

**025 (0.64) Series Connectors (H-Type, SMT)**

**1. PART NAME AND PART NUMBER**

**1.1. Male Connector**

Part Number	Part Description
2291172	8P 025 Cap with Solder Fork (Male)
2291173	12P 025 Cap with Solder Fork (Male)
2291174	16P 025 Cap with Solder Fork (Male)
2237067	24P 025 Cap with Solder Fork (Male)
2237309	24P 025 Cap with Solder Fork (Male)
2237122	4P 025 Cap with Solder Peg (Male)
2237138	32P 025 Cap with Solder Peg (Male)
2237145	8P 1Row 025 Cap with Solder Peg (Male)
2237149	8P 025 Cap with Solder Peg (Male)
2237171	8P 025 Cap with Solder Fork (Male)
2237224	16P 025 Cap with Solder Peg (Male)

Figure 1

Note: Part number is consisted from listed base number and 1 digit numeric prefix and suffix with dash. Refer to catalog or customer drawing for specific part numbers for each base number. When prefix is zero, zero and dash are omitted.

**1.2. Component View**

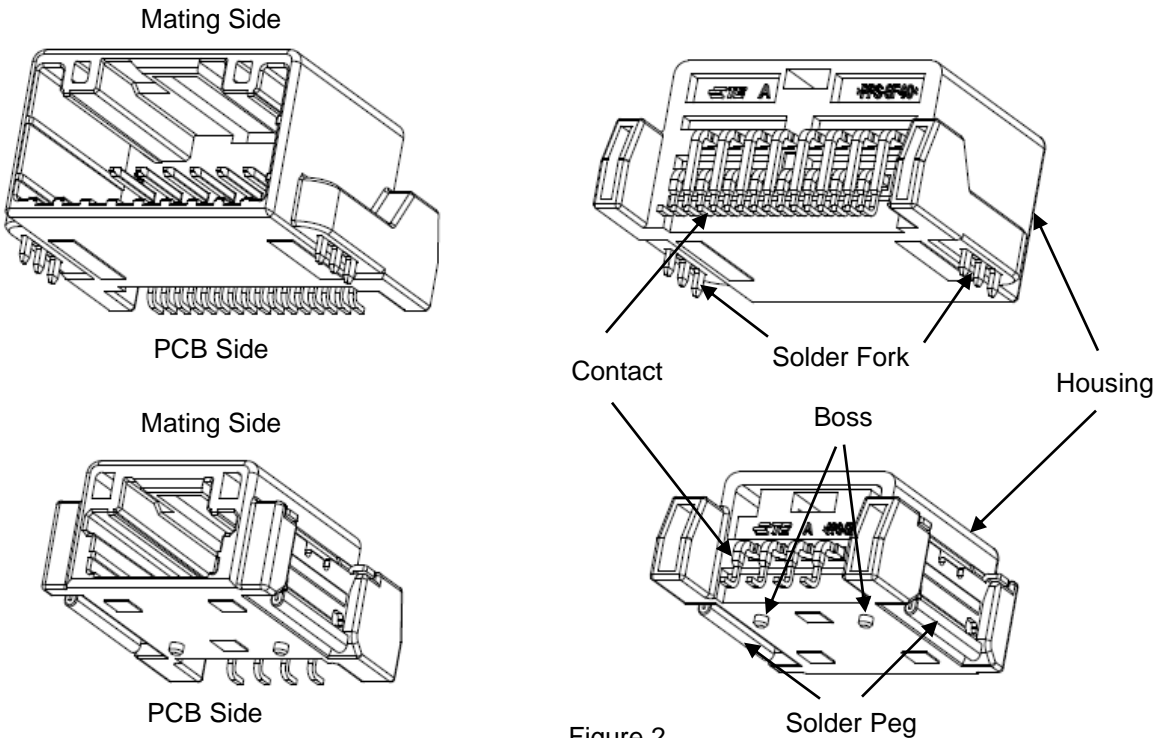


Figure 2

## 2. CUSTOMER RECEIVING INSPECTION

We conduct inspections according to our quality control regulations to maintain an overall lot control. In addition, customers should conduct receiving inspections, attentive to confirm the status of products, to check if the product incurred any damage during transit.

## 3. STORAGE

- A. Avoid storing the connector in a moist or dusty place. Stock the connectors in a comparatively dry and clean place (5~35°C, 45~85%RH) away from direct sunlight.
- B. Do not apply load to the tape and reel packaging. The load may cause the contacts to deform.
- C. Avoid leaving or carrying the connectors in an open area without wrapping them in proper material.
- D. Do not drop or shock the connectors when carrying it.

