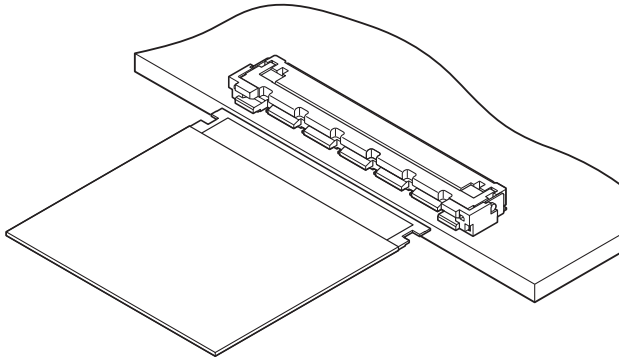




# FCH CONNECTOR

0.5mm pitch/Connectors for FFC



**This is 0.5 mm pitch connector for FPC which has the exclusive GND contact and enables high-speed transmission with connecting to the impedance controlled FPC. Adopting the auto lock mechanism that makes lock by performing the one action of snap-in-work, the workability improvement is realized.**

- Auto lock mechanism with secure and good workability
- EMI countermeasure
- Compatibility with the VESA standard connector
- Correspond to V-by-One<sup>®</sup> HS which is one of the next-generation interface for flat-screen TV

V-by-One is registered trademark of THine Electronics, Inc.

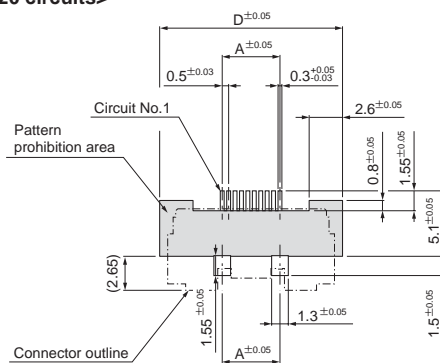
## Specifications

- Current rating: 0.3 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/ 60 mΩ max.  
After environmental tests/ 120 mΩ max.
- Insulation resistance: 500 MΩ min.
- Withstanding voltage: 200 VAC/minute
- Applicable FFC: Conductor pitch/ 0.5 mm  
Conductor width/ 0.32 mm  
Mating part thickness/ 0.33<sup>+0.03</sup><sub>-0.01</sub> mm

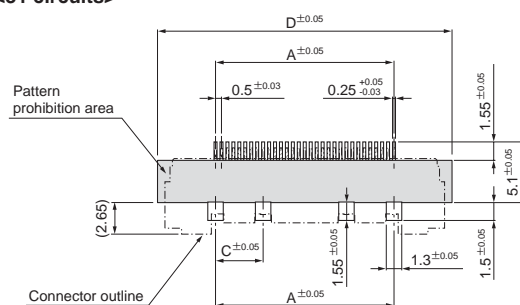
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.
- \* Compliant with RoHS.

## PC board layout and Assembly layout

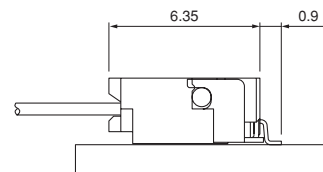
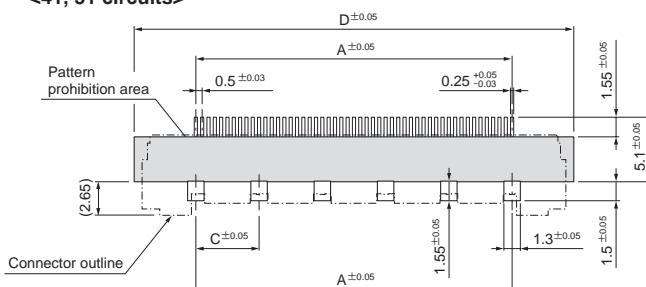
<10, 15, 20 circuits>



<31 circuits>



<41, 51 circuits>



Circuits	Dimensions (mm)		
	A	C	D
10	4.5	—	14.25
15	7.0	—	16.75
20	9.5	—	19.25
31	15.0	4.0	24.75
41	20.0	4.0	29.75
51	25.0	5.0	34.75

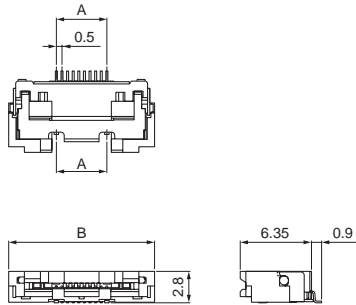
Note: 1. The above figure is the figure viewed from the connector mounting side.

