26FMN-STRK-A	26FMN-SSTK-A	26FMN-SSTRK-A	25.0	28.0	700	420	490
27	27FMN-BTK-A	27FMN-BTRK-A	27FMN-STK-A	27FMN-STRK-A	27FMN-SSTK-A	27FMN-SSTRK-A	26.0	29.0	700	420	490
28	28FMN-BTK-A	28FMN-BTRK-A	28FMN-STK-A	28FMN-STRK-A	28FMN-SSTK-A	28FMN-SSTRK-A	27.0	30.0	700	420	490
29	29FMN-BTK-A	29FMN-BTRK-A	29FMN-STK-A	29FMN-STRK-A	29FMN-SSTK-A	29FMN-SSTRK-A	28.0	31.0	700	420	490
30	30FMN-BTK-A	30FMN-BTRK-A	30FMN-STK-A	30FMN-STRK-A	30FMN-SSTK-A	30FMN-SSTRK-A	29.0	32.0	600	360	420
31	31FMN-BTK-A	31FMN-BTRK-A	31FMN-STK-A	31FMN-STRK-A	31FMN-SSTK-A	31FMN-SSTRK-A	30.0	33.0	600	360	420
32	32FMN-BTK-A	32FMN-BTRK-A	32FMN-STK-A	32FMN-STRK-A	32FMN-SSTK-A	32FMN-SSTRK-A	31.0	34.0	600	360	420
33	33FMN-BTK-A	33FMN-BTRK-A	33FMN-STK-A	33FMN-STRK-A	33FMN-SSTK-A	33FMN-SSTRK-A	32.0	35.0	600	360	420
34	34FMN-BTK-A	34FMN-BTRK-A	34FMN-STK-A	34FMN-STRK-A	34FMN-SSTK-A	34FMN-SSTRK-A	33.0	36.0	600	360	420
35	35FMN-BTK-A	35FMN-BTRK-A	35FMN-STK-A	35FMN-STRK-A	35FMN-SSTK-A	35FMN-SSTRK-A	34.0	37.0	500	300	350
36	36FMN-BTK-A	36FMN-BTRK-A	36FMN-STK-A	36FMN-STRK-A	36FMN-SSTK-A	36FMN-SSTRK-A	35.0	38.0	500	300	350
37	37FMN-BTK-A	37FMN-BTRK-A	37FMN-STK-A	37FMN-STRK-A	37FMN-SSTK-A	37FMN-SSTRK-A	36.0	39.0	500	300	350
38	38FMN-BTK-A	38FMN-BTRK-A	38FMN-STK-A	38FMN-STRK-A	38FMN-SSTK-A	38FMN-SSTRK-A	37.0	40.0	500	300	350
39	39FMN-BTK-A	39FMN-BTRK-A	39FMN-STK-A	39FMN-STRK-A	39FMN-SSTK-A	39FMN-SSTRK-A	38.0	41.0	500	300	350
40	40FMN-BTK-A	40FMN-BTRK-A	40FMN-STK-A	40FMN-STRK-A	40FMN-SSTK-A	40FMN-SSTRK-A	39.0	42.0	500	300	350

Material and Surface finish, etc

Contact: Copper alloy, tin-plated

Housing: 4 to 22 circuits/ PBT (GF)

Gray (Normal type), Brown (Reverse type: Top entry type and Side entry type),

Black (Reverse type: Side entry type with stopper)

23 to 40 circuits/ PA (Heat resistance)

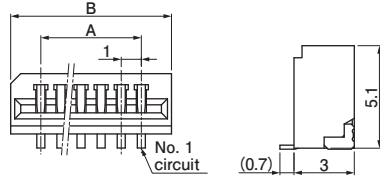
Gray (Normal type), Black (Reverse type)

Note: 1. This product displays (LF)(SN) on a label.

