# FPC/FFC 用コネクタ

A18-QAY-0003 rev.1

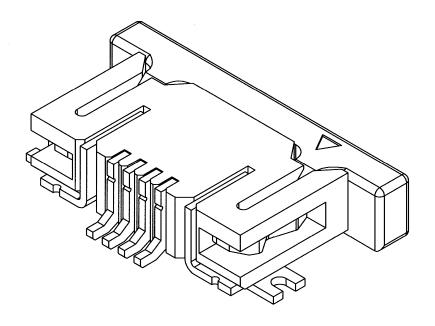
Connector for FPC/FFC

取り扱い説明書

# Manual

適用製品: FPC コネクタ スライダータイプ/ ライトアングル接続

Application product: FPC Connector Slider Type/ Right Angle



#### 《コネクタの操作方法と注意点 / Operation method and notes of connector》

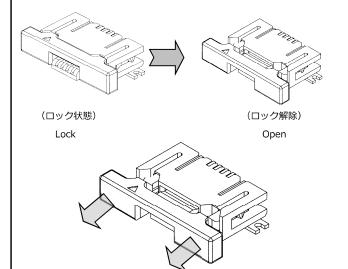
※図のコネクタの形状は参考とします。

The shape of the connector in the figure is a reference

#### 操作方法/Operation method

#### 1. FPC/FFC 挿入方法 Method of inserting FPC/FFC

スライダーの両端を引き出し、ロックを解除します。
Both ends of the slider are drawn out and the lock is released.

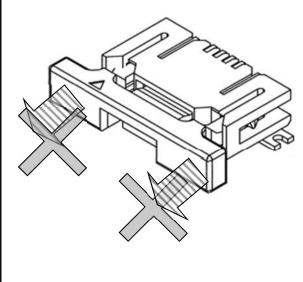


#### 使用上の注意点/Directions point

スライダーは軽い力で引き出せます。

無理な力をかけると破損の原因になります。

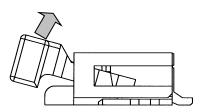
The slider can be drawn out by light load. Please note too much load. It causes damage.



② スライダーを図の様に傾けます。

これにより FPC/FFC を挿入し易くなります。

The slider is inclined only a little as shown in figure. As a result, FPC/FFC can be made easy to insert.



③ FPC/FFC を図の向きで挿入します。奥まで確実に挿入して下さい。 FPC/FFC を挿入する際には FPC/FFC の補強板部分を持って 挿入すると、確実な作業ができます。

その為、FPC/FFC は補強板が長いものを推奨致します。

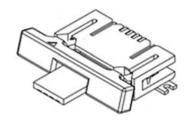
Insert FPC/FFC like the direction of figure.

Please insert it in the interior surely.

Please insert the FPC/FFC holding the supporting tape.

It makes insertion to easy.

Therefore, we recommend long supporting tape at FPC/FFC.

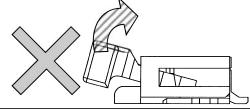


無理な力を掛けないで下さい。

基板からの剥離・金具の変形など破損の原因となります。

Please do not multiply too much load.

It may cause damage such as peeling from the PCB and deformation of the anchor plates.



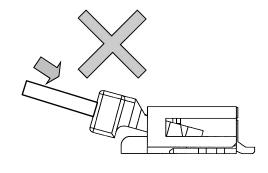
FPC/FFC はコネクタに対してまっすぐ入れるようにして下さい。

補強板部分を持たないで挿入すると、カードが曲がり、

作業性が悪くなる可能性があります。

Please insert FPC/FFC straight into the connector.

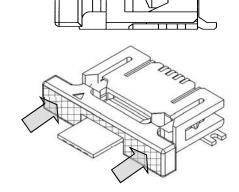
There is a possibility that work efficiency worsens by the card bending if it tries to insert it without holding the supporting tape.



## 操作方法

#### Operation method

④ スライダーを水平に戻し、全面(網かけ部)を押し込みます。Returned slider to horizontally, and push full (part of net) of slider the same time .



## 使用上の注意点

#### **Directions point**

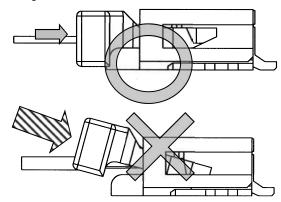
スライダーを傾けたまま押し込まないで下さい。 必ずスライダーを水平な状態に戻してから押し込んで下さい。

破損の原因になります。

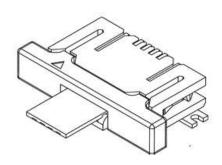
Please do not push it when the slider is inclining.