2. Tolerance for the centers of pattern on PCB is ±0.03 mm, and shall be not cumulative more than ±0.05 mm.

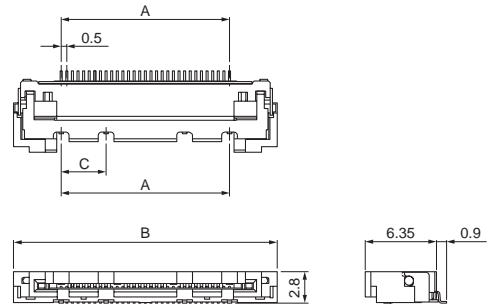
# FCH CONNECTOR

## Connector

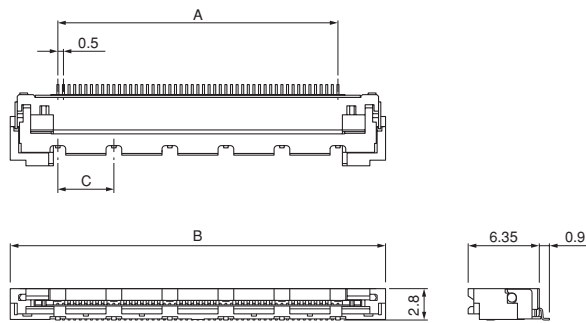
<10, 15, 20 circuits>



<31 circuits>



<41, 51 circuits>



Circuits	Model No.	Dimensions (mm)			Q'ty/ reel
		A	B	C	
10	<b>10FCH-RSM1-GA-TB</b>	4.5	13.0	—	2,000
15	<b>15FCH-RSM1-GA-TB</b>	7.0	15.5	—	2,000
20	<b>20FCH-RSM1-GA-TB</b>	9.5	18.0	—	2,000
31	<b>31FCH-RSM1-GA-TB</b>	15.0	23.5	4.0	2,000
41	<b>41FCH-RSM1-GA-TB</b>	20.0	28.5	4.0	2,000
51	<b>51FCH-RSM1-GA-TB</b>	25.0	33.5	5.0	2,000

### Material and Finish

Signal contact: Copper alloy, nickel-undercoated, selective gold-plated

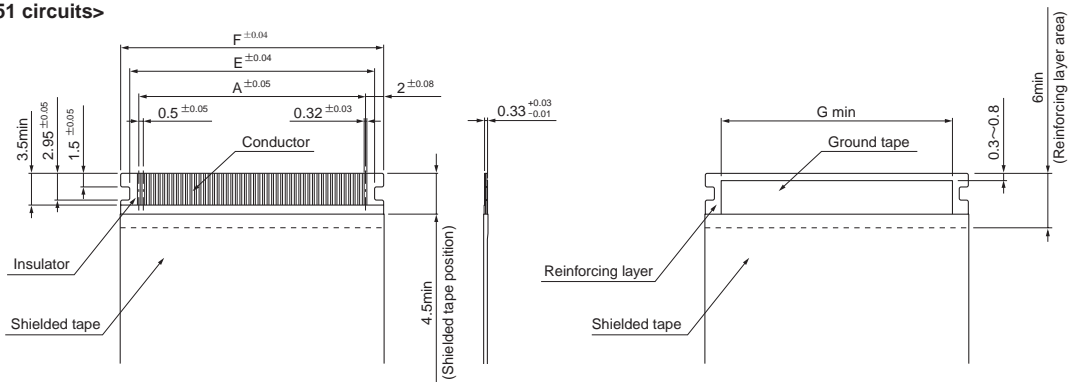
Ground contact: Copper alloy, tin-plated

Socket housing/Cover housing: Heat resisting resin, UL94V-0, black

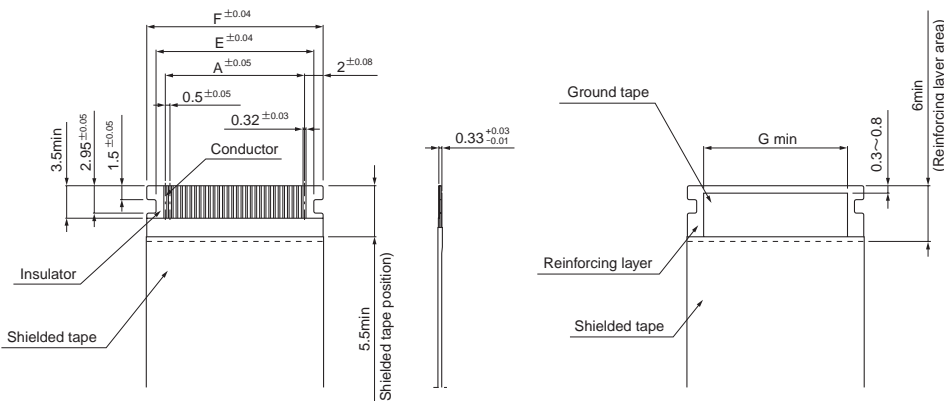
**RoHS compliance** This product displays (LF)(SN) on a label.  
Note: The products listed above are supplied on embossed-tape.

## Lead section dimensions of FFC

<10, 15, 20, 41, 51 circuits>



<31 circuits>



Circuits	Dimensions (mm)			
	A	C	D	D
10	4.5	6.5	8.5	5.0
15	7.0	9.0	11.0	7.5
20	9.5	11.5	13.5	10.0
31	15.0	17.0	19.0	15.5
41	20.0	22.0	24.0	20.5
51	25.0	27.0	29.0	25.5

Note: The tolerance of FFC conductor pitch should be  $\pm 0.05$  mm and non-cumulative.