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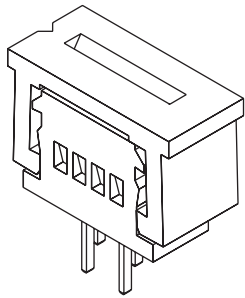
www.Jameco.com ♦ 1-800-831-4242

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Jameco Part Number 1969497

1.25mm (.049") Pitch FFC/FPC Connector

5597-NCPB Vertical, ZIF



Features and Benefits

- Sizes 3 to 30 circuits
- Staggered solder tails, 3.50mm (.138") long
- 5597 accommodates FFC/FPC 0.30mm (.012") thick

Reference Information

Packaging: Tray
UL File No.: E29179
Designed In: Millimeters

Electrical

Voltage: 200V
Current: 1.0A
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 500V AC/1 min.
Insulation Resistance: 500 Megohms min.

Physical

Housing: PBTP, UL 94V-0
Actuator: PBTP, UL 94V-0
Contact: Phosphor Bronze
Plating: Tin
Operating Temperature: -20 to +80°C

Circuits	Order No.	Lead-free
3	39-51-3034	No
4	39-51-3044	
5	39-51-3054	
6	39-51-3064	
7	39-51-3074	
8	39-51-3084	
9	39-51-3094	
10	39-51-3104	
11	39-51-3114	
12	39-51-3124	

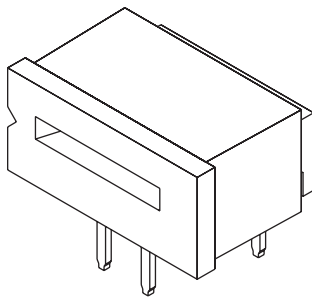
Circuits	Order No.	Lead-free
13	39-51-3134	No
14	39-51-3144	
15	39-51-3154	
16	39-51-3164	
17	39-51-3174	
18	39-51-3184	
19	39-51-3194	
20	39-51-3204	
21	39-51-3214	
22	39-51-3224	

Circuits	Order No.	Lead-free
23	39-51-3234	No
24	39-51-3244	
25	39-51-3254	
26	39-51-3264	
27	39-51-3274	
28	39-51-3284	
29	39-51-3294	
30	39-51-3304	

Note: Contact Molex for cable specification dimensions

1.25mm (.049") Pitch FFC/FPC Connector

5597-NAPB Right Angle, ZIF



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3	39-51-3033	No
4	39-51-3043	
5	39-51-3053	
6	39-51-3063	
7	39-51-3073	
8	39-51-3083	
9	39-51-3093	
10	39-51-3103	
11	39-51-3113	
12	39-51-3123	

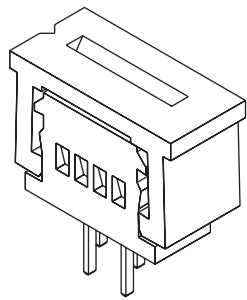
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13	39-51-3133	No
14	39-51-3143	
15	39-51-3153	
16	39-51-3163	
17	39-51-3173	
18	39-51-3183	
19	39-51-3193	
20	39-51-3203	
21	39-51-3213	
22	39-51-3223	

Circuits	Order No.	Lead-free
23	39-51-3233	No
24	39-51-3243	
25	39-51-3253	
26	39-51-3263	
27	39-51-3273	
28	39-51-3283	
29	39-51-3293	
30	39-51-3303	

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3	39-51-3034	No
4	39-51-3044	
5	39-51-3054	
6	39-51-3064	
7	39-51-3074	
8	39-51-3084	
9	39-51-3094	
10	39-51-3104	
11	39-51-3114	
12	39-51-3124	

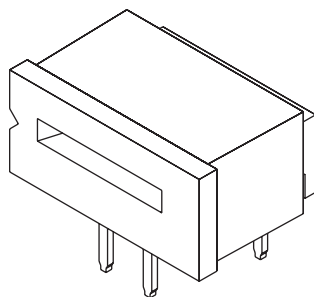
Circuits	Order No.	Lead-free
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15	39-51-3154	
16	39-51-3164	
17	39-51-3174	
18	39-51-3184	
19	39-51-3194	
20	39-51-3204	
21	39-51-3214	
22	39-51-3224	

Circuits	Order No.	Lead-free
23	39-51-3234	No
24	39-51-3244	
25	39-51-3254	
26	39-51-3264	
27	39-51-3274	
28	39-51-3284	
29	39-51-3294	
30	39-51-3304	

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1.25mm (.049") Pitch FFC/FPC Connector

5597-NAPB Right Angle, ZIF



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4	39-51-3043	
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6	39-51-3063	
7	39-51-3073	
8	39-51-3083	
9	39-51-3093	
10	39-51-3103	
11	39-51-3113	
12	39-51-3123	

Circuits	Order No.	Lead-free
13	39-51-3133	No
14	39-51-3143	
15	39-51-3153	
16	39-51-3163	
17	39-51-3173	
18	39-51-3183	
19	39-51-3193	
20	39-51-3203	
21	39-51-3213	
22	39-51-3223	

Circuits	Order No.	Lead-free
23	39-51-3233	No
24	39-51-3243	
25	39-51-3253	
26	39-51-3263	
27	39-51-3273	
28	39-51-3283	
29	39-51-3293	
30	39-51-3303	

Note: Contact Molex for cable specification dimensions



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【1. 適用範囲 SCOPE】

本仕様書は、 _____ 殿 に納入する。

1. 25mm ピッチ FFC / FPC 用コネクタ について規定する。

This specification covers the 1.25mm PITCH FFC/FPC CONNECTOR series.

