



# PRODUCT SPECIFICATION



LANGUAGE

JAPANESE  
ENGLISH

## 【1. 適用範囲 SCOPE】

本仕様書は、0.3 mm ピッチ FPC用 コネクタ について規定する。

This product specification covers the performance requirements for 0.3mm PITCH FPC CONNECTOR series.

## 【2. 製品名称及び型番 PRODUCT NAME AND PART NUMBER】

製品名称 Product Name	製品型番 Part Number
ハウジング アセンブリ Housing Assembly (Right Angle Type)	5 0 3 5 6 6 - * * 0 8
5 0 3 5 6 6 - * * 0 8 テーピング梱包品 Embossed Tape Package For 503566-**08	5 0 3 5 6 6 - * * 0 0

\*\* : 極数 (図面参照)  
CIRCUITS (Refer to the drawing)

## 【3. 定格 RATINGS】

項目 Item	規格 Standard	
最大許容電圧 Rated Voltage (MAXIMUM)	50V	[AC(実効値 rms)/DC]
最大許容電流 Rated Current (MAXIMUM)	0.2A	
使用温度範囲 <sup>*1</sup> Operating Temperature Range	-40°C ~ +85°C <sup>*2 *3</sup>	
保管条件 Storage Condition	温度 Temperature	-10°C ~ +50°C
	湿度 Humidity	85%R.H.以下 (但し結露しないこと) 85%R.H. MAX. (No Condensation)
	期間 Terms	出荷後6ヶ月 (未開封の場合) For 6 months after shipping (unopened package)

\*1 : 基板実装後の無通電状態は、使用温度範囲が適用されます。

Non-operating connectors after reflow must follow the operating temperature range condition.

\*2 : 通電による温度上昇分を含む。

This includes the terminal temperature rise generated by conducting electricity.

\*3 : 適合FPCも本使用温度範囲を満足すること。

Applicable FPC must also meet the specified temperature range.

REV.	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F			
SHEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17			
REVISE ON PC ONLY							TITLE: 0.3 mm PITCH FPC CONN. E/O HGT=0.95MM (RIGHT ANGLE TYPE) <b>CONFIDENTIAL</b> <b>製品仕様書</b>													
<b>F</b>	REVISED J2011-1637 '11/05/31 H.MIYAMOTO						THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
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DESIGN CONTROL J				STATUS			WRITTEN BY: H.IIJIMA	CHECKED BY: N.MATSUURA	APPROVED BY: K.MORIKAWA	DATE: YR/MO/DAY 2010/05/11										
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【 4. 性能 PERFORMANCE 】

4-1. 電気的性能 Electrical Performance

項目 Item	条件 Test Condition	規格 Requirement
4-1-1 接触抵抗 Contact Resistance	適合FPCを嵌合させ、開放電圧 20mV以下、 短絡電流10mA以下にて測定する。 (JIS C5402 5.4) Mate applicable FPC by closing actuator, measure contact resistance by dry circuit, 10mA DC max. Open circuit voltage is 20 mV MAX. (JIS C5402 5.4)	奇数端子 Odd terminal 80 milliohm MAXIMUM  偶数端子 Even terminal 50 milliohm MAXIMUM
4-1-2 絶縁抵抗 Insulation Resistance	適合FPCを嵌合させ、隣接するターミナル間 及びターミナル、アース間に、DC250Vを 印加し測定する。 (JIS C5402 5.2/MIL-STD-202 試験法 302) Mate applicable FPC by closing actuator, apply 250V(rms) DC betweenbetween adjacent terminal between adjacent ground between adjacent terminal and ground Trip current is set at 2mA. (JIS C5402 5.1/MIL-STD-202 Method 302)	50 megaohm MINIMUM
4-1-3 耐電圧 Dielectric Strength	適合FPCを嵌合させ、隣接するターミナル間 及びターミナル、アース間に、AC250V(実効値) を1分間印加する。 (JIS C5402 5.1/MIL-STD-202 試験法 301) Mate applicable FPC by closing actuator, and apply 250V(rms) AC between ...between adjacent terminal between adjacent ground between adjacent terminal and ground Trip current is set at 2mA. (JIS C5402 5.1/MIL-STD-202 Method 301)	異状なきこと No Breakdown

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## 4-2. 機械的性能 Mechanical Performance

項目 Item	条件 Test Condition	規格 Requirement
4-2-1 FPC保持力 FPC Retention Force	適合FPCを挿入しACTを閉めた状態で、FPCを25±3mm/minで引張る。 Mate applicable FPC by closing actuator. As it is, pull out the FPC at the speed rate of 25+3/-3mm per a minute.	第7項参照 Refer to paragraph 7

