



Title of Document:	HANDLING MANUAL	Issue No. CHM-1-2459	Rev. 2
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This handling manual describes the points of assembling and mounting on the PC board for further connector's reliability and making the most of the connector's features.

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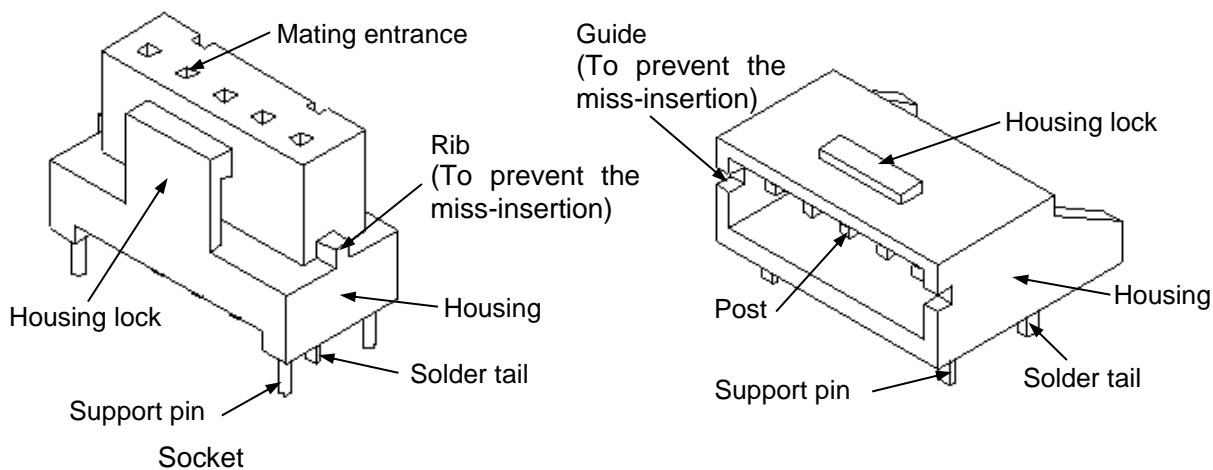
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1. Mechanism and Part Name

The JL connector is composed of the socket and the header.

In processing and assembling, understand the mechanism and the names of each part.



Header

Socket

2. Model Number

Product Name		Model Number	Color
Socket		**JL-BT-E	Blue
Header	Secure lock product	S**B-JL-R (LF)(SN)	Red
	Friction lock product	S**B-JL-F-E (LF)(SN)	Blue

Note₁: "*" denotes the circuit number.

3. Storage

3.1. Connector storage

Recommended storage condition: Temperature: 5 – 35 °C, Relative humidity 60 % or less
(Under packaging like the state of JST shipment)

Keep off direct sunlight, places exposing to such corrosive gas as industrial gas (generate from a stove and whatnot) and ammonia gas (generate from a toilet and whatnot), dusty place and condensation.

Note that the resin molding part may break due to transportation and handling, such as processing and mating, under dry or low temperature condition.

After unpacking, return products in the original package to store.

3.2. Storage of the processed connectors

Not leaving the processed connectors to stand in a place exposed to high humidity and direct sunshine, and not placing them directly on the ground, keep them in a clean storage room,

4. Applicable PC Board

4.1. Thickness

1.6 mm in thickness

4.2. PC board's layout

Refer to the following PC board's layout.

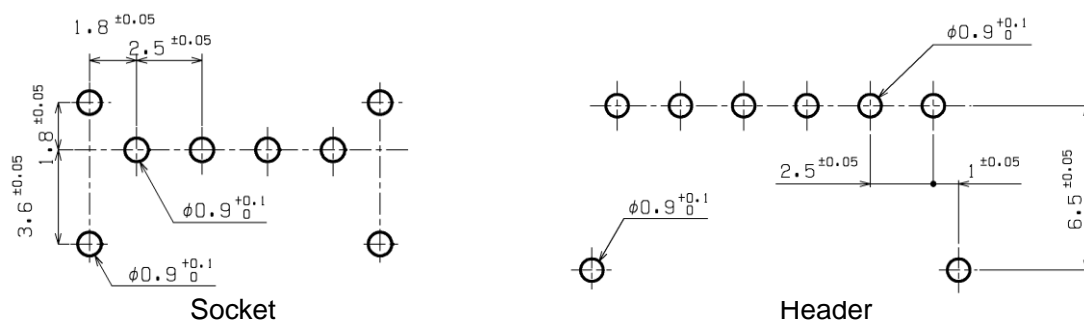
The tolerances for the PC board are non-cumulative ± 0.05 mm for all centers.

Note₂: The PC board's hole diameter is the reference value of the drilling hole for paper-base epoxy resin PC board.

The proper hole diameter depends on the material, etc. of the PC board.

Note₃: Land for Support pins shall be independent from other circuit pattern.

Since stress of PCBs concentrates on support pins, the land may be damaged by an accidental stress.



5. Soldering

① Floating from the PC board

The JL connector's socket and header have the mechanism that they are not come off of the PC board in inserting. But, if the header floats due to an external load and vibration, softly push the connector in before soldering so that it closely touches the PC board's surface.

② Flux

Use the activated one.

Do not dip the connector in the flux.

③ Dip-soldering

Solder the connector within 5 seconds at the temperature of 245 to 265 °C.

④ Hand soldering and repairing

In soldering by a soldering iron or repairing for solder bridge, etc., following, keep in mind the following points, to prevent the housing resin from the deterioration due to heating.

Soldering iron:	Maximum 40W of heat capacity
Soldering time:	Within 3 seconds as quick as possible
Soldering method:	Do not apply an external load, such as pressing down the pin with the aid of the iron's tip, to the pin during soldering.

⑤ Cleaning

The cleaning solvent, which is used for normal flux cleaning, does not affect the socket and the header. But, in case that the cleaning solvent stays behind on the socket and the header, there is a possibility to cause poor contact and other defects.

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6. Assembly Points

When the JL connector is assembled, it has to hold the PC board, so a large load becomes easy to apply to the connector.

The following consideration is necessary in assembling.

○ Mating on the same axis

Mate the connector on the same axis. If it is difficult to mate and unmate the connector on the same axis due to the setting of the connector, do the operation within 10 degrees. In case of the mating at a larger degree than 10° (which is called as prying), there is a risk of the deformation of the contact and the post, which may affect the connector's performance.