



Product application spec

114-115040
17MAY2021 Rev 1

Fine pitch BTB connector

1 INSTRUCTION OF APPLICATION TO USAGE 产品组装的使用说明

This specification is written based on the supposition that the receptacle is mounted on PCB (Hard PCB) and the plug is mounted on FPC. In the case of the receptacle is mounted on FPC and the plug is mounted on PCB (Hard PCB) is also covered. Receptacle contains formable terminal. Please pay attention to un-mating process of connectors if you mount Receptacle on FPC

本说明书根据母座端往PCB基板（硬板）侧实际安装、公座端往FPC（软板）侧，实际安装的设想而作成，同时也适用于公座端往FPC（软板）、公座往PCB基板（硬板）上的实装。母座上的端子容易变形，实装到FPC（软板）上时，特别要注意拔出时的操作。

1.1 MATING (插入操作相关)

1.1.1 HOW TO MATE (INSERTION) 组合方法 (插入方法)

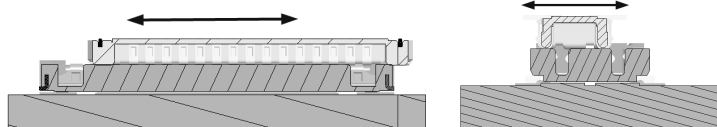
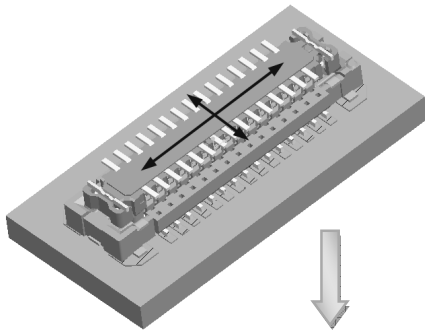
After positioning correctly for mating, then the distance between PCB and FPC need matched with product drawing, insert the Plug to the receptacle in parallel with each other.

组合时 (插入时) 请对好位置再进行。位置对好时, PCB基板和FPC软板间的间距需要满足图面规格, 请将公座侧与母座侧保持平衡后再插入

Please find correct position at inside wall of receptacle and inside wall of plug

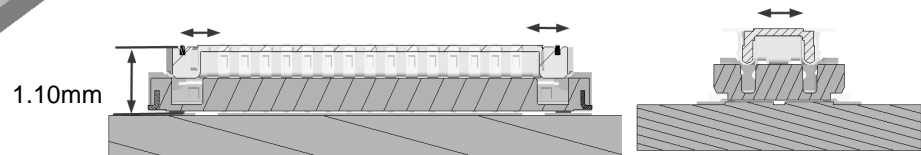
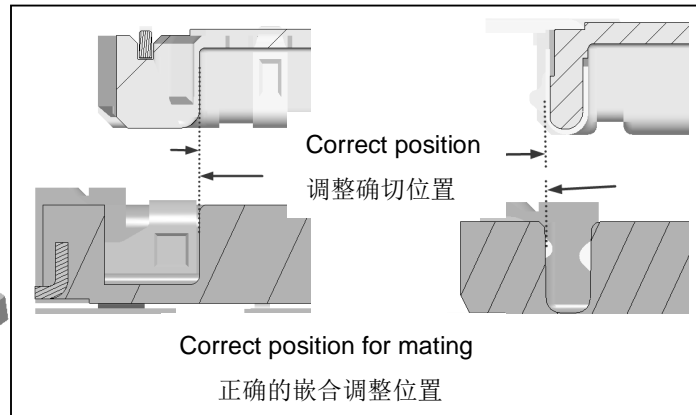
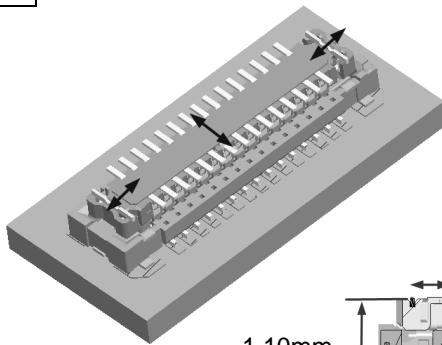
正确的位置调合如右图, 请沿母座内壁和公座内壁来进行操作