## 4-3. その他 Environmental Performance and Others

項目 Item	条件 Test Condition	規格 Requirement
4-3-1 アクチュエータ 繰返し動作 Durability of Actuator Operation	1分間に10回以下の速さで挿入、抜去を10回繰り返す。 When insert and withdrawal up to 10 cycles repeatedly at a rate of 10 cycles / minute.	接触抵抗 Contact Resistance  奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
4-3-2 温度上昇 Temperature Rise	適合するFPCを嵌合させ、最大許容電流を通电し、コネクタ端子の温度上昇分を測定する。 (UL 498) Mate applicable FPC by closing actuator, and apply maximum rated current to the connector. Then, measure the temperature rise. (UL498)	温度上昇 Temperature Rise  30℃以下 30℃ MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-3	耐振動性 Vibration	DC1mA通電状態にて、嵌合軸を含む互いに垂直な3方向に掃引割合10~55~10Hz/分、半振幅0.75mmの振動を各10サイクル加える。 (JIS C60068-2-6/MIL-STD-202試験法201) Mate applicable FPC by closing actuator. Apply 0.1mA DC and subject to the following vibration conditions in each of 3 mutually perpendicular axes. Half-Amplitude : 0.75mm Frequency : 10-55-10 Hz Duration : 10 cycles (JIS C60068-2-6/MIL-STD-202, Method 201)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
			瞬断 Discontinuity	1.0 microsecond MAXIMUM
4-3-4	耐衝撃性 Shock	DC1mA通電状態にて、嵌合軸を含む互いに垂直な6方向に、490m/s <sup>2</sup> {50G}の衝撃を作用時間11millisecondで各3回加える。 (JIS C C60068-2-27/MIL-STD-202 試験法213) Mate applicable FPC by closing actuator. Apply 1mA DC and subject to the following shock conditions. 3 times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes. The total number of shocks is 18. Pulse shape : Half-sine Amplitude : 490m/s <sup>2</sup> {=50G} Duration : 11 milliseconds (JIS C60068-2-27/MIL-STD-202, Method213)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
			瞬断 Discontinuity	1.0 microsecond MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-5	耐熱性 Heat Resistance	適合FPCを嵌合させ、85±2℃の雰囲気中に96時間放置後取り出し、1～2時間室温に放置する。 ( JIS C60068-2-2/MIL-STD-202 試験法108 ) Mate applicable FPC by closing actuator. Subject the test specimens to +85+2/-2℃. Hold the temperature for 96 hours. After the test, they should be at ambient conditions for 1 to 2 hours before checking functionality. ( JIS C60068-2-2/MIL-STD-202 Method 108 )	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
4-3-6	耐寒性 Cold Resistance	適合するFPCを嵌合させ、-40±3℃の雰囲気中に96時間放置後取り出し、1～2時間室温に放置する。 ( JIS C60068-2-1 ) Mate applicable FPC by closing actuator. Subject the test specimens to -40+3/-3℃. Hold the temperature for 96 hours. After the test, they should be at ambient conditions for 1 to 2 hours before checking functionality. ( JIS C60068-2-1 )	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-7	耐湿性 Condensation Test	適合するFPCを嵌合させ、40±2℃、相対湿度90～95%RHの雰囲気中に96時間放置後取り出し、1～2時間室温に放置する。 ( JIS C60068-2-3/MIL-STD-202 試験法103 ) Mate applicable FPC by closing actuator. Subject the test specimens to 40+2/-2℃ and 90 to 95% RH for 96 hours. After the test, they should be at ambient conditions for 1 to 2 hours before checking functionality. ( JIS C60068-2-3/MIL-STD-202 Method 103 )	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
			耐 電 圧 Dielectric Strength	異常なきこと No Breakdown
			絶縁抵抗 Insulation Resistance	20 megaohm MINIMUM
4-3-8	温度サイクル Temperature Cycling	適合FPCを嵌合させ、-55±3℃に30分、+85±2℃に30分、これを1サイクルとし、5サイクル繰り返す。但し、温度移行時間は、5分以内とする。試験後1～2時間室温に放置する。 (JIS C0025) Mate applicable FPC by closing actuator. Subject the test specimens to the temperature profile for 5 cycles. It's exposed to +85+2/-2℃ and -55+3/-3℃ temperature extremes for 30 minutes each including a 0-5 minute transition time. After the test, they should be at ambient conditions for 1 to 2 hours before checking functionality. (JIS C0025)	外 観 Appearance	異常なきこと No Damage
			接 触 抵 抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-9	塩水噴霧 Salt Spray	適合FPCを嵌合させ、35±2℃にて、重量比5±1%の塩水を48時間噴霧し、試験後常温で水洗いした後、室温で乾燥させる。 ( JIS C60068-2-11/MIL-STD-202 試験法101 ) Mate applicable FPC by closing actuator. Subject the test specimens to the atmosphere where salt mist is diffused in. Other condition is written below. NaCl solution : 5+1/-1% by weight Temperature : 35+2/-2℃ Duration : 48 hours After the test, they should be washed well by water and dried at ambient condition before checking functionality. ( JIS C60068-2-11/MIL-STD-202 Method 101 )	外 観 Appearance	割れ、著しい腐食等 異状なきこと No Damage
			接 触 抵 抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
4-3-10	亜硫酸ガス SO <sub>2</sub> Gas	適合FPCを嵌合させ、40±2℃、50±5ppm の亜硫酸ガス中に24時間放置する。 Mate applicable FPC by closing actuator. Subject the test specimens to the atmosphere written below. Gas Concentration : SO <sub>2</sub> =50+5/-5[ppm] Temperature : 40±2℃ Duration : 24h	接 触 抵 抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM
4-3-11	耐アンモニア性 NH <sub>3</sub> Gas	適合するFPCを嵌合させ、濃度28%のアンモニア水を入れた容器中に40分間放置する。 Mate applicable FPC by closing actuator. Subject the test specimens to the atmosphere where NH <sub>3</sub> gas evaporates. NH <sub>3</sub> Water Concentration : 28[%] Duration : 40 minutes	接 触 抵 抗 Contact Resistance	奇数端子 Odd terminal 100 milliohm MAXIMUM  偶数端子 Even terminal 70 milliohm MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-11	半田付け性 Solderability	端子先端より0.2mmの位置まで245±3℃の半田に2~3秒浸す。 Dip 0.2mm from the tip of the solder tails into the molten solder which is held at 245+3/-3 degrees C for 2-3 seconds.	濡れ性 Solder Wetting	浸漬面積の95%以上 At least 95% of immersed area must show no voids, pin holes
4-3-13	半田耐熱性 Resistance to Soldering- Heat	赤外線リフロー時 (Reflow by Infrared Reflow Machine) 第5項に示す推奨温度プロファイル条件にて、リフローを行う。 The product is reflowed using the reflow profile as shown paragraph 5.	外観 Appearance	端子ガタ割れ等 異状無きこと No damage after twice reflow
		手半田時 (Reflow by Manual Soldering iron) 端子先端、及び金具先端より0.2mmの位置まで、350±10℃の半田ゴテにて5秒加熱する。但し、異常な加圧のないこと。 Using a soldering iron (350±10 degrees C for 5 seconds) heat up the area 0.2mm from the tip of the solder tails and fitting nails. However, do not apply excessive pressure to either the terminals or fitting nails.		

