

# FLH CONNECTOR

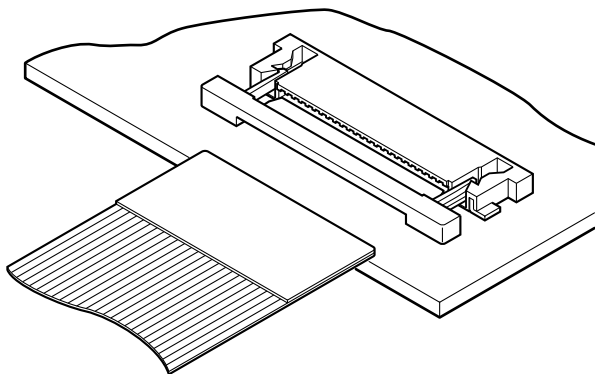


**0.5mm**  
(.020") pitch

28FLH-RSM1-TB Connector for BTHQ128064VD series LCDs



**Compact connector with just 1.2mm(.047") high after mounting on the PC board.**



## Features

### • Ultra thin design

The FLH connector is the ZIF type ultra thin connector, with the mounting height of only 1.2mm (.047"). Applicable to 0.3mm (.012") thick FPCs.

### • Heat resistant design suitable for surface mounting

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

### • In-line surface mounting

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

### • Embossed tape for automatic mounting

The FLH 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/40mΩ max.  
After environmental testing/60mΩ max.
- Insulation resistance: 800MΩ min.
- Withstanding voltage: 200V AC/minute
- Applicable FPC: Lead pitch/0.5mm(.020")  
Lead width/0.35mm(.014")  
Mating part thickness/  
0.30±0.03mm (.012"±.001")

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

\* Contact JST for details.

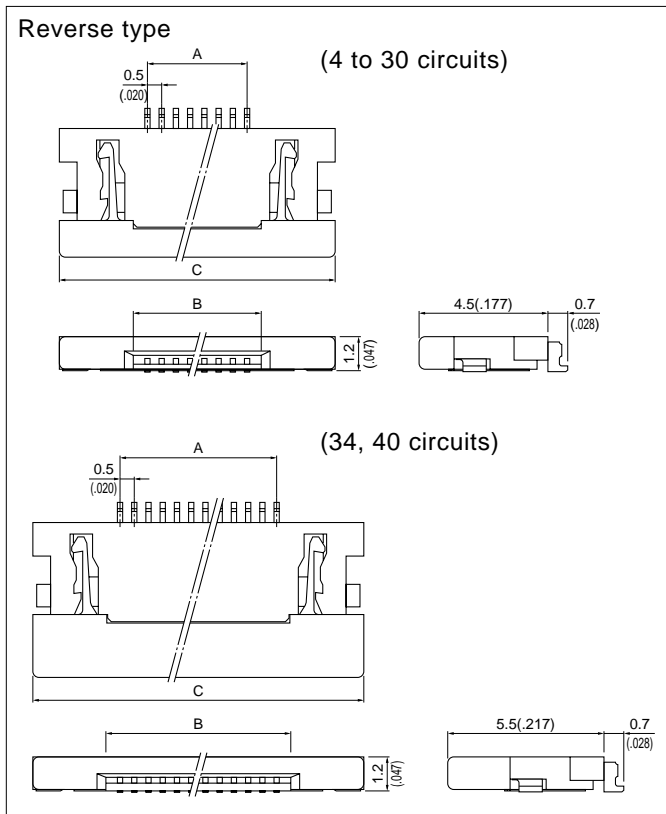
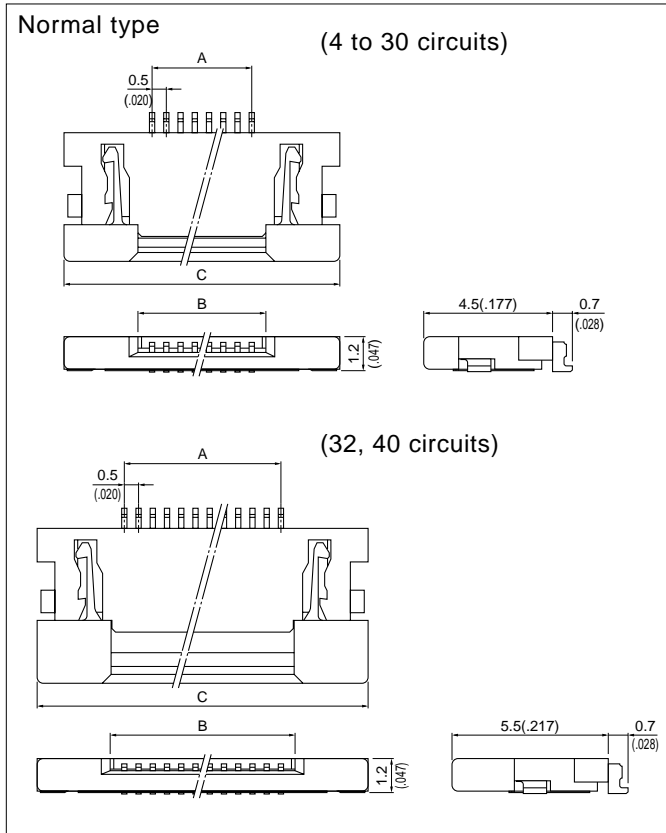
## Standards