STEP 1



Positioning the plug correctly in parallel with the receptacle
请在公座侧与母座侧保持平衡的状态下再校对位置

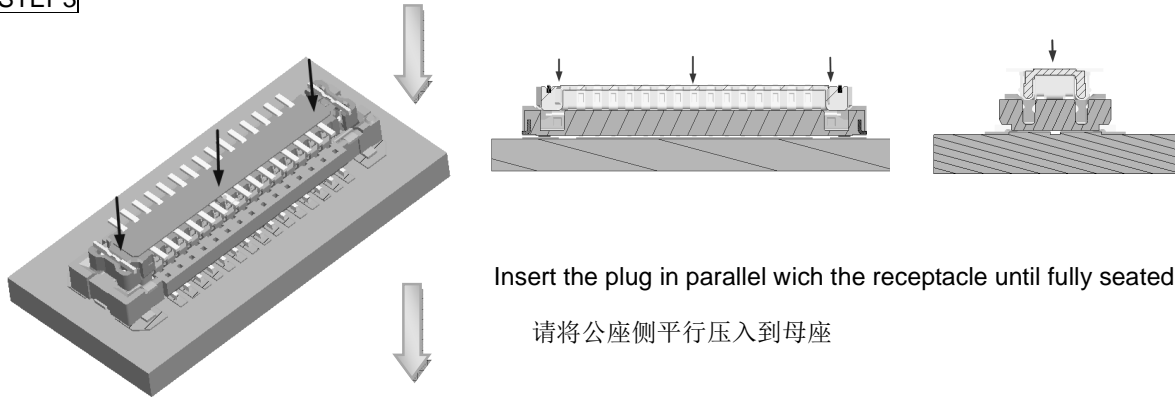
STEP 2



Position the plug correct by adjusting back or forth

轻轻移动公座侧来确认位置调合是否正确

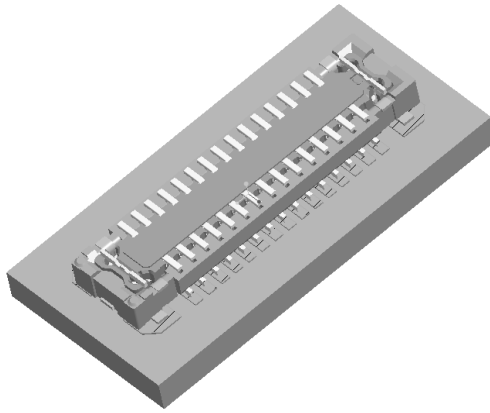
STEP3



Insert the plug in parallel with the receptacle until fully seated

请将公座侧平行压入到母座

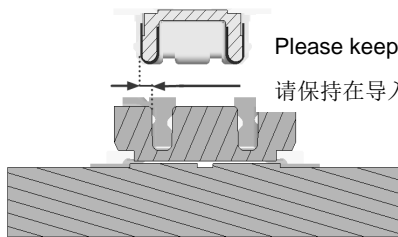
STEP4



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1.2 MATING POSITIONING WITH SLIGHTLY INCLINED 组合时调合位置的方法（位置平行调整困难时）

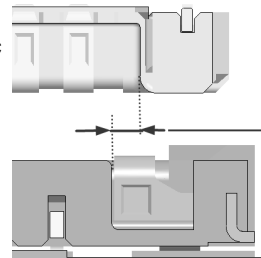
1.2.1 When operated in "a" Direction(lengthways) 长方向有自由度时



Please keep it within lead in spec

请保持在导入规格以内

" b" Direction 短方向

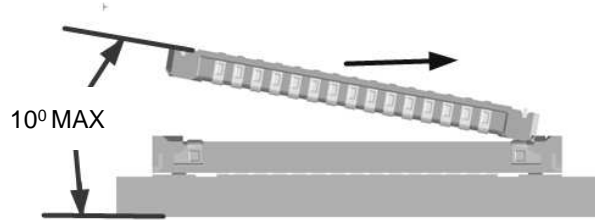
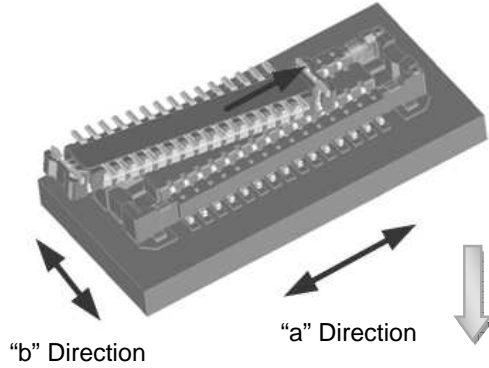