( ) : 参考規格  
: Reference Standard

\* 各項目の評価サンプルは、製品図面に記載されている推奨基板レイアウト、推奨メタルマスクにて実装しています。リフロー条件は4-3-13の推奨温度プロファイルにて実装しております。半田ペーストは、無鉛半田 (Sn-3Ag-0.5Cu) を使用しています。

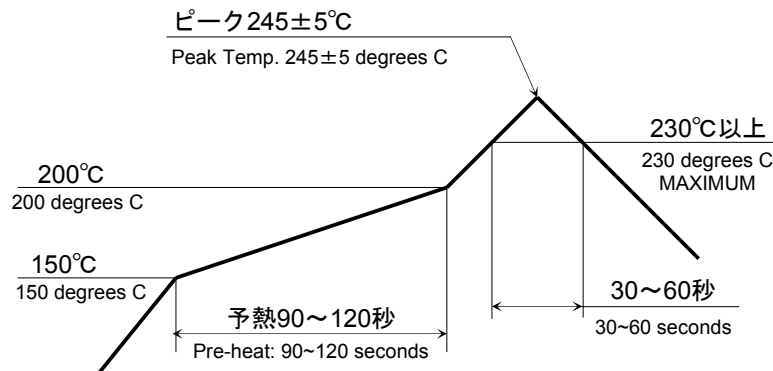
The evaluation samples of each specification test are reflowed according to the recommended Print Circuit Board layout and the recommended metal mask thickness specified in the sales drawing. The reflow conditions followed are specified in the reflow profile in section 4-3-13. Lead free solder (Sn-3Ag-0.5Cu) was used as the soldering paste.