Recognized E60389

Certified LR20812

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## Connector



Circuits	Model No.	Dimensions mm(in.)			Q'ty / reel
		A	B	C	
4	04FLH-SM1-TB	1.5(.059)	2.55(.100)	7.7(.303)	3,000
6	06FLH-SM1-TB	2.5(.098)	3.55(.140)	8.7(.343)	3,000
7	07FLH-SM1-TB	3.0(.118)	4.05(.159)	9.2(.362)	3,000
8	08FLH-SM1-TB	3.5(.138)	4.55(.179)	9.7(.382)	3,000
10	10FLH-SM1-TB	4.5(.177)	5.55(.219)	10.7(.421)	3,000
11	11FLH-SM1-TB	5.0(.197)	6.05(.238)	11.2(.441)	3,000
13	13FLH-SM1-TB	6.0(.236)	7.05(.278)	12.2(.480)	3,000
14	14FLH-SM1-TB	6.5(.256)	7.55(.297)	12.7(.500)	3,000
15	15FLH-SM1-TB	7.0(.276)	8.05(.317)	13.2(.520)	3,000
16	16FLH-SM1-TB	7.5(.295)	8.55(.337)	13.7(.539)	3,000
17	17FLH-SM1-TB	8.0(.315)	9.05(.356)	14.2(.559)	3,000
18	18FLH-SM1-TB	8.5(.335)	9.55(.376)	14.7(.579)	3,000
20	20FLH-SM1-TB	9.5(.374)	10.55(.415)	15.7(.618)	3,000
21	21FLH-SM1-TB	10.0(.394)	11.05(.435)	16.2(.638)	3,000
22	22FLH-SM1-TB	10.5(.413)	11.55(.455)	16.7(.657)	3,000
24	24FLH-SM1-TB	11.5(.453)	12.55(.494)	17.7(.697)	3,000
26	26FLH-SM1-TB	12.5(.492)	13.55(.533)	18.7(.736)	3,000
30	30FLH-SM1-TB	14.5(.571)	15.55(.612)	20.7(.815)	3,000
32	32FLH-SM1-TB	15.5(.610)	16.55(.652)	21.7(.854)	3,000
40	40FLH-SM1-TB	19.5(.768)	20.55(.809)	25.7(1.012)	3,000

### Material and Finish

Contact: Copper alloy, copper-undercoated, tin/lead-plated  
 Hausing: LCP, UL94V-0  
 Solder tab: Copper alloy, copper-undercoated, tin/lead-plated  
 Slider: Modified nylon 6T, UL94V-0

