

J.S.T. Mfg. Co., Ltd.

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JE connector is designed for a board-to-board connector which is a compact, 1.25 mm pitch, high density and low in cost. It is suitable for consumer electronic product, office automation equipment and other electronic product.

This handling manual describes assembly layout, operation points, etc. for further reliability and performance of connector's features.

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Parts Identification

JE connector consists of receptacle (housing with inserted crimped contact) and plug (housing with mounted post). On processing and assembling, understand each structure and name.

Receptacle

Function of each part

(1) Contact: It contacts between PC board and post of plug electrically and

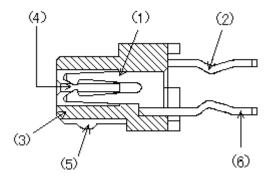
mechanically.

(2) Clinching: It pre-fixes receptacle to PC board on mounting.

(3) Receptacle housing: It insulates contact electrically and holds it.

(4) Mating part: It contacts with post.(5) Lock part: It holds plug to receptacle.

(6) Contact solder tails: Contact is connected with PC board by soldering.



Plug

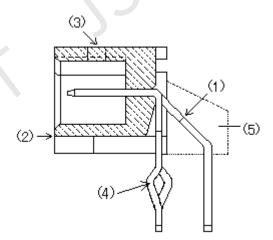
Function of each part

(1) Post: It contacts between PC board and contact of receptacle.

(2) Plug housing: It insulates post electrically and holds it.

(3) Lock window: It holds receptacle to plug.

(4) Clinching: It pre-fixes plug to PC board on mounting.
(5) Rib: It prevents connector from floating. (PSL type)



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2. Product Name and Model Number

Product name	Model No.	
Receptacle (Top entry type)	**R-JE (LF)(SN)	
Plug (Sido ontry typo)	**PS-JE	
Plug (Side entry type)	**PSL-JE (with rib)	

Note 1: Number of circuits in two-digit figure is indicated by asterisk.

Note 2: Identification marking "(LF)(SN)" stands for lead-free product. (LF)(SN) shall be displayed on product label

3. Applicable PC Board

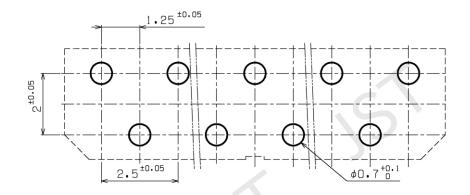
3-1 PC board thickness: 1.6 mm (standard)

3-2 PC board layout

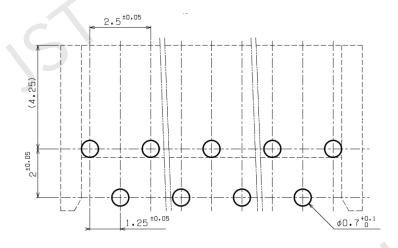
Refer to the following PC board layout.

PC board layout

• Receptacle/Top entry type

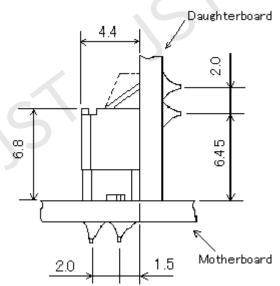


• Plug/Side entry type



3-3 Assembly layout

As mating combination of receptacle and plug with mounted on each PC board, daughterboard can be mounted on motherboard vertically. The dimensions are as shown below figure.



Note: Generally, connector performance is depended on fixing of PC board.

JE connector has a construction that external forces from PC board are not easily applied to mating part of connector, while it is not enough to prevent any kinds of external forces. Therefore, pay attention to the method of fixing PC board so that connector does not come off PC board and PC board must be free from deflection and flection. Refer to item 6 "Precautions for Method of Fixing PC Board" for details of method.

4. Precautions for Dipping Soldering (Flux Treatment)

Water repellent treatment is coated over connector to prevent flux wicking from contact solder tail part. Careful operation is required so that flux does not fly-off mating part.