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

製品名称 Product Name	無鉛 LEAD FREE	製品型番 Material Number
ハウジングアッセンブリ Housing Assembly	無鉛 LEAD FREE	5597-NAPB7F
ハウジングアッセンブリ Housing Assembly	無鉛 LEAD FREE	5597-NCPB7F
5597-NCPB7F スティック梱包 Stick Package for 5597-NCPB7F	無鉛 LEAD FREE	5597-NCPB7F-ST

N : 図面参照 Refer to the drawings.

【3. 定格 RATINGS】

項目 Item	規 格 Standard	
最大許容電圧 Rated Voltage (MAXIMUM)	200 V	[AC (実効値 rms) /DC]
最大許容電流 Rated Current (MAXIMUM)	1 A	
使用温度範囲 Ambient Temperature Range	-20°C ~ +80°C*1	

*1 : 通電による温度上昇分を含む。Including terminal temperature rise.

REV.	A	B																	
SHEET	1-12	1-12																	
REVISE ON PC ONLY						TITLE: 1.25mm PITCH FFC / FPC CONNECTOR ZIF													
B	変更 REVISED J2005-1741 '04/12/13 E.SUZUKI					-LEAD FREE- 製品仕様書													
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REV.	DESCRIPTION					WRITTEN BY: N.AIDA	CHECKED BY: T.TOJO	APPROVED BY: M.SASAO	DATE: YR/MO/DAY 2004/03/16										
DESIGN CONTROL J						STATUS								FILE NAME	SHEET				
DOCUMENT NUMBER PS-5597-004												PS5597004.doc	1 OF 12						



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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FFC/FPCを嵌合させ、開放電圧 20mV 以下、 短絡電流 10mA にて測定する。 (JIS C5402 5.4) Mate applicable FFC/FPC, measure by dry circuit, 20mV MAXIMUM, 10mA. (JIS C5402 5.4)	20 milliohm MAXIMUM
4-1-2 絶縁抵抗 Insulation Resistance	適合FFC/FPCを嵌合させ、隣接するターミナル間、 ターミナル、アース間に、DC 500Vを印加し測定す る。(JIS C5402 5.2/MIL-STD-202 試験法 302) Mate applicable FFC/FPC and apply 500V DC between adjacent terminal or ground. (JIS C5402 5.2/MIL-STD-202 Method 302)	500 megohm MINIMUM
4-1-3 耐電圧 Dielectric Strength	適合FFC/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、AC 500V (実効値) を 1分間印加する。 (JIS C5402 5.1/MIL-STD-202 試験法 301) Mate applicable FFC/FPC, apply 500V AC (rms) for 1 minute between adjacent terminal or ground. (JIS C5402 5.1/MIL-STD-202 Method 301)	異状なきこと No Breakdown

4-2. 機械的性能 Mechanical Performance

項目 Item	条件 Test Condition	規格 Requirement
4-2-1 アクチュエータ 挿抜力 Actuator Insertion/ Withdrawal Force	適合FFC/FPCを嵌合させ、アクチュエータを 毎分 25±3 mmの速さで挿入、抜去を行う。 Mate applicable FFC/FPC and Insert and withdraw actuator at the speed rate of 25±3 mm per minute.	第 6 項 参照 Refer to paragraph 6
4-2-2 FFC/FPC保持力 FFC/FPC Retention Force	アクチュエータ挿入状態にて、毎分 25±3 mm の速さでFFC/FPCを引き抜く。 Insert the actuator, pull the FFC/FPC at the speed rate of 25±3 mm per minute.	第 7 項 参照 Refer to paragraph 7
4-2-3 端子保持力 Terminal/Housing Retention Force	各端子を、毎分 25±3 mm の速さで引き抜く。 Apply axial pull out force at the speed rate of 25 ±3 mm per minute on the terminal assembled in the housing.	5.9 N {0.6kgf} MINIMUM
4-2-4 端子強度 Terminal Strength	全ての方向に 1 分間 4.9N(500gf)の力を加える。 Apply 4.9N(500gf) in each X.Y.Z. axes for 1 minute.	割れ、折れのないこと No Damage

