JST

0.5mm (.020") pitch

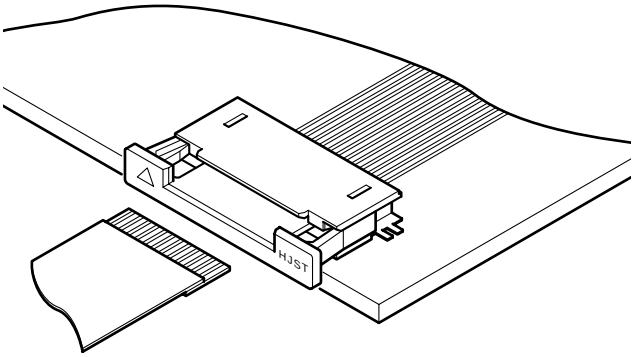
FLZ CONNECTOR

Emboss Tape

ZIF TYPE

Connectors for FFC and FPC

This extremely small 0.5mm (.020") pitch connector with a height of only 2.0mm (.079") above the PCB surface allows interconnection in extremely small spaces and is an example of JST's leading edge technology.



Features

• Zero insertion force mechanism

A ZIF mechanism increases wear resistance and extends the connector's mating life.

• Heat resistant design suitable for surface mounting

This housing is made of heat resistant plastic to allow reflow soldering.

• In-line surface mount tails

Has an in-line surface mount tails for easy inspection.

• Two types of connections

The connector is available in either the normal or reverse configurations. The FFC/FPC is positioned with its mating surfaces facing upward for the normal configured connector, while the reverse configuration requires that the FFC/FPC be positioned with its mating surfaces facing down. The engineer has greater freedom in designing his circuitry.

• Embossed tape for automatic mounting

The FLZ connector can be packaged in embossed tape for automatic mounting.

Specifications

- Current rating: 0.5A AC, DC
- Voltage rating: 50V AC, DC
- Temperature range: -25˚C to +85˚C
  (including temperature rise in applying electrical current)
- Contact resistance: Initial value/40m Ω max.
  After environmental testing/60m Ω max.
- Insulation resistance: 800M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable FFC and FPC: Lead pitch/0.5mm(.020")
  Lead width/0.35mm(.014")
  Mating part thickness/
  0.30±0.03mm(.012" ± .001")

<Note>FFC and FPC to be actually used should be checked for applicability.

* Contact JST if Lead-Free product is required.
* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
* Contact JST for details.

Standards

Recognized E60389

Certified LR20812

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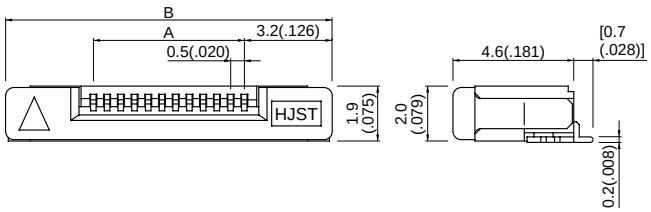
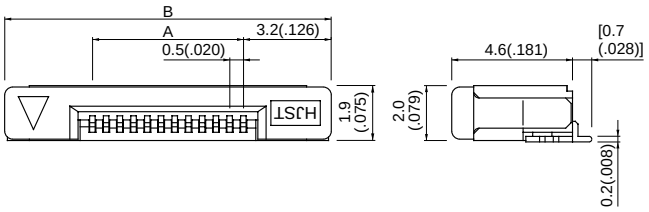
Connector