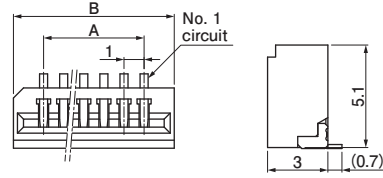
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

Connector/ SMT type

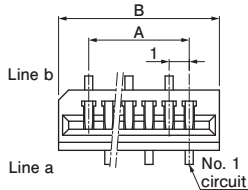
Top entry type, Single-row leads, normal type



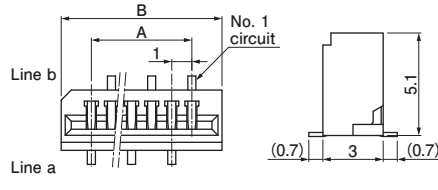
Top entry type, Single-row leads, reverse-type



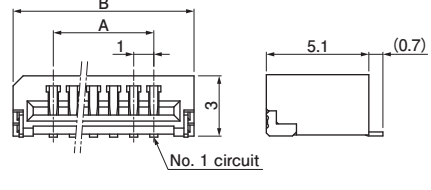
Top entry type
• Staggered leads,
normal type



• Staggered leads,
reverse type



Side entry type



Note) Line a and b: See "PC board layout" section on page 5.

No. of circuits	Model No.					Dimensions (mm)			Q'ty/reel	
	Top entry type									
	Single-row		Staggered		Side entry type	A	B		Top entry type	Side entry type
	Normal type	Reverse type	Normal type	Reverse type			Top entry type	Side entry type		
4	04FMN-BMT-A-TF	04FMN-BMTR-A-TB	04FMN-BMTTN-A-TF	04FMN-BMTTR-A-TB	04FMN-SMT-A-TF	3.0	6.0	7.0	1,000	2,000
5	05FMN-BMT-A-TF	05FMN-BMTR-A-TB	05FMN-BMTTN-A-TF	05FMN-BMTTR-A-TB	05FMN-SMT-A-TF	4.0	7.0	8.0	1,000	2,000
6	06FMN-BMT-A-TF	06FMN-BMTR-A-TB	06FMN-BMTTN-A-TF	06FMN-BMTTR-A-TB	06FMN-SMT-A-TF	5.0	8.0	9.0	1,000	2,000
7	07FMN-BMT-A-TF	07FMN-BMTR-A-TB	07FMN-BMTTN-A-TF	07FMN-BMTTR-A-TB	07FMN-SMT-A-TF	6.0	9.0	10.0	1,000	2,000
8	08FMN-BMT-A-TF	08FMN-BMTR-A-TB	08FMN-BMTTN-A-TF	08FMN-BMTTR-A-TB	08FMN-SMT-A-TF	7.0	10.0	11.0	1,000	2,000
9	09FMN-BMT-A-TF	09FMN-BMTR-A-TB	09FMN-BMTTN-A-TF	09FMN-BMTTR-A-TB	09FMN-SMT-A-TF	8.0	11.0	12.0	1,000	2,000
10	10FMN-BMT-A-TF	10FMN-BMTR-A-TB	10FMN-BMTTN-A-TF	10FMN-BMTTR-A-TB	10FMN-SMT-A-TF	9.0	12.0	13.0	1,000	2,000
11	11FMN-BMT-A-TF	11FMN-BMTR-A-TB	11FMN-BMTTN-A-TF	11FMN-BMTTR-A-TB	11FMN-SMT-A-TF	10.0	13.0	14.0	1,000	2,000
12	12FMN-BMT-A-TF	12FMN-BMTR-A-TB	12FMN-BMTTN-A-TF	12FMN-BMTTR-A-TB	12FMN-SMT-A-TF	11.0	14.0	15.0	1,000	2,000
13	13FMN-BMT-A-TF	13FMN-BMTR-A-TB	13FMN-BMTTN-A-TF	13FMN-BMTTR-A-TB	13FMN-SMT-A-TF	12.0	15.0	16.0	1,000	2,000
14	14FMN-BMT-A-TF	14FMN-BMTR-A-TB	14FMN-BMTTN-A-TF	14FMN-BMTTR-A-TB	14FMN-SMT-A-TF	13.0	16.0	17.0	1,000	2,000
15	15FMN-BMT-A-TF	15FMN-BMTR-A-TB	15FMN-BMTTN-A-TF	15FMN-BMTTR-A-TB	15FMN-SMT-A-TF	14.0	17.0	18.0	1,000	2,000
16	16FMN-BMT-A-TF	16FMN-BMTR-A-TB	16FMN-BMTTN-A-TF	16FMN-BMTTR-A-TB	16FMN-SMT-A-TF	15.0	18.0	19.0	1,000	2,000
17	17FMN-BMT-A-TF	17FMN-BMTR-A-TB	17FMN-BMTTN-A-TF	17FMN-BMTTR-A-TB	17FMN-SMT-A-TF	16.0	19.0	20.0	1,000	2,000
18	18FMN-BMT-A-TF	18FMN-BMTR-A-TB	18FMN-BMTTN-A-TF	18FMN-BMTTR-A-TB	18FMN-SMT-A-TF	17.0	20.0	21.0	1,000	2,000