Please push slider after it return to horizontally.

It causes damage.



#### 2. ロック時 Locked



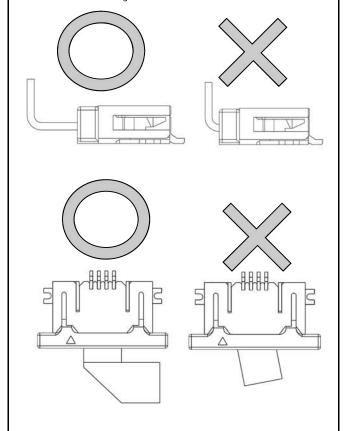
FPC/FFC を取りまわす際は、製品に負荷が掛からないように

間口から離れた箇所で取りまわすか、

FPC/FFC に折り曲げ加工を行って下さい。

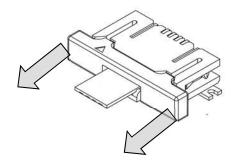
製品に負荷が掛かるとカバーやハウジング破損の恐れがあります。

When bending the FPC / FFC, bend it at a location away from the opening or process bending the FPC / FFC so that no load is applied to the product. If load is applied to the product, there is a risk of damage to the cover and housing



#### 操作方法/Operation method

- 3. FPC/FFC 抜去方法 Method of extracting FPC/FFC
- スライダーの両端を引き出し、ロックを解除します。 片側ずつ引き出す場合は、過度の荷重を加えると コネクタが破損する場合がありますので、注意して下さい。
  Drawn out both ends of the slider. And release the lock.
  Please note that it is likely to damage the connector if you add an excessive load when you operate slider at each side draws it out.



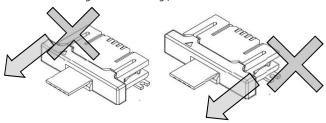
#### 使用上の注意点/Directions point

スライダーをロックした状態で、FPC/FFC を引き抜かないで下さい。 引き抜く際は必ずロックを解除した状態で行って下さい。 Please do not pull out FPC/FFC with the slider locked. Please pull it out with the lock released without fail.

スライダーの片側のみを過剰な力で引き出さないでください。 ハウジング/スライダーの破損の原因になります。

Don't pull out only one side of the slider.

It will cause breakage of the housing / slider.



スライダー抜く際に過剰な力をハウジングに加えると

ハウジングの白化や破損する場合があります。

過剰な力が加える場合は、治具などを使用しハウジングに

過負荷を与えないようにしてください。

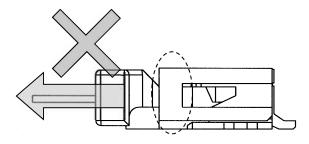
If excessive force is applied to the housing

when pull out the slider

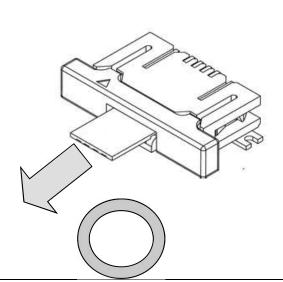
The housing may whiten or be damaged.

If excessive force is applied, use a jig etc. to the housing

Please do not overload it.



② FPC/FFC 抜く時は、まっすぐ抜いてください。When pull out of the FPC/FFC pull out it straight.

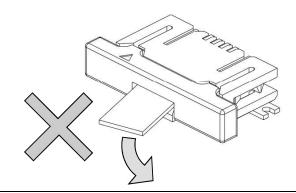


FPC/FFCを引き抜く際、下図のような状態で斜めに傾けたまま無理に引き抜くと、破損の原因になります。

必ず、一度押し戻してから引き抜いて下さい。

When FPC/FFC is pulled out, it causes damage when forcibly diagonally pulling it out while inclined as shown in the figure below.

Please pull it out after it pushes once.



×:禁止行為 prohibited Operation

#### その他 Others

- ①コネクタ実装後、半田接合部が変色する場合がございますが 使用上問題ございません。
- ②モールド内に黒点が発生する場合がございますが、性能上 問題ございません。
- ③リフロー半田付け時、モールドに膨れが発生することが ございますが、性能上問題ございません。
- ④異種金属嵌合は、行わないでください。
- ⑤カード挿入口前に、カードの姿勢が変わるような部品を 配置しないでください。

There is no problem in use though the solder joint part might discolor after mounting the connector.

