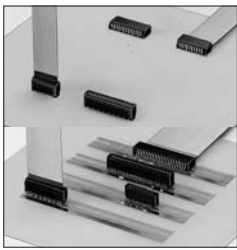




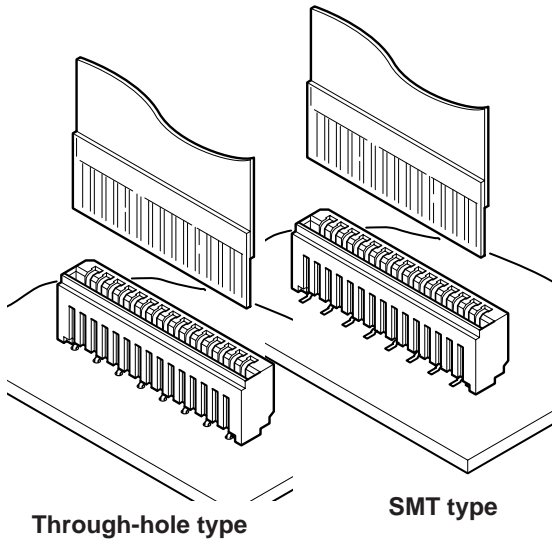
**THE DATASHEET OF
13FMN-SMT-A-TF(LF)(SN)**





FMN CONNECTOR

1.0mm pitch/Connectors for FFC



Through-hole type

SMT type

- Compact
- Low insertion force
- Both through-hole and SMT types are available
- Embossed tape for automatic mounting

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 environmental tests/ 50 mΩ max.
 - Insulation resistance: 500 MΩ min.
 - Withstanding voltage: 500 VAC/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
- Note: FFC to be actually used should be checked for applicability.
- * Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
 - * Contact JST for details.
 - * Compliant with RoHS.

Standards

Recognized E60389

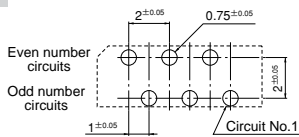
Certified LR20812

PC board layout and Assembly layout

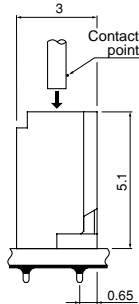
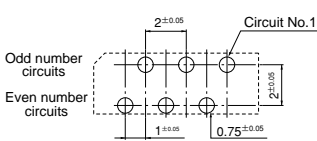
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Top entry type

Normal type

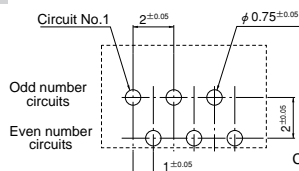


Reverse type

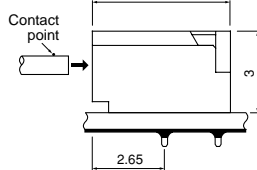
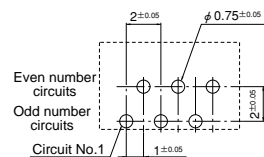


Side entry type

Normal type



Reverse type

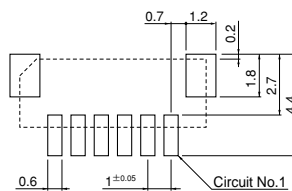


<SMT type>

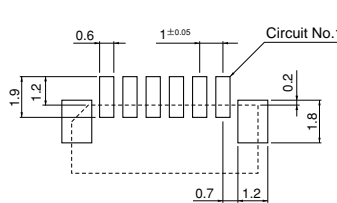
Top entry type

<In-line>

Normal type

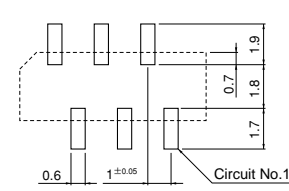


Reverse type

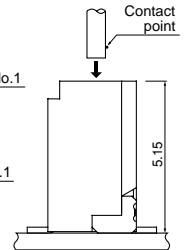
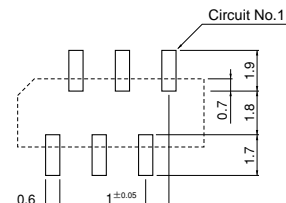


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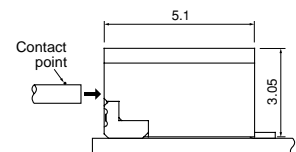
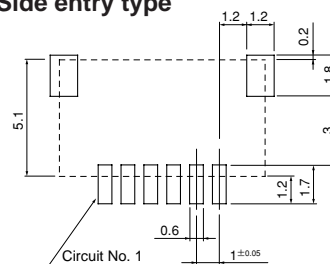
Normal type