19	19FMN-BMT-A-TF	19FMN-BMTR-A-TB	19FMN-BMTTN-A-TF	19FMN-BMTTR-A-TB	19FMN-SMT-A-TF	18.0	21.0	22.0	1,000	2,000
20	20FMN-BMT-A-TF	20FMN-BMTR-A-TB	20FMN-BMTTN-A-TF	20FMN-BMTTR-A-TB	20FMN-SMT-A-TF	19.0	22.0	23.0	1,000	2,000
21	21FMN-BMT-A-TF	21FMN-BMTR-A-TB	—	21FMN-BMTTR-A-TB	21FMN-SMT-A-TF	20.0	23.0	24.0	1,000	2,000
22	22FMN-BMT-A-TF	22FMN-BMTR-A-TB	22FMN-BMTTN-A-TF	22FMN-BMTTR-A-TB	22FMN-SMT-A-TF	21.0	24.0	25.0	1,000	2,000
23	23FMN-BMT-A-TF	23FMN-BMTR-A-TB	23FMN-BMTTN-A-TF	23FMN-BMTTR-A-TB	23FMN-SMT-A-TF	22.0	25.0	26.0	1,000	2,000
24	24FMN-BMT-A-TF	24FMN-BMTR-A-TB	24FMN-BMTTN-A-TF	24FMN-BMTTR-A-TB	24FMN-SMT-A-TF	23.0	26.0	27.0	1,000	2,000
25	25FMN-BMT-A-TF	25FMN-BMTR-A-TB	25FMN-BMTTN-A-TF	25FMN-BMTTR-A-TB	25FMN-SMT-A-TF	24.0	27.0	28.0	1,000	2,000
26	26FMN-BMT-A-TF	26FMN-BMTR-A-TB	26FMN-BMTTN-A-TF	—	26FMN-SMT-A-TF	25.0	28.0	29.0	1,000	2,000
27	27FMN-BMT-A-TF	27FMN-BMTR-A-TB	27FMN-BMTTN-A-TF	27FMN-BMTTR-A-TB	27FMN-SMT-A-TF	26.0	29.0	30.0	1,000	2,000
28	—	28FMN-BMTR-A-TB	28FMN-BMTTN-A-TF	28FMN-BMTTR-A-TB	28FMN-SMT-A-TF	27.0	30.0	31.0	1,000	2,000
29	29FMN-BMT-A-TF	29FMN-BMTR-A-TB	29FMN-BMTTN-A-TF	29FMN-BMTTR-A-TB	29FMN-SMT-A-TF	28.0	31.0	32.0	1,000	2,000
30	30FMN-BMT-A-TF	30FMN-BMTR-A-TB	30FMN-BMTTN-A-TF	30FMN-BMTTR-A-TB	30FMN-SMT-A-TF	29.0	32.0	33.0	1,000	2,000
31	31FMN-BMT-A-TF	31FMN-BMTR-A-TB	31FMN-BMTTN-A-TF	31FMN-BMTTR-A-TB	31FMN-SMT-A-TF	30.0	33.0	34.0	1,000	2,000
32	32FMN-BMT-A-TF	32FMN-BMTR-A-TB	32FMN-BMTTN-A-TF	32FMN-BMTTR-A-TB	32FMN-SMT-A-TF	31.0	34.0	35.0	1,000	2,000
33	33FMN-BMT-A-TF	—	33FMN-BMTTN-A-TF	33FMN-BMTTR-A-TB	33FMN-SMT-A-TF	32.0	35.0	36.0	1,000	2,000
34	34FMN-BMT-A-TF	—	34FMN-BMTTN-A-TF	34FMN-BMTTR-A-TB	34FMN-SMT-A-TF	33.0	36.0	37.0	1,000	2,000
35	35FMN-BMT-A-TF	35FMN-BMTR-A-TB	35FMN-BMTTN-A-TF	35FMN-BMTTR-A-TB	35FMN-SMT-A-TF	34.0	37.0	38.0	1,000	2,000
36	36FMN-BMT-A-TF	36FMN-BMTR-A-TB	36FMN-BMTTN-A-TF	36FMN-BMTTR-A-TB	36FMN-SMT-A-TF	35.0	38.0	39.0	1,000	2,000
37	37FMN-BMT-A-TF	37FMN-BMTR-A-TB	37FMN-BMTTN-A-TF	37FMN-BMTTR-A-TB	37FMN-SMT-A-TF	36.0	39.0	40.0	1,000	2,000
38	38FMN-BMT-A-TF	38FMN-BMTR-A-TB	38FMN-BMTTN-A-TF	38FMN-BMTTR-A-TB	38FMN-SMT-A-TF	37.0	40.0	41.0	1,000	2,000
39	39FMN-BMT-A-TF	39FMN-BMTR-A-TB	39FMN-BMTTN-A-TF	39FMN-BMTTR-A-TB	39FMN-SMT-A-TF	38.0	41.0	42.0	1,000	2,000
40	40FMN-BMT-A-TF	40FMN-BMTR-A-TB	40FMN-BMTTN-A-TF	40FMN-BMTTR-A-TB	40FMN-SMT-A-TF	39.0	42.0	43.0	1,000	2,000