There is no problem on the performance though the black spot might be generated in molding.

There is no problem on the performance though the swelling might be generated in molding when the reflow solder is put up.

Please do not do the different kind metal mating.

Please do not arrange parts into which the posture of the card changes in the card insertion entrance front.

# FPC/FFC 连接器

# Connector for FPC/FFC

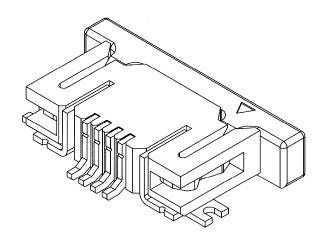
A18-QAY-0003 rev.1

使用说明书

Manual

适用产品类型;滑块式FPC连接器/L型连接器

Application product: FPC Connector Slider Type/ Right Angle



#### 《连接器的使用方法及注意事项/ Operation method and notes of connector》

解锁状态

#### ※图示连接器形状仅为参考图。

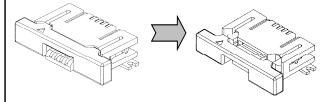
The shape of the connector in the figure is a reference

#### 操作方法/Operation method

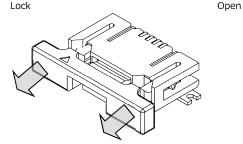
#### 1. FPC/FFC 插入方法 Method of inserting FPC/FFC

抓住滑块的俩端拔取,解除锁紧装置

Both ends of the slider are drawn out and the lock is released.



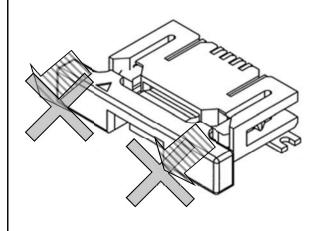
锁紧状态



#### 注意事项/Directions point

滑块是可以用很小得力拔取的,用力过猛会造成滑块的损坏

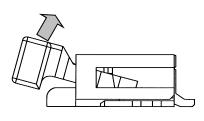
The slider can be drawn out by light load. Please note too much load. It causes damage.



#### 按下图倾斜滑块后,会容易插接 FFC/FPC

The slider is inclined only a little as shown in figure.

As a result, FPC/FFC can be made easy to insert.



按图插接 FFC/FPC, 插入到与壳体底部接触位置。要抓住 FPC/FFC 加强筋**平顺插接。建议使用加强部比较长的 FFC/FPC**,易于操作。

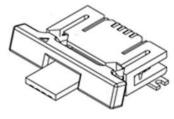
Insert FPC/FFC like the direction of figure.

Please insert it in the interior surely.

Please insert the FPC/FFC holding the supporting tape.

It makes insertion to easy.

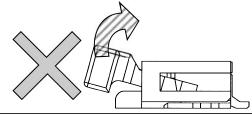
Therefore, we recommend long supporting tape at FPC/FFC.



请不要用力开启滑块。用力过猛会造成连接器的脱落及金具的变形破损。

Please do not multiply too much load.

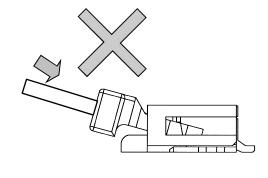
It may cause damage such as peeling from the PCB and deformation of the anchor plates.



插接 FPC/FFC 时要平行于连接器对接口。不抓住加强部插接时,可能会造成 FFC/FPC 的弯曲变形,影响平顺插接。

Please insert FPC/FFC straight into the connector.

There is a possibility that work efficiency worsens by the card bending if it tries to insert it without holding the supporting tape.

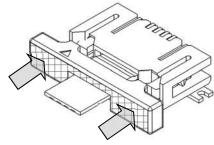


#### 操作方法

#### Operation method

回复滑块平行于壳体状态,用力于滑块下图所示网状面,进行压入。 Returned slider to horizontally, and push full (part of net) of slider the same time .





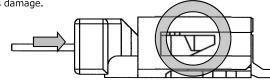
#### 注意事项 Directions point

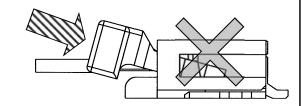
请勿斜着压入滑块。必须让滑块回复到水平状态后进行锁紧作业。

Please do not push it when the slider is inclining.