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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 繰り返し動作 Repeated Actuator Insertion / Withdrawal	無通電状態にて、1分間に10回以下の速さで挿入、 抜去を30回繰り返す。 Insert and withdraw actuator up to 30 cycles at the speed rate of less than 10 cycles per minute.	接触抵抗 Contact Resistance	40 milliohm MAXIMUM
		4-3-2 項から4-3-13 項までのテスト後、 アクチュエータを1回動作させる。 After completion of item 4-3-2~4-3-13 test, Insert and extract actuator up to 1 cycle.	外 観 Appearance	異常なきこと No Damage
4-3-2	温度上昇 Temperature Rise	適合FFC/FPCを嵌合させ、最大許容電流を通電し、 コネクタの温度上昇分を測定する。 (UL 498) Mate applicable FFC/FPC, measure the temperature rise of contact when the maximum AC rated current is passed. (UL 498)	温度上昇 Temperature Rise	30 °C MAXIMUM
4-3-3	耐振動性 Vibration	DC 1mA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、全振幅 1.5mmの振動を各2時間加える。 (JIS C60068-2-6/MIL-STD-202試験法 201) Mate applicable FFC/FPC and subject to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, passing DC 1 mA during the test. Amplitude : 1.5 mm P-P Frequency : 10-55-10 Hz Shall be traversed in 1 minute. (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	40 milliohm MAXIMUM
			瞬断 Discontinuity	1.0 microsecond MAXIMUM
4-3-4	耐衝撃性 Shock	DC 1mA通電状態にて、嵌合軸を含む互いに垂直 な6方向に490m/s ² {50G}の衝撃を各3回加える。 (JIS C60068-2-27/MIL-STD-202試験法 213) Mate applicable FFC/FPC and subject to the following shock conditions. 3 times of shocks shall be applied for each 6 directions along 3 mutually perpendicular axes, passing DC 1 mA current during the test. (Total of 18 shocks) Peak value : 490 m/s ² {50 G} (JIS C60068-2-27/MIL-STD-202 Method 213)	外 観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 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FFC/FPCを嵌合させ、85±2°C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 FFC/FPC and expose to 85±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (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	40 milliohm MAXIMUM
4-3-6	耐寒性 Cold Resistance	適合FFC/FPCを嵌合させ、-40±2°C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 FFC/FPC and expose to -40±2°C for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (JIS C60068-2-1)	外観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAXIMUM
4-3-7	耐湿性 Humidity	適合FFC/FPCを嵌合させ、40±2°C 相対湿度 90~95%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 試験方法103) Mate applicable FFC/FPC and expose to 40±2°C,relative humidity 90 to 95% for 96 hours. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. (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	40 milliohm MAXIMUM
			耐電圧 Dielectric Strength	4-1-3項 満足のこと Must meet 4-1-3
			絶縁抵抗 Insulation Resistance	50 megohm MINIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-8	温度サイクル Temperature Cycling	適合FFC/FPCを嵌合させ、-30±3°Cに30分、+85±2°C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3分以内とする。試験後1~2時間室温に放置する。(JIS C0025) Mate applicable FFC/FPC and subject to the following conditions for 5 cycles. Upon completion of the exposure period, the test specimens shall be conditioned at ambient room conditions for 1 to 2 hours, after which the specified measurements shall be performed. 1 cycle -30±3°C 30minutes +85±2°C 30minutes (Transit time shall be within 3 minutes) (JIS C0025)	外 観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAXIMUM
4-3-9	塩水噴霧 Salt Spray	適合FFC/FPCを嵌合させ、35±2°Cにて重量比 5±1%の塩水を 48±4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 試験方法101) Mate applicable FFC/FPC and expose to the following salt mist condition. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water, after which the specified measurements shall be performed. NaCl solution Concentration : 5±1% Spray time : 48±4 hours Ambient temperature : 35±2°C (JIS C60068-2-11/MIL-STD-202 Method 101)	外 観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAXIMUM
4-3-10	亜硫酸ガス SO ₂ Gas	適合FFC/FPCを嵌合させ、40±2°Cにて50±5ppmの亜硫酸ガス中に24時間放置する。 Mate applicable FFC/FPC and expose them to the following SO ₂ gas atmosphere. Temperature 40±2°C Gas Density 50±5ppm Duration 24 hours	外 観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAXIMUM
4-3-11	耐アンモニア性 NH ₃ Gas	適合FFC/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。 (1Lに対して25mLの割合) Mate applicable FFC/FPC and 40 minutes exposure to NH ₃ gas evaporating from 28% Ammonia solution.	外 観 Appearance	異常なきこと No Damage
			接触抵抗 Contact Resistance	40 milliohm MAXIMUM

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項目 Item		条件 Test Condition	規格 Requirement	
4-3-12	半田付け性 Solder Ability	端子をフラックスに浸し、本体の取付け基準面より1.2mmまで、245±3°Cの半田に3±0.5秒浸す。 Soldering time : 3±0.5 seconds Solder temperature : 245±3°C	濡れ性 Solder Wetting	浸漬面積 75%以上 75% of immersed area must show no voids, pin holes.
4-3-13	半田耐熱性 Resistance to Soldering Heat	(ディップの場合) <u>Soldering bath method</u> 端子を本体の取付け基準面より1.2mmまで、260±5°Cの半田に5±0.5秒浸す。 Soldering time : 5±0.5 seconds Solder temperature : 260±5°C	外 観 Appearance	端子ガタ、 割れ等 異状無き事 No Damage
		(手半田時) <u>Soldering iron method</u> 370~400°Cの半田ゴテにて最大5秒加熱する。但し、端ピンに異常な加圧のないこと。 Solder Time : 5 sec MAX. Solder Temperature: 370~400°C However, without too much pressure to the terminal pin.		

(): 参考規格 Reference Standard
{ }: 参考単位 Reference Unit

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

図面参照 Refer to the drawing.