Reverse type



Side entry type

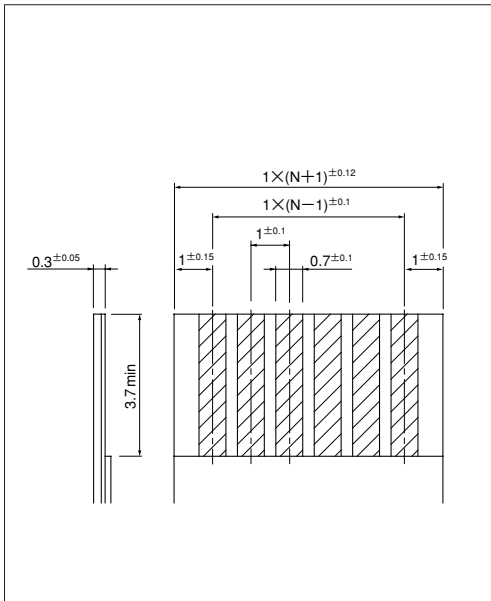


- Note:
1. The above figure is the figure viewed from the connector mounting side.
 2. Tolerances are non-cumulative: ±0.05 mm for all centers.
 3. Hole dimensions differ according to the type of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

- Note:
1. The above figure is the figure viewed from the connector mounting side.
 2. Tolerances are non-cumulative: ±0.05 mm for all centers.
 3. The dimensions above should serve as a guideline. Contact JST for details.

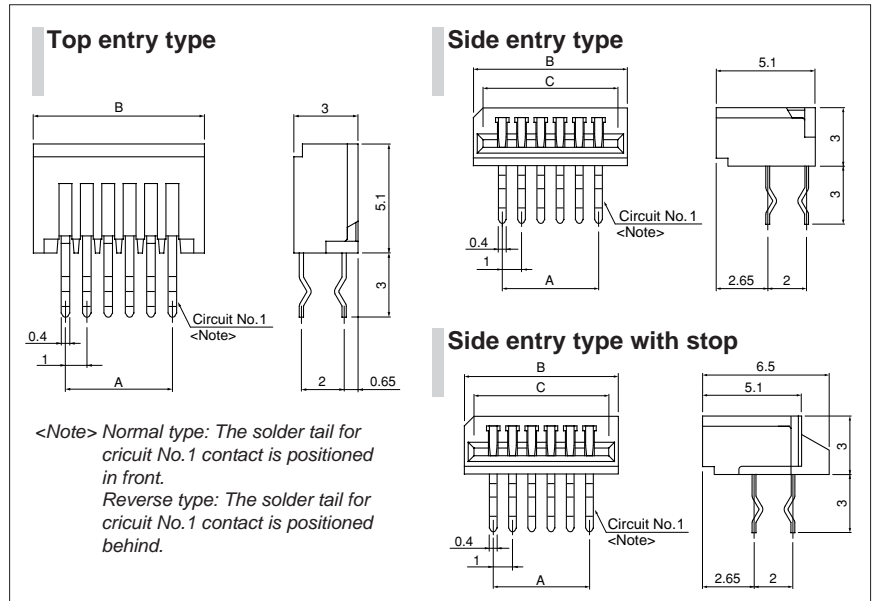
FMN CONNECTOR

Lead section dimensions of FFC



Note: N --- Number of circuits

Through-hole type Connector



Circuits	Model No.						Dimensions (mm)			Q'ty/box		
	Top entry type		Side entry type		Side entry type with stop		A	B	C	Top entry type	Side entry type	Side entry type with stop
	Normal type	Reverse type	Normal type	Reverse type	Normal type	Reverse type						
4	04FMN-BTK-A	04FMN-BTRK-A	04FMN-STK-A	04FMN-STRK-A	04FMN-SSTK-A	04FMN-SSTRK-A	3.0	6.0	5.0	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	6.0	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	7.0	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	8.0	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	9.0	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	10.0	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	11.0	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	12.0	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	13.0	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	14.0	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	15.0	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	16.0	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	17.0	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	18.0	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	19.0	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	20.0	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	21.0	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	22.0	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	23.0	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	24.0	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	25.0	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	26.0	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	27.0	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	28.0	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	29.0	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	30.0	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	31.0	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	32.0	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	33.0	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	34.0	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	35.0	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	36.0	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	37.0	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	38.0	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	39.0	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	40.0	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	41.0	500	300	350