Material and Surface finish, etc

Contact: Copper alloy, tin-plated
Housing: PA (Heat resistance), black
Reinforcement: Copper alloy, tin-plated

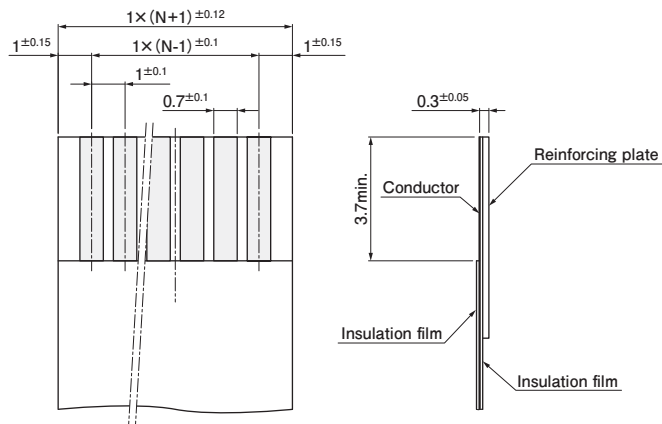
Note: 1. This product displays (LF)(SN) on a label.

2. This product is supplied on embossed tape and reel packaging.

3. The top entry type is available with suction tape.

4. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

FFC recommended dimensions

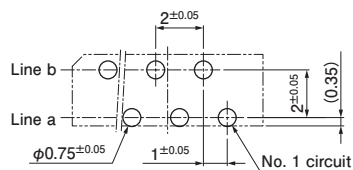


Note) N: No. of circuits

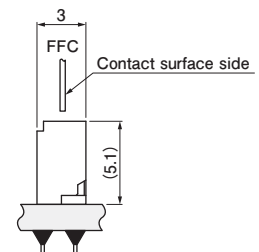
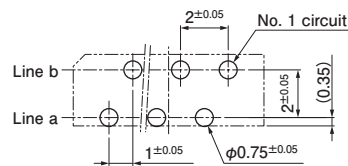
PC board layout and Assembly layout/ Through-hole type

Top entry type

• Normal type

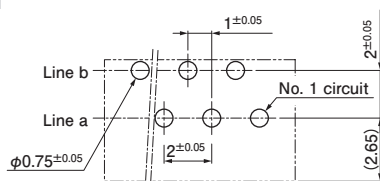


• Reverse type

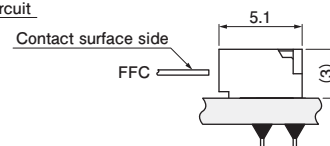
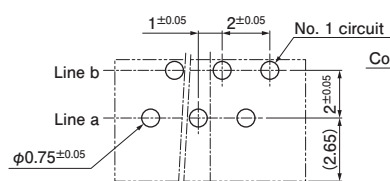