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【5. 推奨温度プロファイル Recommended Reflow Profile】



温度条件グラフ  
TEMPERATURE CONDITION GRAPH

半田接合部の基板表面にて測定

(Temperature is measured at the soldering area on the surface of the print circuit board)

注記：本リフロー条件に関しては、温度プロファイル、半田ペースト、大気、N<sub>2</sub>リフロー、基板などにより条件が異なりますので事前に実装評価(リフロー評価)を必ず実施願います。実装条件によっては、製品性能に影響を及ぼす場合があります。

NOTE: Please investigate the mounting condition (reflow soldering condition) on your own devices beforehand. The mounting conditions may change due to the soldering temperature, soldering paste, air reflow machine, Nitrogen reflow machine, and the type of printed circuit board. The different mounting conditions may have an influence on the product's performance.

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【6. 外観形状、寸法及び材質 PRODUCT SHAPE, DIMENSIONS AND MATERIALS】

製品はELV及びRoHSを満たしております。 Product fulfills ELV and RoHS.

他の情報については図面を参照願います。 Refer to the drawing about any other information.

【7. FPC保持力 FPC RETENTION FORCE】

下記に示した表は、0.2mm厚のFPCを使用したときのFPC保持力のデータを示しております。ただし、FPCの仕様がFPC保持力に影響を与えるため、下記に示したFPC保持力の仕様を満たさない場合があります。

Table shown below is a data of FPC retention force when using a thickness of 0.2mm FPC. But, there's a case which FPC retention force doesn't fulfill the specification shown below, because FPC specification affects the result of FPC retention force.

極数 No. of CKT	単位 UNIT	保持力 (最小値) Retention Force (MIN.)		極数 No. of CKT	単位 UNIT	保持力 (最小値) Retention Force (MIN.)	
		初回 1st	10回目*4 10 <sup>th</sup>			初回 1st	10回目*4 10 <sup>th</sup>
9	N {kgf}	6.8 {0.70}	0.7 {0.07}	31	N {kgf}	8.7 {0.89}	2.4 {0.24}
11	N {kgf}	6.9 {0.71}	0.8 {0.08}	33	N {kgf}	8.9 {0.91}	2.6 {0.26}
13	N {kgf}	7.1 {0.73}	1.0 {0.10}	35	N {kgf}	9.1 {0.93}	2.8 {0.28}
15	N {kgf}	7.3 {0.74}	1.2 {0.12}	37	N {kgf}	9.3 {0.94}	2.9 {0.30}
17	N {kgf}	7.5 {0.76}	1.3 {0.13}	39	N {kgf}	9.5 {0.96}	3.1 {0.31}
19	N {kgf}	7.7 {0.78}	1.5 {0.15}	41	N {kgf}	9.6 {0.97}	3.2 {0.33}
21	N {kgf}	7.8 {0.79}	1.6 {0.17}	43	N {kgf}	9.8 {1.00}	3.4 {0.35}
23	N {kgf}	8.0 {0.82}	1.8 {0.18}	45	N {kgf}	10.0 {1.02}	3.6 {0.36}
25	N {kgf}	8.2 {0.83}	2.0 {0.20}	51	N {kgf}	10.5 {1.08}	4.0 {0.41}
27	N {kgf}	8.4 {0.85}	2.1 {0.22}				

\*4 : 10回目はFPCの耳のタブ無しの状態で測定しています。

The 10th times are measuring in the state without the ear tab of FPC.

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## 【 8. 注記 NOTE】

### ・ 外観について

8-1

本製品の樹脂部に黒点、（ウエルド部の線）、多少の傷が確認される事がありますが、製品性能には影響ございません。

Although this product may have a small black mark, a weld line or a scratch on the housing, these will not have any influence on the product's performance.

8-2

成形品の色相に多少の違いを生じる場合がありますが、製品性能には影響ありません。

There may be slight differences in the housing coloring, but there will be no influence on the product's performance.

### ・ 実装について

8-3

実装性能（平坦度）は、実装基板の反りの影響を含まないものと致します。基板の反りはコネクタ両端部を基準とし、コネクタ中央部にて Max0.02mm として下さい。

The mounting specification for coplanarity does not include the influence of warpage of the printed circuit board. The warpage of the printed circuit board should be a maximum of 0.02mm if measuring from one connector edge to the other.

8-4

本製品の一般性能確認はリジット基板にて実施おります。フレキシブル基板等の特殊な基板へ実装する場合は、事前に実装確認等を行った上でご使用願います。

The product performance was tested using rigid printed circuit board. In case the product needs to be reflowed onto flexible circuit board, please conduct a reflow test on the flexible circuit board in advance.

8-5

フレキシブル基板に実装する場合は、基板の変形を防止するため、補強板をご使用願います。

Please add a stiffener on the flexible printed circuit (FPC) when you mount the connector onto FPC in order to prevent deformation of the FPC.

8-6

リフロー後、半田付け部に変色が見られることがありますが、製品性能に影響はありません。

Although there might be some discoloration seen on the soldering tail after reflow, this will not influence the product's performance.