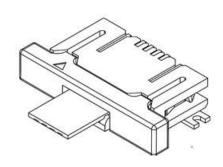
Please push slider after it return to horizontally.

It causes damage.



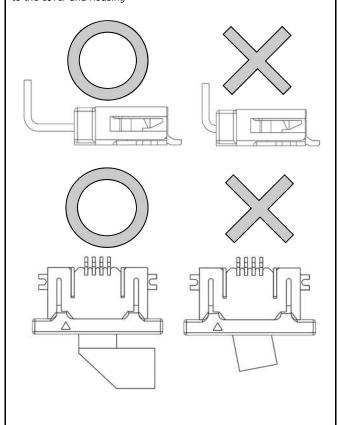


### 2. 锁紧状态 Locked



插接好 FFC 后,在固定处理余线部分时,禁止扭上劲固定 FFC。保证接口处留 出距离,并进行折角处理后固定。连接器负载会造成滑块及壳体的损坏。

When bending the FPC / FFC, bend it at a location away from the opening or process bending the FPC / FFC so that no load is applied to the product. If load is applied to the product, there is a risk of damage to the cover and housing



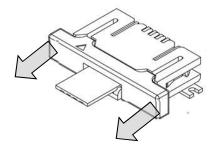
#### 操作方法/Operation method

#### 3. FPC/FFC 的拔取方法

Method of extracting FPC/FFC

拔取 FFC/FPC 时要先抓住滑块的俩端解除连接器的锁紧装置后,水平拔取 FFC/FPC.

Drawn out both ends of the slider. And release the lock. Please note that it is likely to damage the connector if you add an excessive load when you operate slider at each side draws it out.



#### 注意事项/Directions point

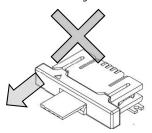
请勿在锁紧状态下拔取 FFC/FPC,拔取时必须解除锁紧后进行拔取 FFC/FPC Please do not pull out FPC/FFC with the slider locked.

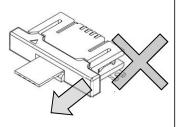
Please pull it out with the lock released without fail.

请勿从滑块的单边拔取盖冒,会造成连接器的损坏。

Don't pull out only one side of the slider.

It will cause breakage of the housing / slider.





拔取连接器滑块时,请不要用力过猛损坏连接器。

如果不能掌握力度,敬请使用专用工具等避免负载过大造成损坏。

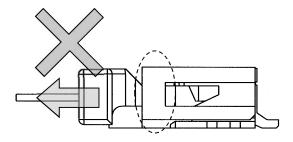
If excessive force is applied to the housing

when pull out the slider

The housing may whiten or be damaged.

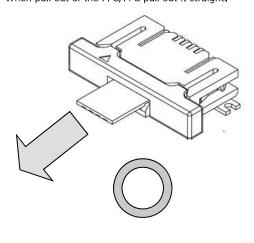
If excessive force is applied, use a jig etc. to the housing

Please do not overload it.



拔取 FFC/FPC 时要平行对接口进行作业。

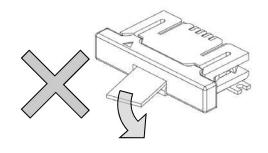
When pull out of the FPC/FFC pull out it straight.



请不要斜着拔取 FFC/FPC,会造成连接器的损坏。必须返插一次 FFC/FPC 后缓慢平行拔取。

When FPC/FFC is pulled out, it causes damage when forcibly diagonally pulling it out while inclined as shown in the figure below.

Please pull it out after it pushes once.



×:禁止行为 prohibited Operation

### 补充 Others

①实装后的连接器焊接部会有变色现象,但不会影响使用。

There is no problem in use though the solder joint part might discolor after mounting the connector.

②壳体部会出现黑色斑点,但不会影响产品性能。

There is no problem on the performance though the black spot might be generated in molding.

③回流焊接后壳体上可能会出现气泡,但不会影响产品性能。

There is no problem on the performance though the swelling might be generated in molding when the reflow solder is put up.

④禁止不同电镀的 FFC/FPC 进行对接使用。

Please do not do the different kind metal mating.

⑤在产品对接口位置,请勿配置会影响 FFC/FPC 自由状态的零部件。

Please do not arrange parts into which the posture of the card changes in the card insertion entrance front.