Please find right Position regarding to procedure

below(请按以下流程来调整位置)

" a" Direction (lengthways) 长方向

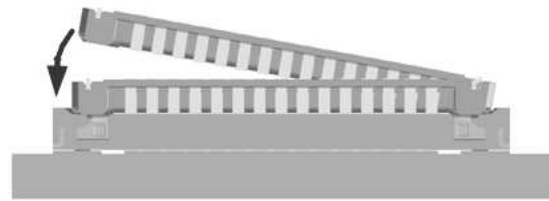
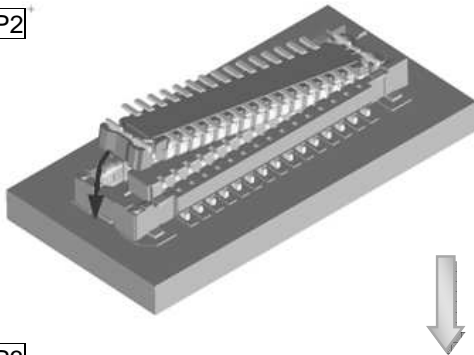
STEP1



Position for mating by inclining the plug to the receptacle approximately less than 10°

请在公座侧稍微倾斜（10度以下）的状态下进行组合位置调整操作

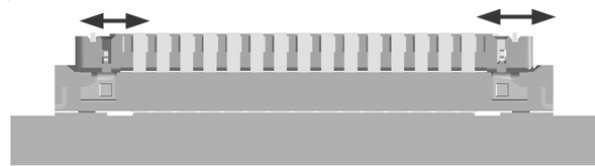
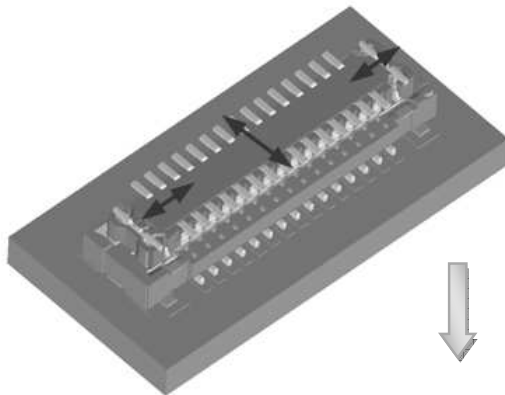
STEP2



Once the plug is positioned over the receptacle
Move it to the parallel position

位置调合后，请将公座侧和母座侧保持平行

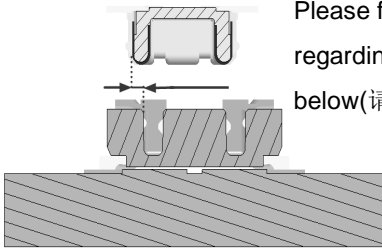
STEP3



Position the plug correct by adjusting back or forth
轻轻移动公座侧来确认位置调合是否对位

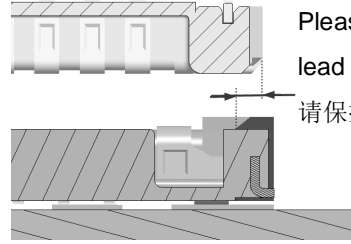
Please go to the STEP3 in 6.1.1
请参照 6.1.1 步骤 3 进行下一步操作