Normal type



Reverse type



Cir-cuits	Model No.		Dimensions mm(in.)		Q'ty / reel
	Normal type	Reverse type	A	B	
6	**06FLZ-SM1-TB**	**06FLZ-RSM1-TB**	2.5(.098)	8.9(.350)	2,000
7	**07FLZ-SM1-TB**	**07FLZ-RSM1-TB**	3.0(.118)	9.4(.370)	2,000
8	**08FLZ-SM1-TB**	**08FLZ-RSM1-TB**	3.5(.138)	9.9(.390)	2,000
9	**09FLZ-SM1-TB**	**09FLZ-RSM1-TB**	4.0(.157)	10.4(.409)	2,000
10	**10FLZ-SM1-TB**	**10FLZ-RSM1-TB**	4.5(.177)	10.9(.429)	2,000
11	**11FLZ-SM1-TB**	**11FLZ-RSM1-TB**	5.0(.197)	11.4(.449)	2,000
12	**12FLZ-SM1-TB**	**12FLZ-RSM1-TB**	5.5(.217)	11.9(.469)	2,000
13	**13FLZ-SM1-TB**	**13FLZ-RSM1-TB**	6.0(.236)	12.4(.488)	2,000
14	**14FLZ-SM1-TB**	**14FLZ-RSM1-TB**	6.5(.256)	12.9(.508)	2,000
15	**15FLZ-SM1-TB**	**15FLZ-RSM1-TB**	7.0(.276)	13.4(.528)	2,000
16	**16FLZ-SM1-TB**	**16FLZ-RSM1-TB**	7.5(.295)	13.9(.547)	2,000
17	**17FLZ-SM1-TB**	**17FLZ-RSM1-TB**	8.0(.315)	14.4(.567)	2,000
18	**18FLZ-SM1-TB**	**18FLZ-RSM1-TB**	8.5(.335)	14.9(.587)	2,000
19	**19FLZ-SM1-TB**	**19FLZ-RSM1-TB**	9.0(.354)	15.4(.606)	2,000
20	**20FLZ-SM1-TB**	**20FLZ-RSM1-TB**	9.5(.374)	15.9(.626)	2,000
21	**21FLZ-SM1-TB**	**21FLZ-RSM1-TB**	10.0(.394)	16.4(.646)	2,000
22	**22FLZ-SM1-TB**	**22FLZ-RSM1-TB**	10.5(.413)	16.9(.665)	2,000
23	**23FLZ-SM1-TB**	**23FLZ-RSM1-TB**	11.0(.433)	17.4(.685)	2,000
24	**24FLZ-SM1-TB**	**24FLZ-RSM1-TB**	11.5(.453)	17.9(.705)	2,000
25	**25FLZ-SM1-TB**	**25FLZ-RSM1-TB**	12.0(.472)	18.4(.724)	2,000
26	**26FLZ-SM1-TB**	**26FLZ-RSM1-TB**	12.5(.492)	18.9(.744)	2,000
27	**27FLZ-SM1-TB**	**27FLZ-RSM1-TB**	13.0(.512)	19.4(.764)	2,000
28	**28FLZ-SM1-TB**	**28FLZ-RSM1-TB**	13.5(.531)	19.9(.783)	2,000
30	**30FLZ-SM1-TB**	**30FLZ-RSM1-TB**	14.5(.571)	20.9(.823)	2,000
33	**33FLZ-SM1-TB**	–	16.0(.630)	22.4(.882)	2,000

Material and Finish
Contact: Phosphor bronze, tin/lead-plated Slider housing: Nylon 46, UL94V-0 (black) Receptacle housing: Nylon 46, UL94V-0 ( )FLZ-SM1-TB, gray ( )FLZ-RSM1-TB, natural Solder tab: Phosphor bronze, tin/lead-plated

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

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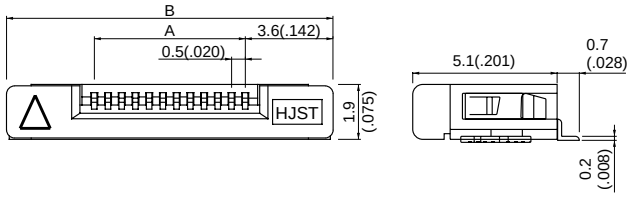
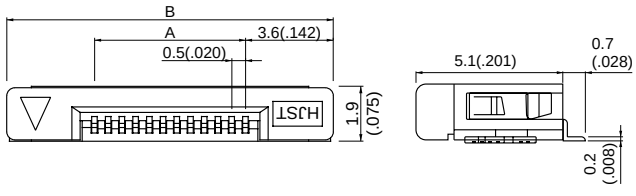
Connector <Inner-lock type>

Normal type



Reverse type



Cir-cuits	Model No.		Dimensions mm(in.)		Q'ty / reel
	Normal type	Reverse type	A	B	
13	–	**13FLZ-RSM1-R-TB**	6.0(.236)	13.1(.516)	2,000
30	**30FLZ-SM1-R-TB**	–	14.5(.571)	21.6(.850)	2,000
32	**32FLZ-SM1-R-TB**	**32FLZ-RSM1-R-TB**	15.5(.610)	22.6(.890)	2,000
34	**34FLZ-SM1-R-TB**	**34FLZ-RSM1-R-TB**	16.5(.650)	23.6(.929)	2,000
36	**36FLZ-SM1-R-TB**	**36FLZ-RSM1-R-TB**	17.5(.689)	24.6(.969)	2,000
40	**40FLZ-SM1-R-TB**	**40FLZ-RSM1-R-TB**	19.5(.768)	26.6(1.047)	2,000
42	**42FLZ-SM1-R-TB**	–	20.5(.807)	27.6(1.087)	2,000
45	**45FLZ-SM1-R-TB**	–	22.0(.866)	29.1(1.146)	2,000
50	**50FLZ-SM1-R-TB**	–	24.5(.965)	31.6(1.244)	2,000

Material and Finish
Contact: Phosphor bronze, tin/lead-plated Slider housing: Nylon 46, UL94V-0 (black) Receptacle housing: Nylon 46, UL94V-0 ( )FLZ-SM1-R-TB, gray ( )FLZ-RSM1-R-TB, natural Solder tab: Phosphor bronze, tin/lead-plated

Note: 1. The products listed above are supplied on embossed tape.
2. 45FLZ-SM1-R-TB and 50FLZ-SM1-R-TB are not CSA approved.