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【6. アクチュエータ保持力(FFC) ACTUATOR INSERTION/WITHDRAWAL FORCE(FFC)】

極数 Number of Circuit	単位 UNIT	挿入力 (最大値) Insertion Force (MAXIMUM)			抜去力 (最大値) Withdrawal Force (MAXIMUM)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
		3	N {kgf}	27.4 {2.8}	26.4 {2.7}	26.4 {2.7}	28.4 {2.9}
4	N {kgf}	29.4 {3.0}	28.4 {2.9}	28.4 {2.9}	30.3 {3.1}	29.4 {3.0}	29.4 {3.0}
5	N {kgf}	30.3 {3.1}	29.4 {3.0}	29.4 {3.0}	31.3 {3.2}	30.3 {3.1}	30.3 {3.1}
6	N {kgf}	32.3 {3.3}	30.3 {3.1}	30.3 {3.1}	33.3 {3.4}	31.3 {3.2}	31.3 {3.2}
7	N {kgf}	33.3 {3.4}	31.3 {3.2}	31.3 {3.2}	34.3 {3.5}	32.3 {3.3}	32.3 {3.3}
8	N {kgf}	35.2 {3.6}	33.3 {3.4}	33.3 {3.4}	36.2 {3.7}	34.3 {3.5}	34.3 {3.5}
9	N {kgf}	36.2 {3.7}	34.3 {3.5}	34.3 {3.5}	37.2 {3.8}	35.2 {3.6}	35.2 {3.6}
10	N {kgf}	38.2 {3.9}	36.2 {3.7}	36.2 {3.7}	39.2 {4.0}	37.2 {3.8}	37.2 {3.8}
11	N {kgf}	39.2 {4.0}	37.2 {3.8}	37.2 {3.8}	40.1 {4.1}	38.2 {3.9}	38.2 {3.9}
12	N {kgf}	41.1 {4.2}	39.2 {4.0}	39.2 {4.0}	42.1 {4.3}	40.1 {4.1}	40.1 {4.1}
13	N {kgf}	42.1 {4.3}	40.1 {4.1}	40.1 {4.1}	43.1 {4.4}	41.1 {4.2}	41.1 {4.2}
14	N {kgf}	43.1 {4.4}	41.1 {4.2}	41.1 {4.2}	44.1 {4.5}	42.1 {4.3}	42.1 {4.3}
15	N {kgf}	45.0 {4.6}	42.1 {4.3}	42.1 {4.3}	46.0 {4.7}	43.1 {4.4}	43.1 {4.4}
16	N {kgf}	46.0 {4.7}	43.1 {4.4}	43.1 {4.4}	47.0 {4.8}	44.1 {4.5}	44.1 {4.5}
17	N {kgf}	48.0 {4.9}	45.0 {4.6}	45.0 {4.6}	49.0 {5.0}	46.0 {4.7}	46.0 {4.7}
18	N {kgf}	49.0 {5.0}	46.0 {4.7}	46.0 {4.7}	49.9 {5.1}	47.0 {4.8}	47.0 {4.8}

REVISE ON PC ONLY

B

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TITLE:

1.25mm PITCH FFC / FPC CONNECTOR ZIF

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製品仕様書

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DESCRIPTION

DOCUMENT NUMBER

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EN-37-1(019)



PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

極数 Number of Circuit	単位 UNIT	挿入力 (最大値) Insertion Force (MAXIMUM)			抜去力 (最大値) Withdrawal Force (MAXIMUM)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
19	N {kgf}	50.9 {5.2}	47.0 {4.8}	47.0 {4.8}	51.9 {5.3}	48.0 {4.9}	48.0 {4.9}
20	N {kgf}	51.9 {5.3}	48.0 {4.9}	48.0 {4.9}	52.9 {5.4}	49.0 {5.0}	49.0 {5.0}
21	N {kgf}	53.9 {5.5}	49.9 {5.1}	49.9 {5.1}	54.8 {5.6}	50.9 {5.2}	50.9 {5.2}
22	N {kgf}	54.8 {5.6}	50.9 {5.2}	50.9 {5.2}	55.8 {5.7}	51.9 {5.3}	51.9 {5.3}
23	N {kgf}	56.8 {5.8}	51.9 {5.3}	51.9 {5.3}	57.8 {5.9}	52.9 {5.4}	52.9 {5.4}
24	N {kgf}	57.8 {5.9}	52.9 {5.4}	52.9 {5.4}	58.8 {6.0}	53.9 {5.5}	53.9 {5.5}
25	N {kgf}	59.7 {6.1}	54.8 {5.6}	54.8 {5.6}	60.7 {6.2}	55.8 {5.7}	55.8 {5.7}
26	N {kgf}	60.7 {6.2}	55.8 {5.7}	55.8 {5.7}	61.7 {6.3}	56.8 {5.8}	56.8 {5.8}
27	N {kgf}	62.7 {6.4}	56.8 {5.8}	56.8 {5.8}	63.7 {6.5}	57.8 {5.9}	57.8 {5.9}
28	N {kgf}	63.7 {6.5}	57.8 {5.9}	57.8 {5.9}	64.6 {6.6}	58.8 {6.0}	58.8 {6.0}
29	N {kgf}	65.6 {6.7}	59.7 {6.1}	59.7 {6.1}	66.6 {6.8}	60.7 {6.2}	60.7 {6.2}
30	N {kgf}	66.6 {6.8}	60.7 {6.2}	60.7 {6.2}	67.6 {6.9}	61.7 {6.3}	61.7 {6.3}
31	N {kgf}	68.6 {7.0}	62.7 {6.4}	62.7 {6.4}	69.5 {7.1}	63.7 {6.5}	63.7 {6.5}
32	N {kgf}	69.5 {7.1}	63.7 {6.5}	63.7 {6.5}	70.5 {7.2}	64.6 {6.6}	64.6 {6.6}
33	N {kgf}	71.5 {7.3}	65.6 {6.7}	65.6 {6.7}	72.5 {7.4}	65.6 {6.7}	65.6 {6.7}
34	N {kgf}	72.5 {7.4}	66.6 {6.8}	66.6 {6.8}	73.5 {7.5}	66.6 {6.8}	66.6 {6.8}
35	N {kgf}	73.5 {7.5}	67.6 {6.9}	67.6 {6.9}	74.4 {7.6}	67.6 {6.9}	67.6 {6.9}