1.2.2 When operated in "b" Direction 短方向有自由度时



"b" Direction 短方向

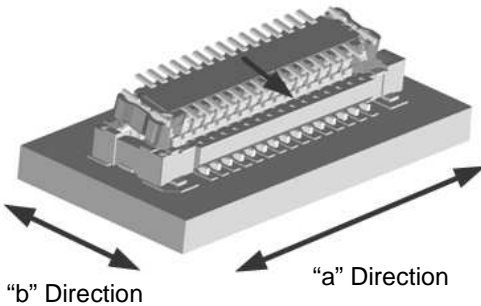
Please find right Position regarding to procedure below(请按以下流程来调整)



"a" Direction (lengthways) 长方向

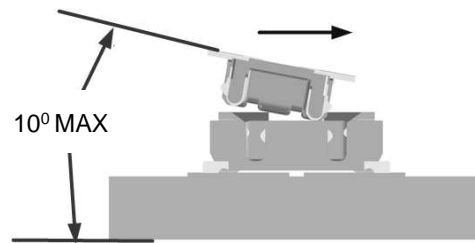
Please keep it within lead in spec
请保持在导入规格以内

STEP1



"b" Direction

"a" Direction

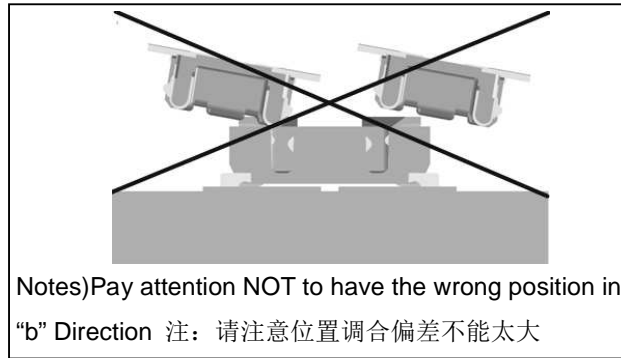
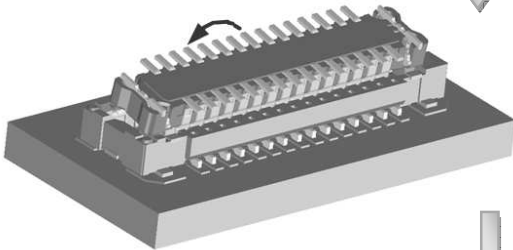


10° MAX

Position for mating by inclining the plug to the receptacle approximately less than 10°

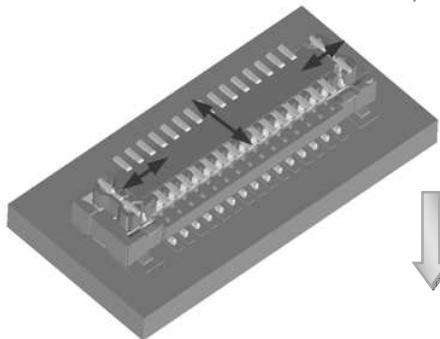
请在公座侧稍微倾斜（10度以下）的状态下进行组合位置调整操作

STEP2



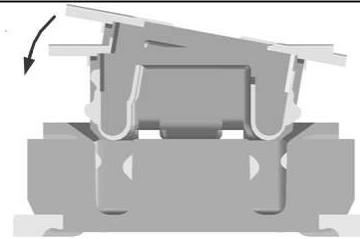
Notes) Pay attention NOT to have the wrong position in "b" Direction 注：请注意位置调合偏差不能太大

STEP3



Please go to the STEP3 in 6.1.1

请参照 6.1.1 步骤 3 进行下一步操作



Once the plug is positioned over the receptacle

Move it to the parallel position

位置调合后，请将公座侧和母座侧保持平行

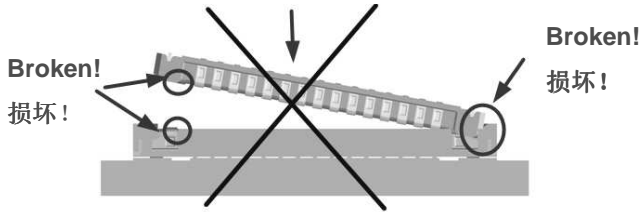
Position the plug correct by adjusting back or forth