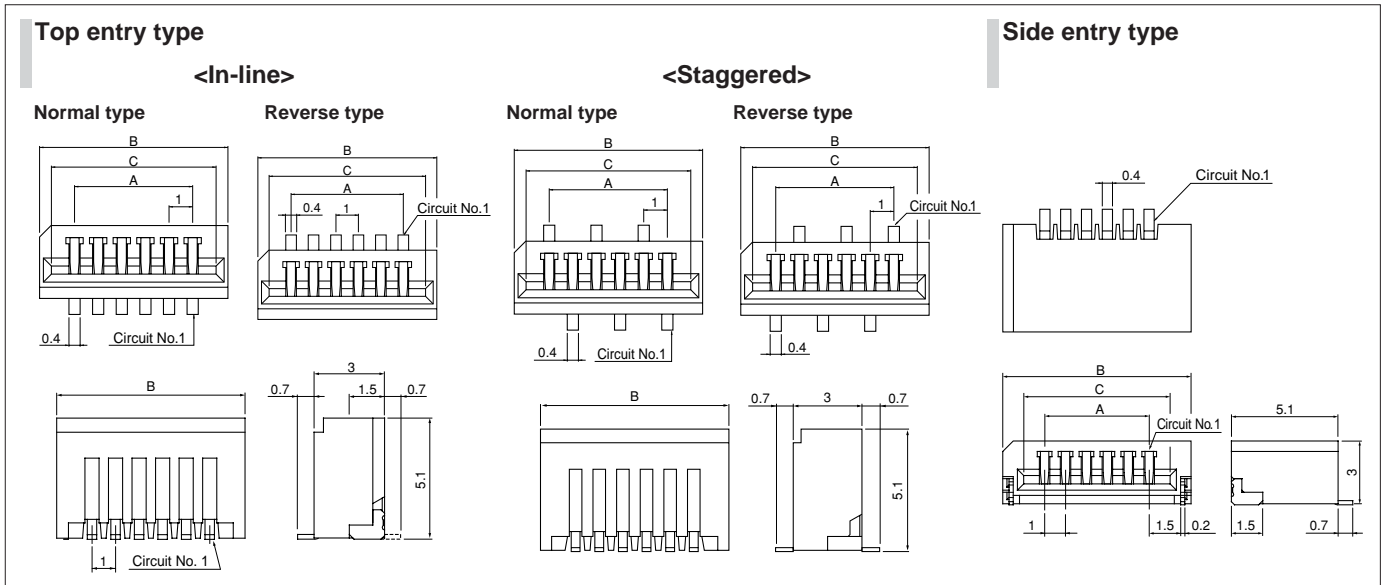
Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)
Housing: 4 to 22 circuits/PBT, UL94V-0, Normal type...gray Reverse type...brown
23 to 40 circuits/PA 6T, UL94V-0, Normal type...gray Reverse type...black

RoHS compliance This product displays (LF)(SN) on a label.

FMN CONNECTOR

SMT type Connector



Circuits	Model No.					Dimensions (mm)			Qty/reel		
	Top entry type				Side entry type	A	B		C	Top entry type	Side entry type
	In-line		Staggered				Top entry type	Side entry type			
	Normal type	Reverse type	Normal type	Reverse 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	5.0	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	6.0	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	7.0	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	8.0	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	9.0	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	10.0	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	11.0	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	12.0	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	13.0	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	14.0	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	15.0	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	16.0	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	17.0	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	18.0	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	19.0	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	20.0	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	21.0	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	22.0	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	23.0	1,000	2,000
23	23FMN-BMT-A-TF	23FMN-BMTR-A-TB	23FMN-BMTTN-A-TF	—	23FMN-SMT-A-TF	22.0	25.0	26.0	24.0	1,000	2,000
24	24FMN-BMT-A-TF	24FMN-BMTR-A-TB	24FMN-BMTTN-A-TF	—	24FMN-SMT-A-TF	23.0	26.0	27.0	25.0	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	26.0	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	27.0	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	28.0	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	29.0	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	30.0	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	31.0	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	32.0	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	33.0	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	34.0	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	35.0	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	36.0	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	37.0	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	38.0	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	39.0	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	40.0	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	41.0	1,000	2,000

Material and Finish

Contact: Phosphor bronze, copper-undercoated, tin-plated (reflow treatment)
Housing: PA 6T, UL94V-0, black
Solder tab: Brass, copper-undercoated, tin-plated (reflow treatment)

RoHS compliance This product displays (LF)(SN) on a label.

Note: 1. The products listed above are supplied on embossed tape.

2. Contact JST for the top entry type headers with suction cap.

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View 13FMN-SMT-A-TF\(LF\)\(SN\) on WIN SOURCE](#)
- [JST Sales America Inc. Information](#)

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