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PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

【6. アクチュエータ保持力(FPC) ACTUATOR INSERTION/WITHDRAWAL FORCE(FPC)】

極数 Number of Circuit	単位 UNIT	挿入力 (最大値) Insertion Force (MAXIMUM)			抜去力 (最大値) Withdrawal Force (MAXIMUM)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
		3	N {kgf}	23.5 {2.4}	22.5 {2.3}	22.5 {2.3}	32.3 {3.3}
4	N {kgf}	25.4 {2.6}	24.5 {2.5}	24.5 {2.5}	34.3 {3.5}	33.3 {3.4}	33.3 {3.4}
5	N {kgf}	26.4 {2.7}	25.4 {2.6}	25.4 {2.6}	35.2 {3.6}	34.3 {3.5}	34.3 {3.5}
6	N {kgf}	28.4 {2.9}	26.4 {2.7}	26.4 {2.7}	37.2 {3.8}	35.2 {3.6}	35.2 {3.6}
7	N {kgf}	29.4 {3.0}	27.4 {2.8}	27.4 {2.8}	38.2 {3.9}	36.2 {3.7}	36.2 {3.7}
8	N {kgf}	31.3 {3.2}	29.4 {3.0}	29.4 {3.0}	40.1 {4.1}	37.2 {3.8}	37.2 {3.8}
9	N {kgf}	32.3 {3.3}	30.3 {3.1}	30.3 {3.1}	41.1 {4.2}	38.2 {3.9}	38.2 {3.9}
10	N {kgf}	34.3 {3.5}	32.3 {3.3}	32.3 {3.3}	43.1 {4.4}	39.2 {4.0}	39.2 {4.0}
11	N {kgf}	29.4 {3.0}	27.4 {2.8}	27.4 {2.8}	39.2 {4.0}	37.2 {3.8}	37.2 {3.8}
12	N {kgf}	30.3 {3.1}	28.4 {2.9}	28.4 {2.9}	40.1 {4.1}	38.2 {3.9}	38.2 {3.9}
13	N {kgf}	31.3 {3.2}	29.4 {3.0}	29.4 {3.0}	41.1 {4.2}	39.2 {4.0}	39.2 {4.0}
14	N {kgf}	32.3 {3.3}	30.3 {3.1}	30.3 {3.1}	42.1 {4.3}	40.1 {4.1}	40.1 {4.1}
15	N {kgf}	34.3 {3.5}	31.3 {3.2}	31.3 {3.2}	44.1 {4.5}	41.1 {4.2}	41.1 {4.2}
16	N {kgf}	35.2 {3.6}	32.3 {3.3}	32.3 {3.3}	45.0 {4.6}	42.1 {4.3}	42.1 {4.3}
17	N {kgf}	36.2 {3.7}	33.3 {3.4}	33.3 {3.4}	46.0 {4.7}	43.1 {4.4}	43.1 {4.4}
18	N {kgf}	37.2 {3.8}	34.3 {3.5}	34.3 {3.5}	47.0 {4.8}	44.1 {4.5}	44.1 {4.5}

REVISE ON PC ONLY

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TITLE:

1.25mm PITCH FFC / FPC CONNECTOR ZIF

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PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