轻轻移动公座侧来确认位置调合是否对位

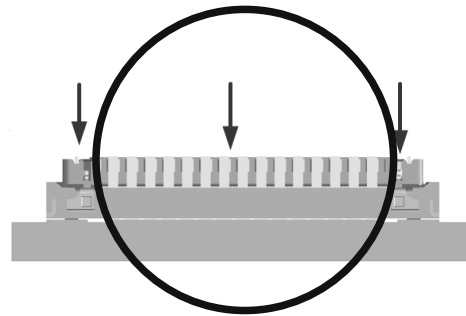
1.3 CONNECTOR HANDLING WHEN MATING(组合时操作注意事项)

Please DO NOT apply force while mating the receptacle or plug at an angle in the "a" direction(lengthways)
It may cause damage to the connector

请在连接器之间平行的状态下进行组合操作。如果在连接器之间不平行、处在倾斜的状态下组合时，连接器本体之间可能会有干涉，就会有损坏连接器的可能。

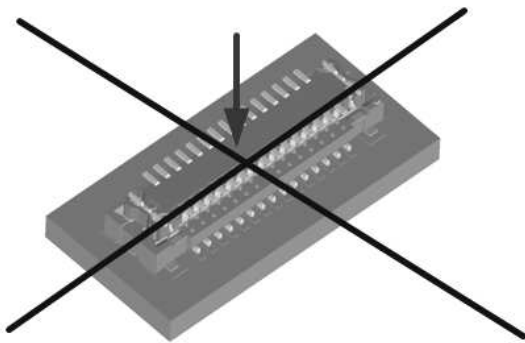


Mating with angle(Wrong Handling)
连接器倾斜组合

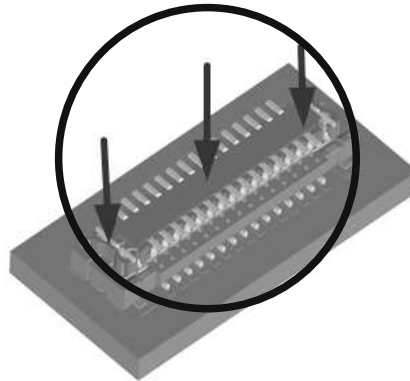


Mating with Parallel(Correct Handling)
连接器平行组合

This product is downsized comparing with the current products and needs to be handled more carefully.
When mating(inserting), do NOT push the only center of connector but the whole connector in parallel with
The receptacle . When pushed only the center of connector , it may cause damage to the connector
本产品比现有产品还要小，连接器的强度较低。组合（插入）时，不能单单只按压连接器中间部，要平行按压整
体。FPC 加强板的强度不充足时，如果只按压连接器中间的话，连接器就会有折断的可能。