## 4. INSTALLATION OF MALE CONNECTOR TO PC BOARD

### 4.1. Check the following item before installation

#### A. Date Code

Mount and solder onto PC Board within 3 months after purchase.

#### B. PC Board dimension recommendation

See customer drawing of appropriate product for PC Board dimension recommendation

#### C. Soldering process

Reflow soldering

#### D. PC Board

In the case of large PC Board warpage, soldering may become poor. Be careful of reflow condition and material of PC Board.

#### E. Solder paste thickness

0.15mm minimum. In the case of solder paste less than 0.15mm, soldering may become poor.

### 4.2. Be careful of the following points during installation

#### A. Extraction process from tape and reel packaging

Be care of lead deformation. If deformation occurs, discard connector.

#### B. Connector placement on PC Board

- 1. For male connectors with solder fork, arrange so that solder fork goes into the holes for solder fork on PCB. In case there is need to separate connector from PC Board, careful not to deform the contact.
- 2. For male connectors with boss, arrange so that boss goes into the holes for boss on PC Board. In case there is need to separate connector from PC Board, careful not to deform the contact.

### C. Reflow soldering process

1. No discoloration nor deformation should be caused by the heat of soldering.
2. If connector is heated at temperature more than 260°C, housing may have fusion.
3. Not to go through reflow more than once.
4. Reflow condition <Reference>
  - a. Sn-Pb Solder Paste
    - Pre-Heat: 140~180°C, 40~100sec
    - Soldering: 200°C, 50sec Max
    - Peak Temperature: 230°C, 5sec
    - Solder: Sn-Pb Solder Paste
  - b. Sn-Ag-Cu Solder Paste (See Figure 6)
    - A Pre-Heat: 170~190°C, 110sec
    - B Soldering: 200°C, 70sec Max
    - C Peak Temperature: 245°C
    - Solder: Sn-Ag-Cu Solder Paste

### D. After reflow

1. Check that there are no discoloration nor deformation of the connector.
2. Check all contacts, solder fork and solder peg are soldered.

### E. Others

1. Be care of deformation and damage to contact (mating side and solder side) of the contact, solder fork, solder peg and housing.
2. No foreign substances are permissible in the mating area.

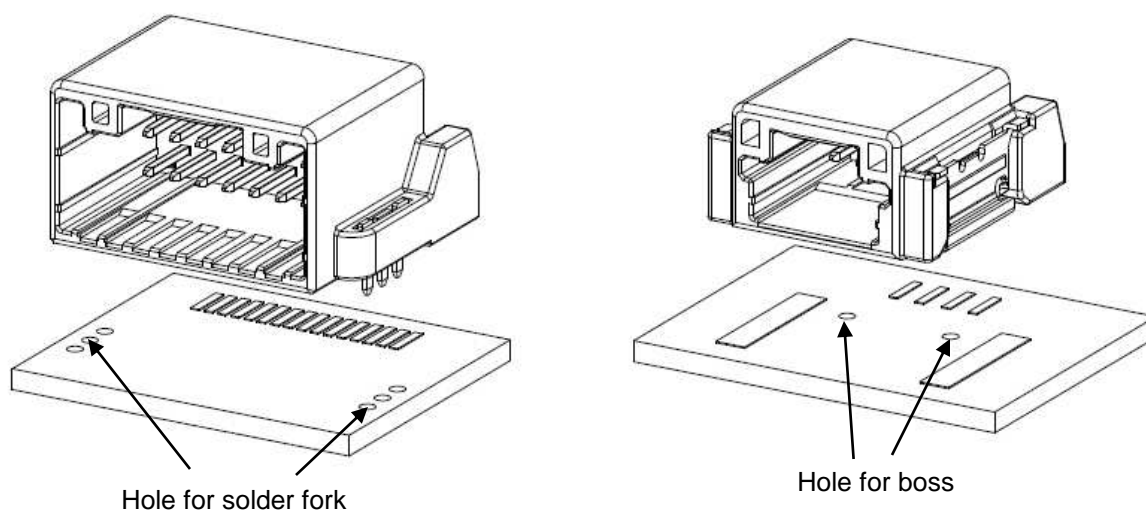


Figure 3

## 5. MATING AND EXTRACTION OF CONNECTOR

### 5.1. Female Housing

Part Number	Part Description
1473672	0.64 series 4P Plug Assembly (Female)
2237126	0.64II series 4P Plug Assembly (Female)
2069748	0.64II series 4P Plug Assembly (Female)
1717103	0.64III series 8P Plug Assembly (Female)
1376352	0.64 series 8P Plug Assembly (Female)
2237147	0.64III series 8P 1Row Plug Assembly (Female)
1717106	0.64III series 12P Plug Assembly (Female)
1318774	0.64 series 12P Plug Assembly (Female)
1717109	0.64III series 16P Plug Assembly (Female)
2237049	0.64III series 16P Plug Assembly (Female)
1318386	0.64 series 16P Plug Assembly (Female)
1717112	0.64III series 24P Plug Assembly (Female)
1318917	0.64 series 24P Plug Assembly (Female)
1717118	0.64III series 32P Plug Assembly (Female)
1318747	0.64 series 32P Plug Assembly (Female)

Figure 4

Note: Part number is consisted from listed base number and 1 digit numeric prefix and suffix with dash. Refer to catalog or customer drawing for specific part numbers for each base number. When prefix is zero, zero and dash are omitted. Refer to instruction manual 411-78080 concerning female housing handling.