5. Precautions for Assembling Operation

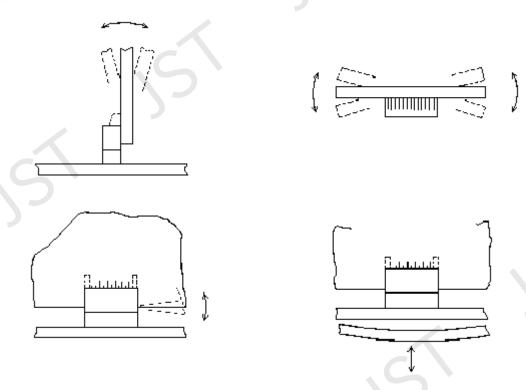
Assembling operation is conducted with holding PC board by hand, so that large forces are easily applied to JE connector. On assembling, pay attention to the following points.

- Mating and unmating operation should be conducted on same axis. In case the operation cannot be done on same axis due to setting of connector, conduct smooth operation within 10 degrees.
- Do not pry JE connector.
 Do not pry connector on mating and unmating operation.
- ③ Fix PC board smoothly and do not apply external forces to PC board before fixing. Fix PC board smoothly. When leaving heavy PC board without fixing it, the weight of PC board and mounted parts or external forces during manufacturing work on connector as prying. To prevent these forces, there is a way of fixing after pre-fixing PC board by hook type molded product.

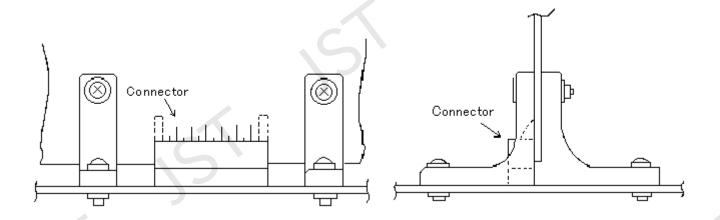
6. Precautions for Method of Fixing PC Board

The method of fixing PC board affects performances of JE connector. As the method, PC board should be fixed so that connector does not receive external forces from PC board. Therefore, it is not necessary to fix each PC board completely, but fix PC board so as to prevent deflection of it as shown in the following figures.

PSL type is somewhat reinforced due to its rib.

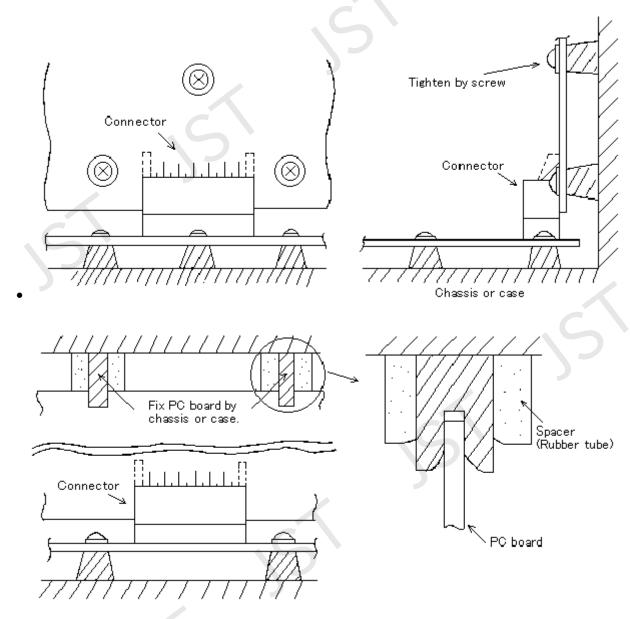


① Fixing by jig



② Fixing by chassis or case

Example: 1



Remarks: Weight of PC board including components and fixing method
Depending on weight of PC board, the degree of fixing PC board must be reinforced.
In case weight of components is heavy though PC board is small, it is required to fix PC board firmly.

7. Others

① Store connector under environment of ordinary temperature (15 °C \sim 35 °C) and humidity (25% \sim 85%).

Keep them free from direct sunshine and dust.

- ② Do not leave connector taken out of carton box, since they may cause deformation, discoloration, and adhesion of foreign matter. Store them in a carton box.
- 3 As adhesion of foreign matter such as seasoning, fruit juice, detergent, etc. may cause discontinuity and defective soldering. Pay careful attention and if stained, never use stained connector.
- Wever spray fumy insecticide in the place where connector is stored. Such spray adhered to contact or post may cause discontinuity and defective soldering.
- ⑤ Do not disassemble connector or mate other things except post, since they may cause defective continuity.