8-7

本製品は端子先端部に、カット面がある為に端子先端部の実装性(基板への半田付け性)は、端子側面・後側に比べて悪くなります。しかし、側面及び後側においてフィレットが形成されていれば、機能及び強度に問題はありません。

Because this product has a cutoff area on the tip of the terminal, the solderability performance in this area is not as good as compared to the side/back of the terminal. However, by building a good soldering fillet at the side/back of the terminal, there will be no issue on either the product function or the printed circuit board retention force.

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# PRODUCT SPECIFICATION



LANGUAGE

JAPANESE  
ENGLISH

8-8

半田実装部の未半田は、ターミナル脱落、ピン間ショート、ターミナル座屈、またコネクタの基板からの外れが懸念されます。従って全てのターミナルテール部及び、ネイル部に半田付けを行って下さい。

If you leave any soldering area on this product open, there may be the possibility of a missing terminal short circuiting between pins, terminal buckling or the potential for the connector to come off of the printed circuit board. Therefore, please solder all of the terminals and fitting nails on the printed circuit board.

・製品及びFPCについて

8-9

コネクタの性能を損なう恐れがある為、コネクタの洗浄は、行わないで下さい。

Please do not conduct any "washing process" on the connector because it may damage the product's function.

8-10

適合するFPCの導体部は、金めっき（ニッケル下地）品を使用願います。

Please make sure to use the appropriate FPC which has Gold plating (Nickel under plating) on the contact area.

8-11

量産前にご使用になるFPCとの相性確認を行った上で、ご使用をお願い致します。

Please check the compatibility between the connector and the FPC prior to moving to mass production.

・リペアについて

8-12

実装後において半田ごてによる手修正を行う際は、必ず仕様書掲載の条件以内で行って下さい。条件を超えて実施した場合、端子の抜け、接点ギャップの変化、モールドの変形、溶融等、破損の原因になります。

When conducting manual repairs using a soldering iron, please follow the soldering conditions shown in the product specification. If the conditions in the product spec are not followed, it may cause the terminals to fall off, a change in the contact gap, a deformation of the housing, melting of the housing, and damage the connector.

8-13

半田ごてによる手修正を行なう際、過度の半田やフラックスを使用しないで下さい。半田上がりやフラックス上がりにより接触、機能不良に至る場合があります。

When conducting manual repairs using a soldering iron, please do not use more solder and flux than needed. This may cause solder wicking and flux wicking issues, and it will eventually cause a contact defect and functional issues.

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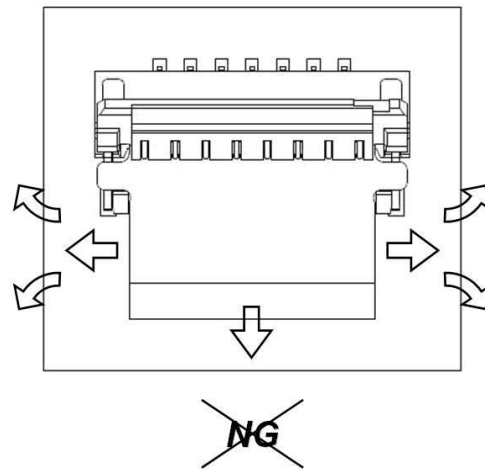
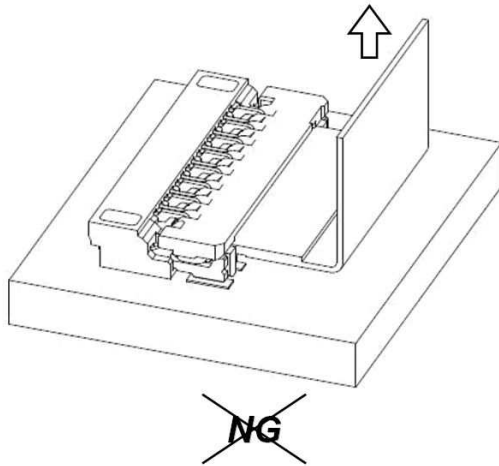
【9. 使用上の注意 OPERATING PRECAUTIONS】

・製品及びFPCについて

9-1

コネクタにFPCを装着した状態で、FPCに過度の負荷が加わらないようにご注意ください、御社基板のスペース上、コネクタに負担の掛かる位置への取り付けはしないで下さい。コネクタのロックが解除されたり、FPCの抜け、断線、破損や接触不良の原因になります。特に、連続的に加わる場合はFPCを固定するようにして下さい。また、基板に対して垂直上下方向の引張荷重、コンタクトピッチ方向のこじり荷重を与えない様にご注意願います。

Please pay special attention not to have any pulling force/tension on the FPC when it is inserted into the connector. This can cause; the actuator to be unlocked, the actuator to come off, cut the traces on the FPC, and/or damage the FPC. Please be especially careful to avoid placing the FPC in a location where it will have a constant force applied on the FPC. If necessary, please fix the FPC directly on the chassis. Also, please avoid pulling the FPC vertically or twisting the FPC back and force horizontally while it is inserted in the connector.