### 5.2. Mating of Connector

- A. Check to make sure that the contact is inserted into the housing in proper condition, the wire is taped up from proper position and the retainer is in final lock condition. If the retainer is in pre-assembled condition, it must be changed to final lock condition.
- B. Check the contact and female housing into the male connector for defects, deformation, discoloration, damage, rust, crack, deficit, etc.

Note: The connector must be renewed if any defects are found.

- C. Insert the proper female housing into the male connector straight with same direction as shown in Figure 5. The operation is finished when you hear the click sound and cannot insert further. When you cannot insert the housing, do not insert by force.

Note: At the insertion operation, take care not to apply force except in the insertion direction.

- D. By pulling the female housing lightly, check to make sure that the connector cannot be withdrawn

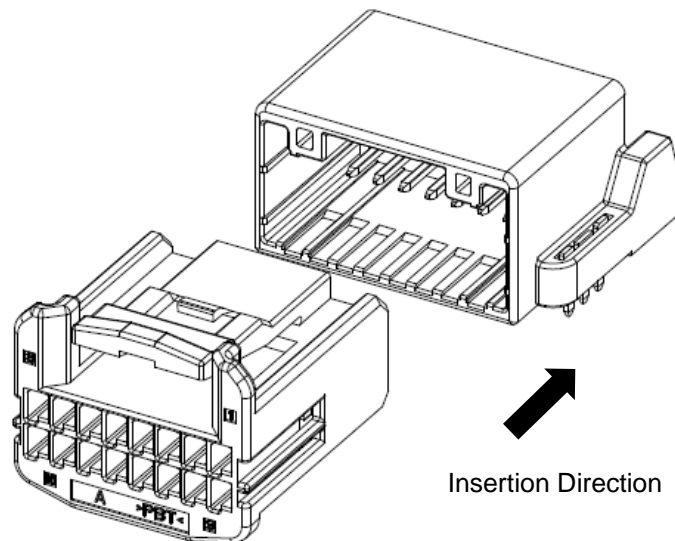


Figure 5

### 5.3. Extraction of Connector

Grip the female housing and then draw straight out while pressing down the locking lever. When the housing cannot be drawn out, do not pull it by force but check to make sure if the locking mechanism is released.

Note: At the extraction operation, take care not to apply force except in the extraction direction

Note: Do not pull the wire only.

### 5.4. General Attention Matters

- A. Do not mate and extract the connector unnecessarily.
- B. Do not insert any objects except the proper connector.
- C. At mating/extraction operation, or after mating operation, take care not to apply unnecessary force or shock to the wire and the connector.

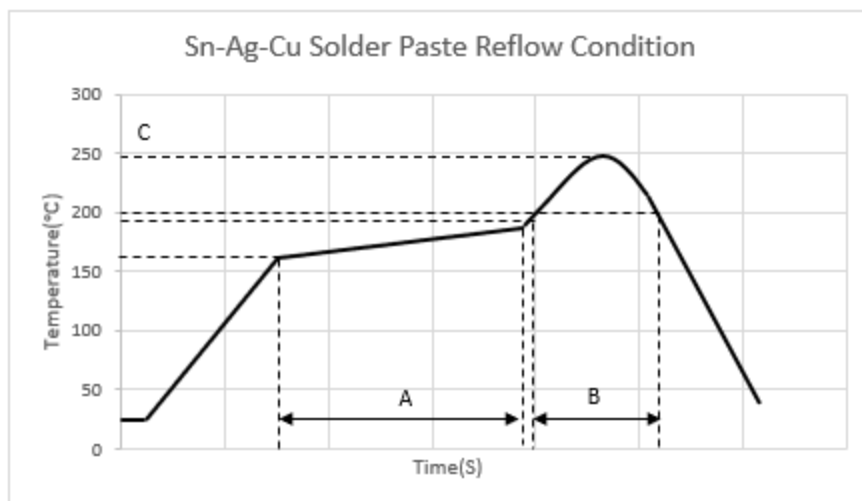


Figure 6