
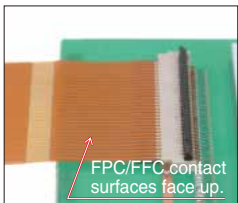



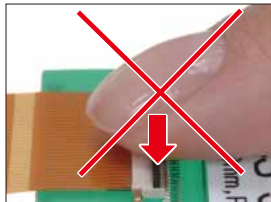
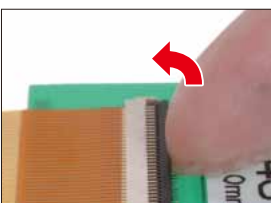
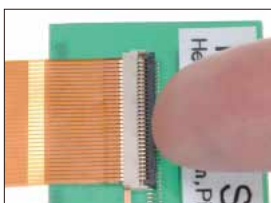
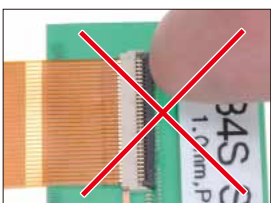
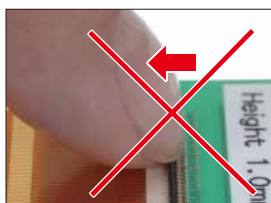


## ■ Operation and Precautions

Exercise care when handling connectors. Follow recommendations given below.

Operation	Precautions
<p><b>1. As delivered</b></p> <p>Delivered with the actuator open. There is no need to operate the actuator prior to inserting the FPC/FFC.</p> 	<ul style="list-style-type: none"> <li>Do not close the actuator without the FPC/FFC inserted.</li> </ul>
<p><b>2. FPC/FFC insertion (The top contact specification)</b></p> <p>Insert the FPC/FFC with the conductive surfaces facing up. Align the FPC/FFC straight with the connector and insert it firmly all the way.</p> 	<ul style="list-style-type: none"> <li>The contacts are making connection with the FPC/FFC pads from the top. Do not insert the FPC/FFC with the pads facing down.</li> <li>When inserting the FPC/FFC do not twist it. Insert straight. Improper insertion may cause deformation of the contacts and connection failures.</li> <li>Be sure to insert the FPC/FFC when the actuator is fully open.</li> </ul>
<p><b>3. Locking</b></p> <p>After FPC/FFC insertion, rotate the actuator down to a full stop, pushing it at the center.</p>  <p style="text-align: center;">Rotate</p>  <p style="text-align: center;">Push at the center of the actuator.</p>	<ul style="list-style-type: none"> <li>Do not operate the actuator by only one end. Open or close by pushing at the center.</li> <li>Do not try to rotate the actuator past the fully open 90° position. This will damage the connector, preventing it from use.</li> <li>Do not apply excessive force to the connector when the actuator is closed.</li> </ul>  
<p><b>4. FPC/FFC removal (Lock release)</b></p> <p>Carefully rotate the actuator up to 90°, lifting it at the center.</p>  <p style="text-align: center;">Raise</p>  <p style="text-align: center;">Lift at the center</p>	<ul style="list-style-type: none"> <li>Do not operate the actuator from one end only.</li> <li>The actuator opens only 90°. Do not attempt to open it past this angle or grasp it.</li> <li>During the opening of the actuator do not press it toward the connector body. Rotate up at the center.</li> </ul>  

## ■Precautions at the Design Stage

- (1) Route the FPC/FFC so that a direct pull force
- (2) Make sure that there is enough space to insert/remove the FPC/FFC straight.
- (3) Follow the recommendations given in this catalog in regard to mounting pattern, metal mask dimensions and FPC/FFC mating dimensions.
- (4) Consult the manufacturer of the FPC/FFC for the details on the flexibility of the specific FPC/FFC.
- (5) When designing the board lay-out and spaces in the device assure that there is enough clearances for the actuator to fully open/close.

## ■Precautions when mounting connectors on the PCB

### ◆Handling before mounting on PCB

Insertion of the FPC/FFC or operation of the actuator prior to mounting on the PCB is not recommended.

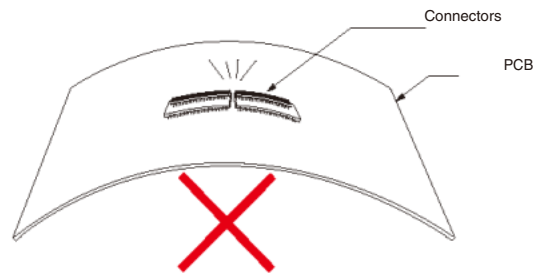
### ◆PC board warpage

Minimize the warpage as much as possible. The connector are straight within 0.1 mm max. Make sure that the mounting area flatness can accept the connector terminals without causing any failure of the solder joints.

### ◆Forces on the board

◆When braking the large PC board into individual boards exercise care not to damage the installed connectors.

◆When attaching the boards or other components with the screws make sure that any stresses will not cause board deflections affecting the mounting areas of the connector.



### ◆When hand soldering:

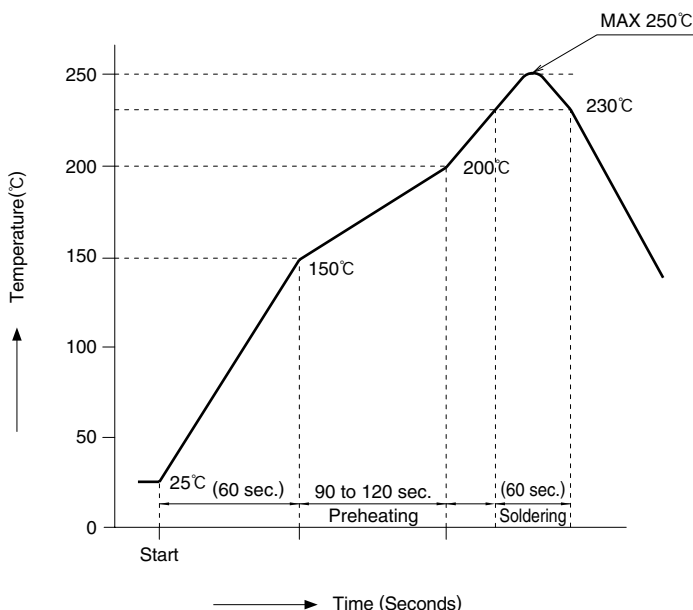
· Do not perform hand soldering with the FPC inserted in the connector.

\* Do not apply excessive heat or touch the soldering iron anywhere other than the connector leads.

\* Do not use excessive amount of solder or flux compounds.

Operation of the actuator or contacts may be affected by excessive amounts of solder or flux compounds.

## ■Temperature Profile



### HRS test condition

Solder method	: Reflow, IR/hot air
Environment	: Room air
Solder composition	: Paste, 96.5%Sn/3.0%Ag/0.5%Cu (Senju Metal Industry, Co., Ltd.'s Part Number: M705-221CM5-42-10.5)
Test board	: Glass epoxy 25mm×40mm×0.8mm thick
Land dimensions	: 0.3mm×0.8mm
Metal mask	: 0.25×0.65×0.1mm thick

The temperature profiles shown are based on the above conditions.

In individual applications the actual temperature may vary, depending on solder paste type, volume / thickness and board size / thickness. Consult your solder paste and equipment manufacturer for specific recommendations.