9-2

本製品をご使用時に取り付けられた電線・プリント基板の共振や、機器の回転構造や可動部分の動作によりコネクタ嵌合部（接点部）が常に動いてしまう状態での御使用は避けて下さい。接触部の摺動磨耗等による接触不良の原因となります。従って、機器内で電線・プリント基板を固定し、共振を抑える等の処置をお願い致します。

Please do not use the connector in a condition where the wire, the printed circuit board, or the contact area is experiencing a sympathetic vibration of wires and printed circuit board, and constant movement of devices. This may cause a defect in the contact due to the contact area being worn down. Therefore, please fix wires and printed circuit board on the chassis, and reduces sympathetic vibration.

・製品の仕様について

9-3

基板実装前後に端子、補強金具に触らないでください。

Please do not touch the terminals and fitting nails before or after reflowing the connector onto the printed circuit board.

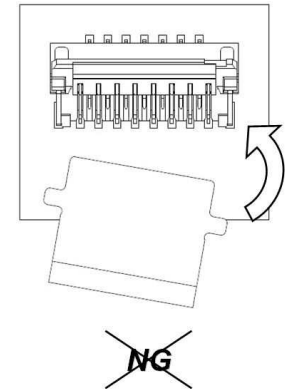
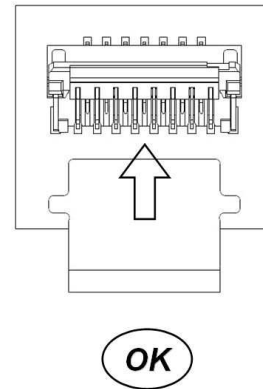
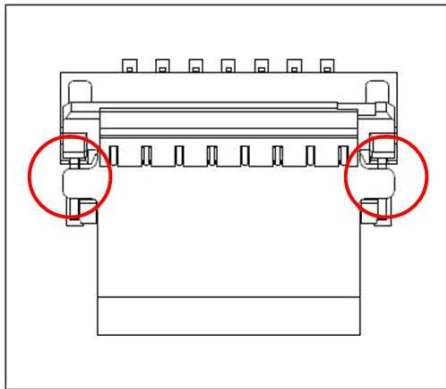
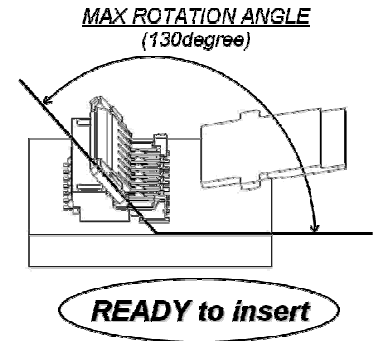
<b>F</b>	REVISE ON PC ONLY	TITLE:  0.3 mm PITCH FPC CONN. E/O HGT=0.95MM (RIGHT ANGLE TYPE) <b>CONFIDENTIAL</b> <span style="float: right;"><b>製品仕様書</b></span>	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
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9-4

FPC挿入する際は、アクチュエータが完全に開いた状態で行い、FPCがハウジングに突き当たるまで挿入し、FPCの耳がコネクタ位置決め部に確実に収まっていることをご確認下さい。  
 左右斜めの状態で挿入すると、ピッチずれによるショート不良になったり、角がターミナルに引っ掛かりターミナルの変形やFPC導体めくれに至るケースがあります。(尚、本製品は、FPC仮保持機構を有しているため、若干の挿入抵抗があります。)

When inserting the FPC into the connector, please ensure that the actuator is completely open during insertion. Please also ensure that the FPC is completely inserted until the end of the FPC touches the housing and that the FPC ear is positioned correctly. Diagonal insertion of the FPC into the connector can cause a short circuit due to the misaligned pitch. Diagonal insertion can also deform the terminal and/or damage the FPC contact area because the FPC edge may contact the terminal. (Because this connector has a tentative cable-hold feature which holds the FPC in place prior to actuation, it may feel like there is a small insertion force when inserting the FPC.



9-5

アクチュエータの開閉は、コネクタを基板に実装しFPCを挿入した状態で行って下さい。FPCを挿入しない状態でのアクチュエータの開閉は、アクチュエータが外れる恐れがありますので行わないで下さい。  
 Please only open or close the actuator while the FPC is fully inserted. Please do not open and close the actuator without first inserting the FPC in the connector. This may damage the actuator.