Side entry type

• Normal type

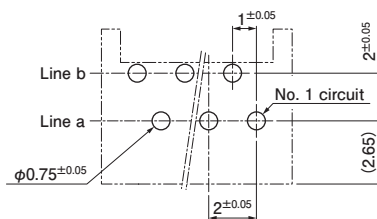


• Reverse type

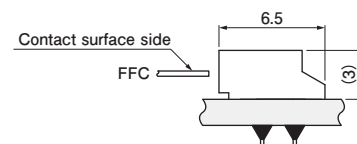
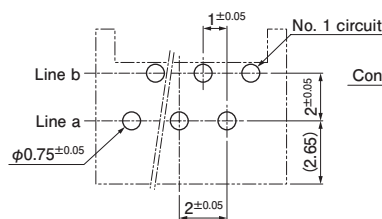


Side entry type with stopper

• Normal type



• Reverse type

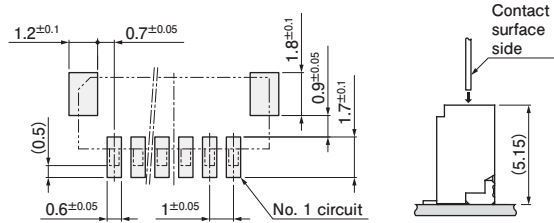


Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
 2. Tolerance for the PCB hole pitch shall be ± 0.05 and shall not accumulate.
 3. Hole dimensions differ depending on the type of PCB and PCB drilling method.
 The above dimensions are for reference only.
 Please contact JST for further details.

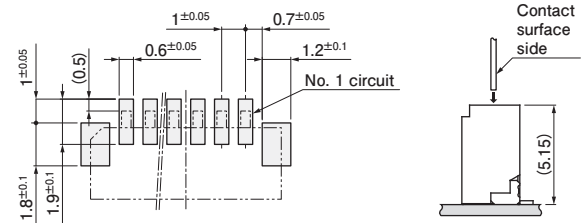
PC board layout and Assembly layout/ SMT type

Top entry type

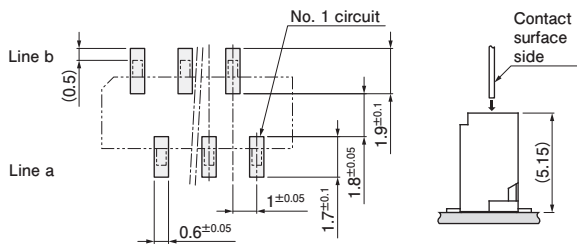
• Single-row leads, normal type



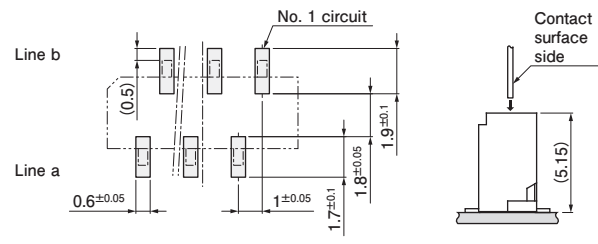
• Single-row leads, reverse-type



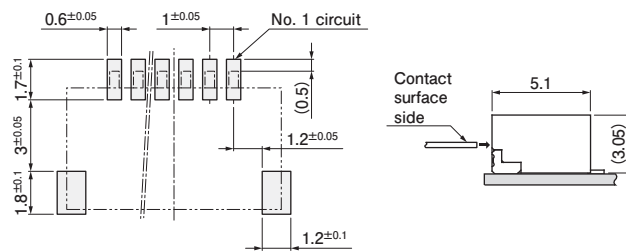
• Staggered leads, normal type



• Staggered leads, reverse type



Side entry type



- Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.
 2. Tolerance for the PCB pattern pitch shall be ± 0.05 and shall not accumulate.
 3. The above dimensions are for reference only.
 Please contact JST for further details.