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

Circuits	Model No.	Dimensions mm(in.)			Q'ty / reel
		A	B	C	
4	04FLH-RSM1-TB	1.5(.059)	2.55(.100)	7.7(.303)	3,000
6	06FLH-RSM1-TB	2.5(.098)	3.55(.140)	8.7(.343)	3,000
7	07FLH-RSM1-TB	3.0(.118)	4.05(.159)	9.2(.362)	3,000
8	08FLH-RSM1-TB	3.5(.138)	4.55(.179)	9.7(.382)	3,000
9	09FLH-RSM1-TB	4.0(.157)	5.05(.199)	10.2(.402)	3,000
10	10FLH-RSM1-TB	4.5(.177)	5.55(.219)	10.7(.421)	3,000
11	11FLH-RSM1-TB	5.0(.197)	6.05(.238)	11.2(.441)	3,000
12	12FLH-RSM1-TB	5.5(.217)	6.55(.258)	11.7(.461)	3,000
13	13FLH-RSM1-TB	6.0(.236)	7.05(.278)	12.2(.480)	3,000
15	15FLH-RSM1-TB	7.0(.276)	8.05(.317)	13.2(.520)	3,000
16	16FLH-RSM1-TB	7.5(.295)	8.55(.337)	13.7(.539)	3,000
17	17FLH-RSM1-TB	8.0(.315)	9.05(.356)	14.2(.559)	3,000
18	18FLH-RSM1-TB	8.5(.335)	9.55(.376)	14.7(.579)	3,000
19	19FLH-RSM1-TB	9.0(.354)	10.05(.396)	15.2(.598)	3,000
20	20FLH-RSM1-TB	9.5(.374)	10.55(.415)	15.7(.618)	3,000
22	22FLH-RSM1-TB	10.5(.413)	11.55(.455)	16.7(.657)	3,000
24	24FLH-RSM1-TB	11.5(.453)	12.55(.494)	17.7(.697)	3,000
28	28FLH-RSM1-TB	13.5(.531)	14.55(.573)	19.7(.776)	3,000
30	30FLH-RSM1-TB	14.5(.571)	15.55(.612)	20.7(.815)	3,000
34	34FLH-RSM1-TB	16.5(.650)	17.55(.691)	22.7(.894)	3,000
40	40FLH-RSM1-TB	19.5(.768)	20.55(.809)	25.7(1.012)	3,000