9-6

アクチュエータ操作時にはピンセット等の先端が鋭利な物は使用しないで下さい。コネクタの破損、半田付け部の損傷の原因になります。  
 When opening and closing the actuator, please do not use a sharp edged tool such as tweezers. This may cause to damage the connector or to the soldering area.

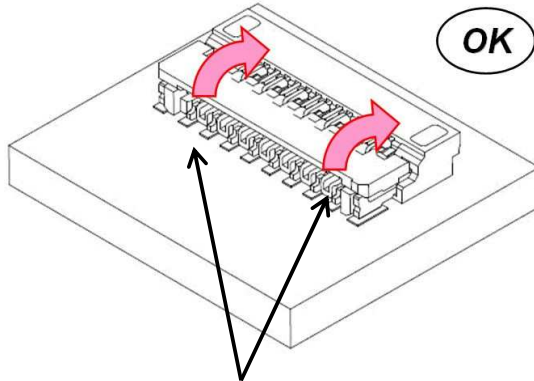
REVISE ON PC ONLY		TITLE:	
<b>F</b>	SEE SHEET 1 OF 17	0.3 mm PITCH FPC CONN. E/O HGT=0.95MM (RIGHT ANGLE TYPE) <b>CONFIDENTIAL</b> <b>製品仕様書</b>	
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9-7

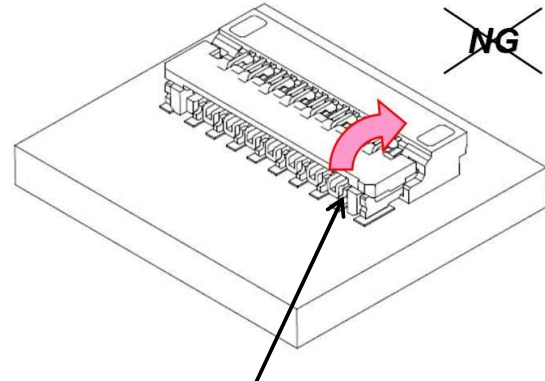
アクチュエータを開閉する際は、左右均等に力が加わるように中央部を回転させて丁寧に操作する様に、お願いします。荷重が一点に集中するような片側に偏った位置での操作は行わないで下さい。コネクタの破損の原因になります。

When opening and closing the actuator, please gently pull the center of the actuator by applying an even force across the actuator and rotating carefully. Please do not apply a force only to one side of actuator because it may cause to damage the connector.



OK

左右均等の位置に同等の力が掛かるように操作してください  
Manipulate with the even force and the same force both on the right and left side across the actuator



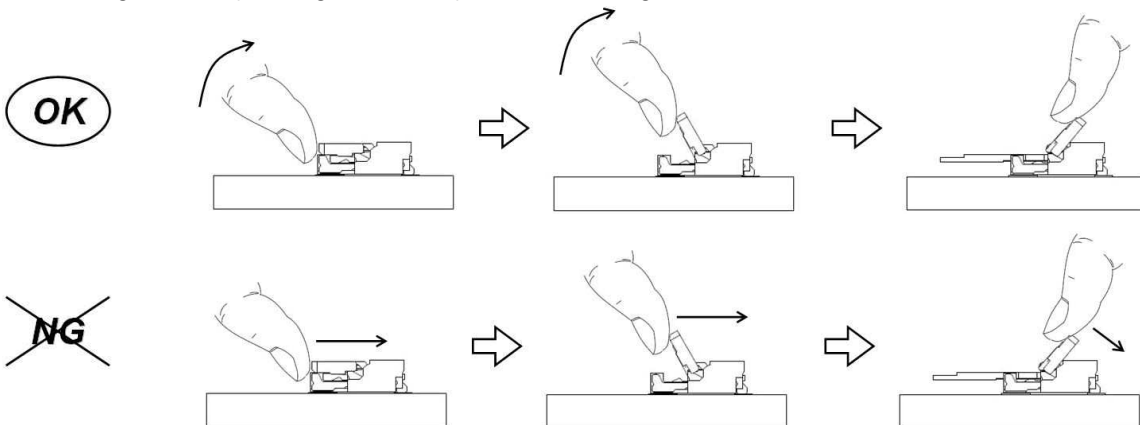
NG

1点もしくは片寄った箇所  
操作しないでください  
Please pay much attention not to apply one side or one point of the actuator.

9-8

アクチュエータは軽い力で下図に示された方向に開けてください。アクチュエータを開けるときや開けた後は、アクチュエータを開ける方向に余計な力を加えないようにしてください。樹脂部の破損やアクチュエータ外れや端子の変形といった致命的な損傷につながる恐れがあります。

Please open the actuator with soft pressure in the direction as shown following pictures. And, when opening the actuator or after you opened actuator, avoid applying excessive force to open. This may cause critical damages like breakage in mold(housing or actuator) or like detaching of actuator or like terminal deformation.