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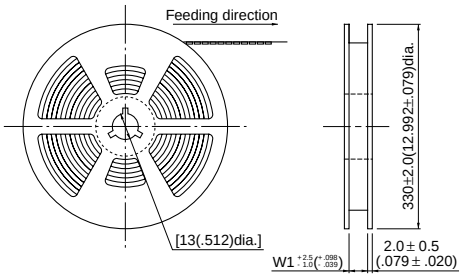
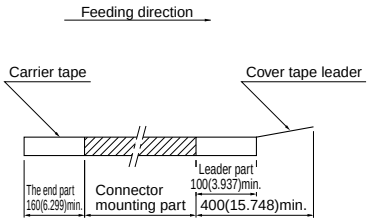
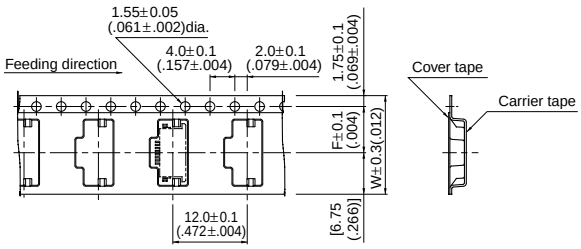
Taping specifications

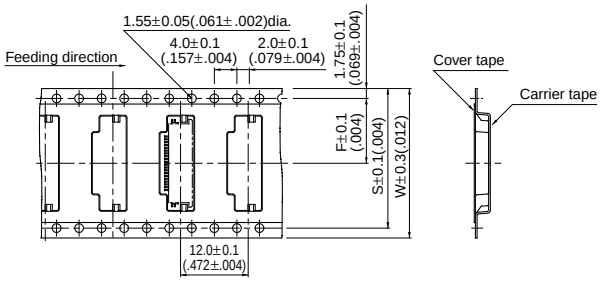




(6 to 24 circuits)



(25 to 50 circuits)

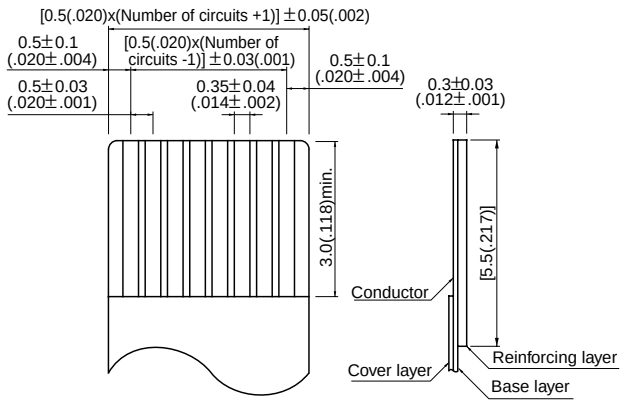


Circuits	Taping dimensions mm(in.)			Reel dimensions mm(in.)	Q'ty / reel
	F	S	W	W1	
6 to 8	7.5(.295)	–	16.0(.630)	17.5(.689)	2,000
9 to 24	11.5(.453)	–	24.0(.945)	25.5(1.004)	2,000
25 to 30	14.2(.559)	28.4(1.118)	32.0(1.260)	33.5(1.319)	2,000
32 to 50	20.2(.795)	40.4(1.591)	44.0(1.732)	45.5(1.791)	2,000

Note:

1. *Specifications conform to JIS C 0806. The tape width, connector recess dimensions, etc. are determined by the number of circuits and external shape of the connector to be loaded.*
2. *Specifications are subject to change without prior notice.*

Lead section dimensions of FFC and FPC



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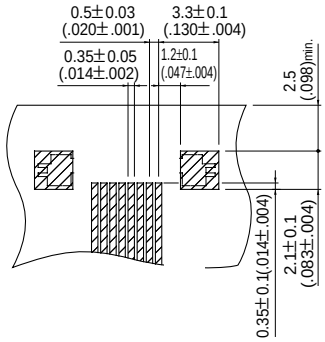
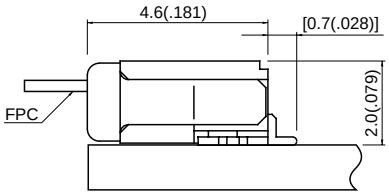
FLZ CONNECTOR

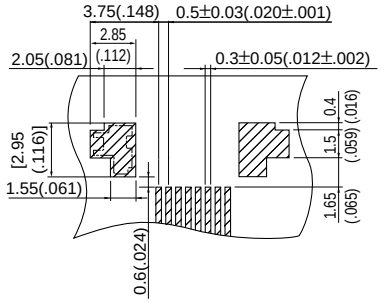
PC board layout (viewed from component side) and Assembly layout

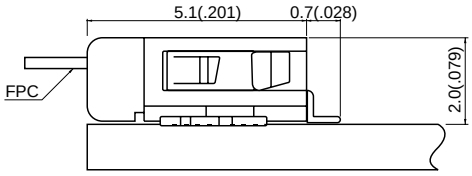
(6 to 33 circuits)





(13 to 50 circuits) <Inner-lock type>





Note:
1. Tolerances are non-cumulative: ±0.03mm(±.001") for all centers.
2. The dimensions above should serve as a guideline.
Contact JST for details.

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