極数 Number of Circuit	単位 UNIT	挿入力 (最大値) Insertion Force (MAXIMUM)			抜去力 (最大値) Withdrawal Force (MAXIMUM)		
		初回 1st	6回目 6th	30回目 30th	初回 1st	6回目 6th	30回目 30th
19	N {kgf}	39.2 {4.0}	35.2 {3.6}	35.2 {3.6}	49.0 {5.0}	45.0 {4.6}	45.0 {4.6}
20	N {kgf}	40.1 {4.1}	36.2 {3.7}	36.2 {3.7}	49.9 {5.1}	46.0 {4.7}	46.0 {4.7}
21	N {kgf}	41.1 {4.2}	37.2 {3.8}	37.2 {3.8}	50.9 {5.2}	47.0 {4.8}	47.0 {4.8}
22	N {kgf}	42.1 {4.3}	38.2 {3.9}	38.2 {3.9}	51.9 {5.3}	48.0 {4.9}	48.0 {4.9}
23	N {kgf}	44.1 {4.5}	39.2 {4.0}	39.2 {4.0}	53.9 {5.5}	49.0 {5.0}	49.0 {5.0}
24	N {kgf}	45.0 {4.6}	40.1 {4.1}	40.1 {4.1}	54.8 {5.6}	49.9 {5.1}	49.9 {5.1}
25	N {kgf}	46.0 {4.7}	41.1 {4.2}	41.1 {4.2}	55.8 {5.7}	50.9 {5.2}	50.9 {5.2}
26	N {kgf}	47.0 {4.8}	42.1 {4.3}	42.1 {4.3}	56.8 {5.8}	51.9 {5.3}	51.9 {5.3}
27	N {kgf}	49.0 {5.0}	43.1 {4.4}	43.1 {4.4}	58.8 {6.0}	52.9 {5.4}	52.9 {5.4}
28	N {kgf}	49.9 {5.1}	44.1 {4.5}	44.1 {4.5}	59.7 {6.1}	53.9 {5.5}	53.9 {5.5}
29	N {kgf}	50.9 {5.2}	45.0 {4.6}	45.0 {4.6}	60.7 {6.2}	54.8 {5.6}	54.8 {5.6}
30	N {kgf}	51.9 {5.3}	46.0 {4.7}	46.0 {4.7}	61.7 {6.3}	55.8 {5.7}	55.8 {5.7}
31	N {kgf}	53.9 {5.5}	47.0 {4.8}	47.0 {4.8}	63.7 {6.5}	56.8 {5.8}	56.8 {5.8}
32	N {kgf}	54.8 {5.6}	48.0 {4.9}	48.0 {4.9}	64.6 {6.6}	57.8 {5.9}	57.8 {5.9}
33	N {kgf}	55.8 {5.7}	49.0 {5.0}	49.0 {5.0}	65.6 {6.7}	58.8 {6.0}	58.8 {6.0}
34	N {kgf}	56.8 {5.8}	49.9 {5.1}	49.9 {5.1}	66.6 {6.8}	59.7 {6.1}	59.7 {6.1}
35	N {kgf}	57.8 {5.9}	50.9 {5.2}	50.9 {5.2}	67.6 {6.9}	60.7 {6.2}	60.7 {6.2}

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PRODUCT SPECIFICATION



LANGUAGE

JAPANESE
ENGLISH

【7. FFC/FPC保持力 FPC RETENTION FORCE】

極数 Number of Circuit	単位 UNIT	保持力 (最小値) Retention Force (MINIMUM)		極数 Number of Circuit	単位 UNIT	保持力 (最小値) Retention Force (MINIMUM)	
		初回 1st	10回目 10th			初回 1st	10回目 10th
3	N {kgf}	5.4 {0.55}	4.9 {0.50}	19	N {kgf}	10.8 {1.10}	7.9 {0.80}
4	N {kgf}	5.9 {0.60}	4.9 {0.50}	20	N {kgf}	11.3 {1.15}	7.9 {0.80}
5	N {kgf}	6.4 {0.65}	5.4 {0.55}	21	N {kgf}	11.8 {1.20}	8.4 {0.85}
6	N {kgf}	6.9 {0.70}	5.9 {0.60}	22	N {kgf}	12.3 {1.25}	8.9 {0.90}
7	N {kgf}	7.4 {0.75}	6.4 {0.65}	23	N {kgf}	12.8 {1.30}	8.9 {0.90}
8	N {kgf}	7.9 {0.80}	6.9 {0.70}	24	N {kgf}	13.3 {1.35}	9.4 {0.95}
9	N {kgf}	8.4 {0.85}	7.4 {0.75}	25	N {kgf}	13.8 {1.40}	11.8 {1.20}
10	N {kgf}	8.9 {0.90}	7.9 {0.80}	26	N {kgf}	14.3 {1.45}	12.3 {1.25}
11	N {kgf}	6.9 {0.70}	4.9 {0.50}	27	N {kgf}	14.7 {1.50}	12.8 {1.30}
12	N {kgf}	7.4 {0.75}	5.4 {0.55}	28	N {kgf}	15.2 {1.55}	13.3 {1.35}
13	N {kgf}	7.9 {0.80}	5.9 {0.60}	29	N {kgf}	15.7 {1.60}	13.8 {1.40}
14	N {kgf}	8.4 {0.85}	5.9 {0.60}	30	N {kgf}	16.2 {1.65}	14.3 {1.45}
15	N {kgf}	8.9 {0.90}	6.4 {0.65}	31	N {kgf}	16.7 {1.70}	14.7 {1.50}
16	N {kgf}	9.4 {0.95}	6.9 {0.70}	32	N {kgf}	17.2 {1.75}	15.2 {1.55}
17	N {kgf}	9.8 {1.00}	6.9 {0.70}	33	N {kgf}	17.7 {1.80}	15.7 {1.60}
18	N {kgf}	10.3 {1.05}	7.4 {0.75}	34	N {kgf}	18.2 {1.85}	16.2 {1.65}
				35	N {kgf}	18.7 {1.90}	16.7 {1.70}