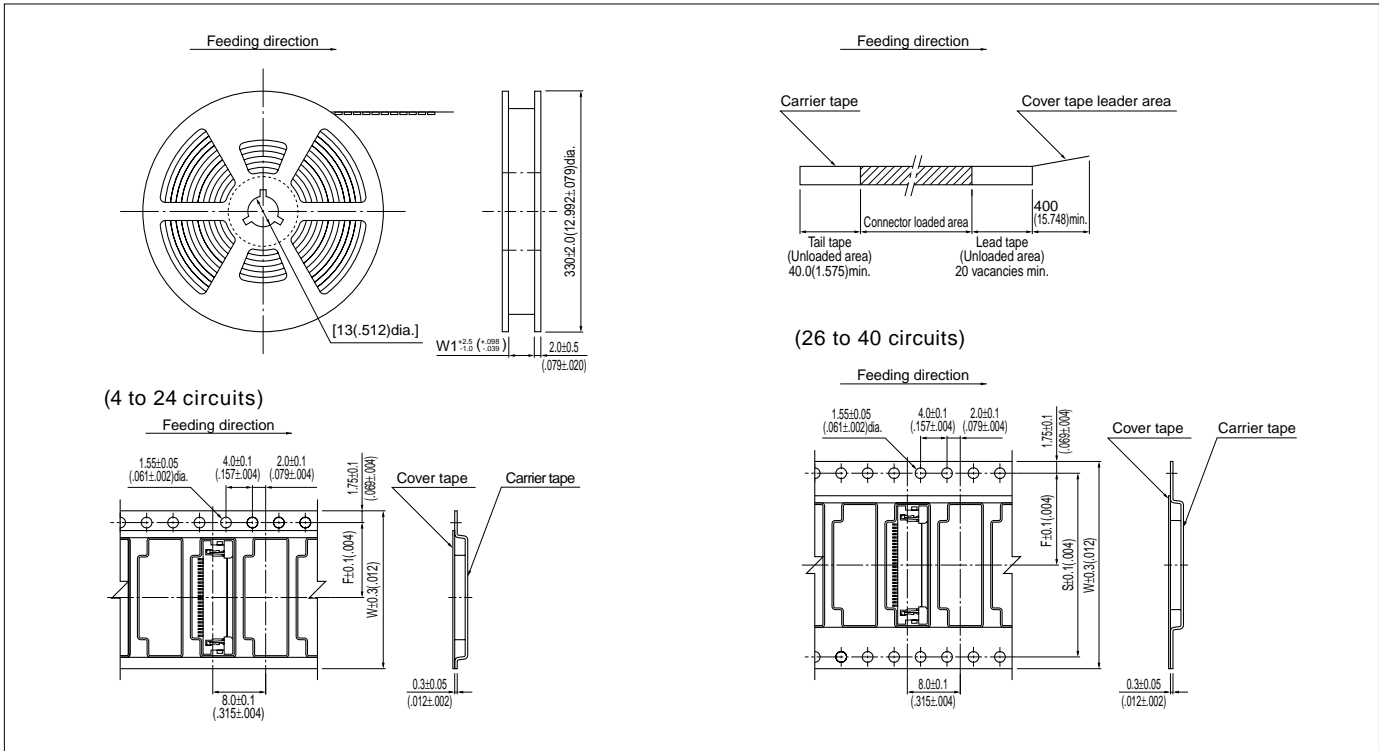
### Material and Finish

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 Solder tab: Copper alloy, copper-undercoated, tin/lead-plated  
 Slider: Modified nylon 6T, UL94V-0

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

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## Taping specifications



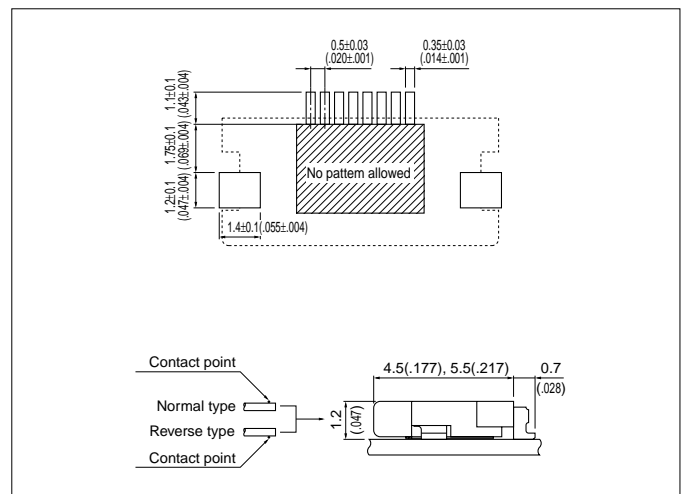
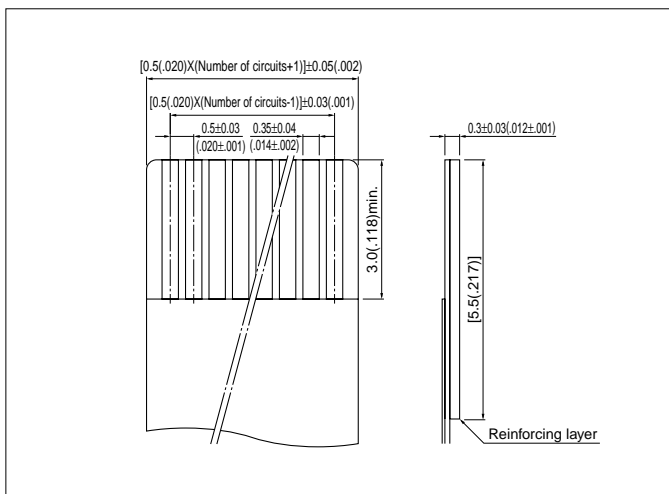
Circuits	Taping dimensions mm(in.)			Reel dimensions mm(in.)	Qty / reel
	F	S	W	W1	
4 to 8	7.5(.295)	-	16.0(.630)	17.5(.689)	3,000
9 to 24	11.5(.453)	-	24.0(.945)	25.5(1.004)	3,000
26 to 30	14.2(.559)	28.4(1.118)	32.0(1.260)	33.5(1.319)	3,000
32 to 40	20.2(.795)	40.4(1.591)	44.0(1.732)	45.5(1.791)	3,000

**Note:**

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

## Lead section dimensions of FPC

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



**Note:**

- Tolerances are non-cumulative:  $\pm 0.03\text{mm}(\pm .001\text{")}$  for all centers.
- The dimensions above should serve as a guideline.