OK

NG

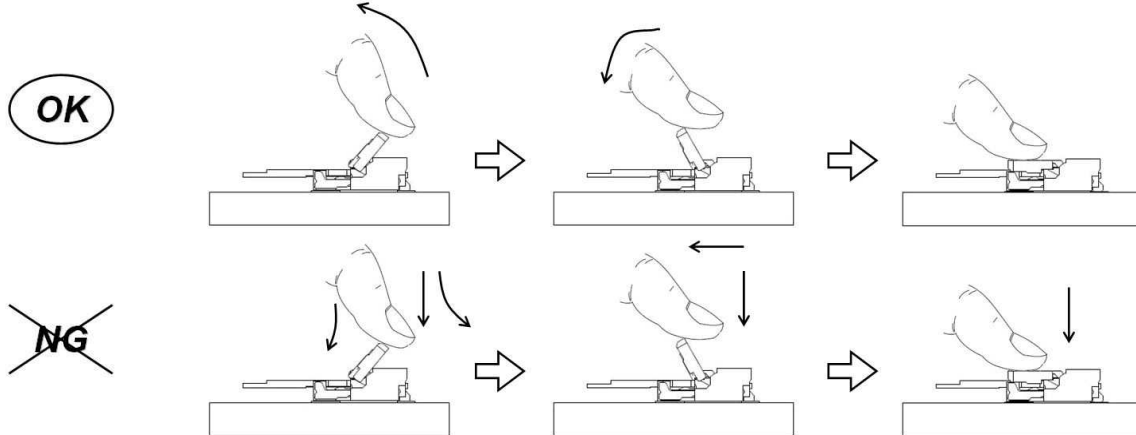
REVISE ON PC ONLY		TITLE:	
<b>F</b>	SEE SHEET 1 OF 17	0.3 mm PITCH FPC CONN. E/O HGT=0.95MM (RIGHT ANGLE TYPE) <b>CONFIDENTIAL</b> <b>製品仕様書</b>	
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9-9

アクチュエータを閉じる際は、下図の様に回転する方向に軽く荷重が掛かる様に閉じて下さい。また、アクチュエータが外れる(押し出す)方向への負荷が加わらない様にご注意下さい。破損・外れの原因となります。

When closing the actuator, please press down on the actuator with soft pressure in the direction of the rotary axis as shown in the figure below. Please do not push the actuator closed from the direction that the FPC is inserted. This may cause damage or disengagement of the actuator.



9-10

アクチュエータを閉じた後は、アクチュエータを確実にロックする為に表面を軽く押さえて下さい。

After the actuator is closed, please apply soft pressure to ensure that the actuator is completely locked.

9-11

アクチュエータのロックを解除する際は、アクチュエータの左右へ均等に力が加わるように、上方向へ押し上げて下さい。押し上げの際には、中央部を跳ね上げるように操作願います。アクチュエータが回転運動をして開きます。また、アクチュエータが変形及び破壊する方向(開く方向)への過大な負荷を掛けない様にご注意下さい。破損・外れの原因となります。

When unlocking the actuator, please pull up on the center of actuator in the direction of actuator rotation, which delivers even force to both edges of actuator. Please do not apply any force in any other direction as this may deform or damage the actuator.

9-12

FPCを抜く時は、アクチュエータが完全に開いた状態で行って下さい。万が一、アクチュエータが完全に開いていない状態でFPCを抜いた時は、コンタクト部に付着物が無いか確認の上、再装着願います。

When withdrawing the FPC, please make sure that the actuator is completely open. If the FPC is withdrawn without the actuator being fully open, please check to make sure that there is no debris on the contact area before inserting the FPC again.

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# PRODUCT SPECIFICATION



LANGUAGE

JAPANESE  
ENGLISH

REV	REV. RECORD	DATE	ECN NO.	WRITTEN BY :	CHECKED BY :
A	RELEASED	'10/05/11	J2010-2357	H.IIJIMA	N.MATSUURA
B	REVISED	'10/06/24	J2010-2571	H.IIJIMA	N.MATSUURA
C	REVISED	'10/07/06	J2011-0029	S.HIRATA	H.IIJIMA
D	REVISED	'10/11/08	J2011-0658	H.MIYAMOTO	H.IIJIMA
E	REVISED	'10/11/29	J2011-0728	H.MIYAMOTO	H.IIJIMA
F	REVISED	'11/05/31	J2011-1637	H.MIYAMOTO	H.IIJIMA

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