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PRODUCT SPECIFICATION

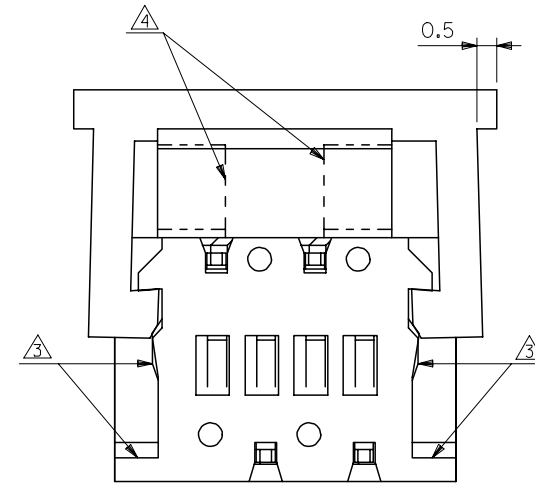
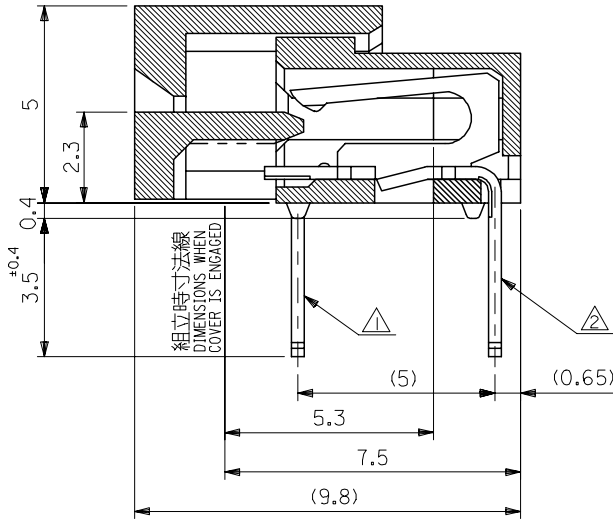
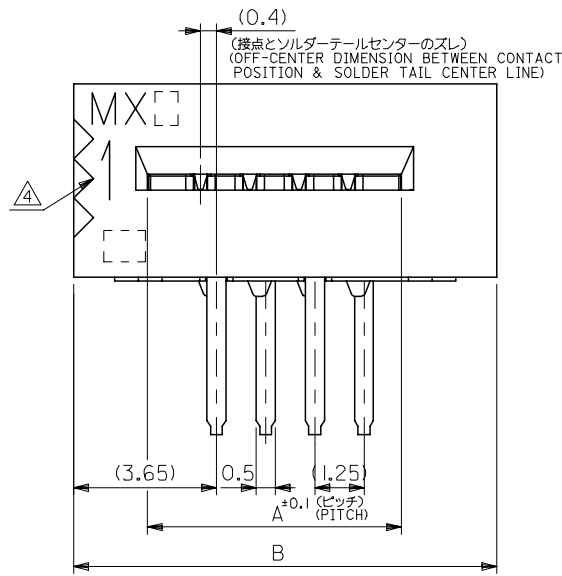


LANGUAGE
JAPANESE
ENGLISH

REV.	REV. RECORD	DATE	EC NO.	WRITTEN BY :	CHECKED BY :
A	RELEASED	'04/03/16	J2004-3126	N.AIDA	K.TOJO
B	REVISED	'04/12/13	J2005-1741	E.SUZUKI	K.TOJO

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REV.	DESCRIPTION	THIS DOCUMENT CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
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10 9 8 7 6 5 4 3 2 1



注記 NOTES

- △ MX J側を基準に奇数番目の極におけるソルダーテール。SOLDER TAIL OF ODD CKTS, MXJ MARK AS BASIC.
- △ MX J側を基準に偶数番目の極におけるソルダーテール。SOLDER TAIL OF EVEN CKTS, MXJ MARK AS BASIC.
- △ 3極～10極に適用。APPLY FOR 3-10 CKTS.
- △ 3極～19極に適用。APPLY FOR 3-19 CKTS.
- 5. () 内寸法は、参考値。
() DIMENSION IS FOR REFERENCE.
- 6. ソルダーテールは、先端が取付推奨穴にガイドされること。
SOLDER TAILS MAY BE CHECKED BY INSERTION FOR RECOMMENDED PCB BOARD HOLES.
- 7. 本製品は5597-NAPBの鉛フリー品である。
THIS PRODUCT IS LEAD FREE OF 5597-NAPB.

48.25	43.95	39-53-2344	5597-34APB7F	34
47.00	42.70	-2334	-33APB7F	33
45.75	41.45	-2324	-32APB7F	32
44.50	40.20	-2314	-31APB7F	31
43.25	38.95	-2304	-30APB7F	30
42.00	37.70	-2294	-29APB7F	29
40.75	36.45	-2284	-28APB7F	28
39.50	35.20	-2274	-27APB7F	27
38.25	33.95	-2264	-26APB7F	26
37.00	32.70	-2254	-25APB7F	25
35.75	31.45	-2244	-24APB7F	24
34.50	30.20	-2234	-23APB7F	23
33.25	28.95	-2224	-22APB7F	22
32.00	27.70	-2214	-21APB7F	21
30.75	26.45	-2204	-20APB7F	20
29.50	25.20	-2194	-19APB7F	19
28.25	23.95	-2184	-18APB7F	18
27.00	22.70	-2174	-17APB7F	17
25.75	21.45	-2164	-16APB7F	16
24.50	20.20	-2154	-15APB7F	15
23.25	18.95	-2144	-14APB7F	14
22.00	17.70	-2134	-13APB7F	13
20.75	16.45	-2124	-12APB7F	12
19.50	15.20	-2114	-11APB7F	11
18.25	13.95	-2104	-10APB7F	10
17.00	12.70	-2094	-09APB7F	9
15.75	11.45	-2084	-08APB7F	8
14.50	10.20	-2074	-07APB7F	7
13.25	8.95	-2064	-06APB7F	6
12.00	7.70	-2054	-05APB7F	5
10.75	6.45	-2044	-04APB7F	4
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B	A	EDP NO.	ENG NO.	極数 CKT.