Pushing only Center(Wrong Handling)
只按压连接器中间部

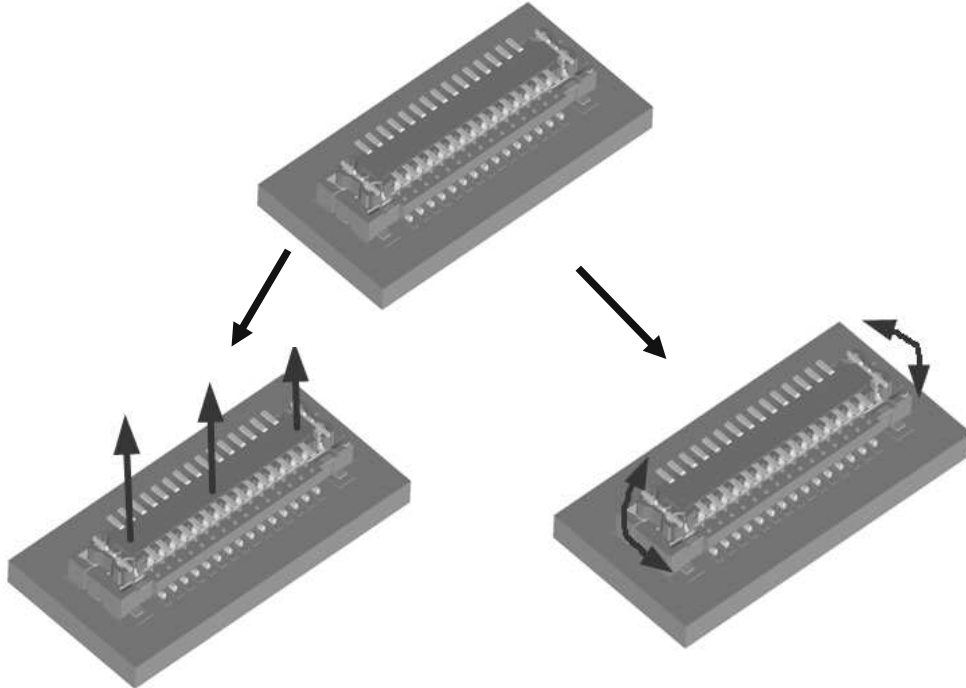


Pushing Whole Paralleled(Correct Handling)
平行按压连接器整体

1.4 UN-MATING

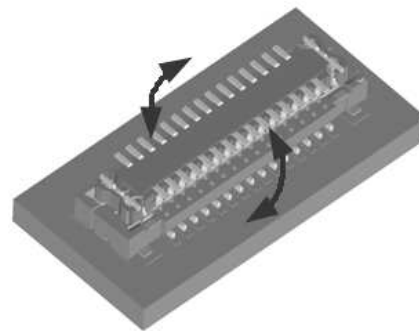
1.4.1 HOW TO WITHDRAW 拔出方法

The plug shall be released from the receptacle paralleled to the mated axis or by moving the plug slowly
极力沿着组合轴平行拔去，或是向左右一点点边晃动边拔出。



Releasing the plug paralleled to the mated axis
沿着组合轴向平行拔去

Releasing the plug by moving slowly in "a" direction
(lengthways) 向左右一点点边晃动边拔去 (长方向)

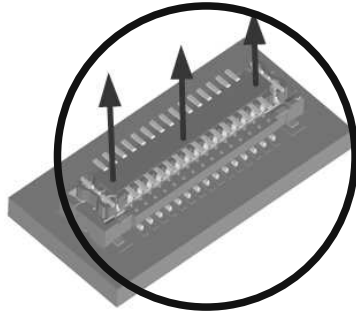


Releasing the plug by moving slowly in "b" direction
向左右一点点边晃动边拔去(短方向)

1.4.2 CONNECTOR HANDLING WHEN WITHDRAWING (拔出时操作注意事项)

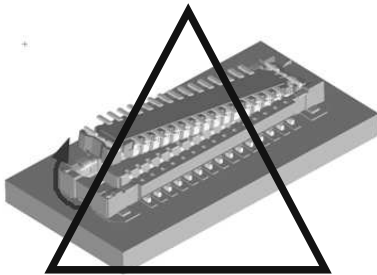
This product is downsized comparing with the current products and needs to be handled more carefully When un-mating(withdrawing), do NOT twist the plug to release . It may cause damage to connector.

本产品比现有产品还要小，连接器的单体强度较低（单体强度）。如果在过度倾斜状态下拔去的话，连接器就会有破损的可能



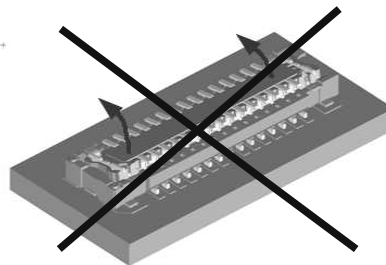
Releasing the plug paralleled to the mated axis

沿着组合轴向平行拔去



Slant releasing in "a" Direction (lengthways)

长方向的倾斜拔出



Slant releasing in "b" Direction

短方向的倾斜拔出

Merit and demerit for slant releasing are below

长方向的倾斜拔去方式与短方向的倾斜拔去方式存在以下优点及缺点

	Slant releasing in "a" Direction (lengthways) 长方向的倾斜拔出	Slant releasing in "b" Direction 短方向的倾斜拔出
Merit 优点	1. Not easily cause the damage to the terminals 不容易引起端子变形 2. Hard to be withdrawn 拔出的力度小	None 无特别优点
Demerit 缺点	1. Multiple connector can be damaged plug 多个连接器时拔出时可能会损坏公座	The continuity defect can be caused by damage to the terminals 端子变形风险，同时会存在不导通的可能