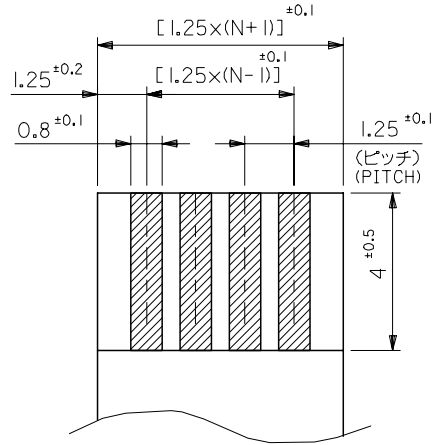
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TERMINAL : PHOSPHOR-BRONZE	THK : 0.3t
仕上げ FINISH	TIN-BISMUTH : 10 MICROMETER MINIMUM
OVER NICKEL PLATING :	10 MICROMETER MINIMUM
適用電線範囲 WIRE RANGE	— # —
被覆外径 INS. RANGE	— # —

REVISED	DESCRIPTION
EC NO: J2007-2876	2007/04/19
DRW:KSAIT001	2007/04/19
CHKD:THARUYAMA	2007/04/19
APPR:NUKITA	2007/04/20
B	

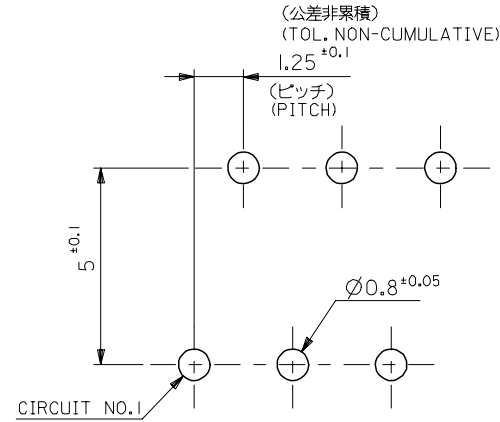
GENERAL TOLERANCES (UNLESS SPECIFIED)	
10 UNDER	±0.2
10 OVER 30 UNDER	±0.25
30 OVER	±0.3
ANGULAR	±3 °
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
M. NAGATA	'04/05/10
CHECKED BY	DATE
K. TOJO	'04/05/10
APPROVED BY	DATE
M. SASAO	'04/05/10
MATERIAL NO.	SEE CHART
SIZE	A3

SCALE	DESIGN UNITS	MODEL NO.	SHEET NO.
---	METRIC	5597-NAPB7F	1 OF 2
TITLE		THIRD ANGLE PROJECTION	
1.25 FPC CONNECTOR ASSY ZIF -LEAD FREE-			
MOLEX INCORPORATED			
DOCUMENT NO. SD-5597-011			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



適合FPC/FFC推奨寸法
RECOMMENDED FPC/FFC
厚さ THK : 0.3^{±0.05}



基板取付穴推奨寸法 (t=1.6)
RECOMMENDED P.C. BOARD
HOLE DIMENSION

FPC/FFCについて:

打抜き方向は導体側から補強板側を推奨いたします。

導体部については軟銅箔35マイクロメートルまたは50マイクロメートルを推奨いたします。

ABOUT FPC/FFC

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.

RECOMMENDED CONDUCTOR SPEC :

THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.

FPCについて:

補強フィルム材質はポリイミドを推奨します。

接着剤は熱硬化接着剤を推奨します。

ABOUT FPC

RECOMMENDED MATERIAL :

STIFFENER FILM : POLYIMIDE

BONDING AGENT : THERMOSETTING BONDING AGENT

MODEL NO. 5597-NAPB7F

REVISED EC NO: J2007-2876 DRWN:KSAIT001 2007/04/19 CHKD:THARUYAMA 2007/04/19 APPR:NUKITA 2007/04/20	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNIT'S METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	± 0.2	DRAWN BY M. NAGATA	DATE '04/05/10	TITLE 1.25 FPC CONNECTOR ASSY ZIF -LEAD FREE-			
	10 OVER 30 UNDER	± 0.25	CHECKED BY K. TOJO	DATE '04/05/10	MOLEX INCORPORATED			
	30 OVER	± 0.3	APPROVED BY M. SASAO	DATE '04/05/10	DOCUMENT NO. SD-5597-011		SHEET NO. 2 OF 2	
	ANGULAR	± 3 °	MATERIAL NO. SEE CHART					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				