



No. of Contacts	A	B	C	D	E	F
50	29.40	24.50	28.50	25.60		
49	28.90	24.00	28.00	25.10		
48	28.40	23.50	27.50	24.60		
47	27.90	23.00	27.00	24.10		
46	27.40	22.50	26.50	23.60		
45	26.90	22.00	26.00	23.10		
44	26.40	21.50	25.50	22.60		
43	25.90	21.00	25.00	22.10		
42	25.40	20.50	24.50	21.60		
41	24.90	20.00	24.00	21.10		
40	24.40	19.50	23.50	20.60		
39	23.90	19.00	23.00	20.10		
38	23.40	18.50	22.50	19.60		
37	22.90	18.00	22.00	19.10		
36	22.40	17.50	21.50	18.60		
35	21.90	17.00	21.00	18.10		
34	21.40	16.50	20.50	17.60		
33	20.90	16.00	20.00	17.10		
32	20.40	15.50	19.50	16.60		
31	19.90	15.00	19.00	16.10		
30	19.40	14.50	18.50	15.60		
29	18.90	14.00	18.00	15.10		
28	18.40	13.50	17.50	14.60		
27	17.90	13.00	17.00	14.10		
26	17.40	12.50	16.50	13.60		
25	16.90	12.00	16.00	13.10		
24	16.40	11.50	15.50	12.60		
23	15.90	11.00	15.00	12.10		
22	15.40	10.50	14.50	11.60		
21	14.90	10.00	14.00	11.10		
20	14.40	9.50	13.50	10.60		
19	13.90	9.00	13.00	10.10		
18	13.40	8.50	12.50	9.60		
17	12.90	8.00	12.00	9.10		
16	12.40	7.50	11.50	8.60		
15	11.90	7.00	11.00	8.10		
14	11.40	6.50	10.50	7.60		
13	10.90	6.00	10.00	7.10		
12	10.40	5.50	9.50	6.60		
11	9.90	5.00	9.00	6.10		
10	9.40	4.50	8.50	5.60		
9	8.90	4.00	8.00	5.10		
8	8.40	3.50	7.50	4.60		
7	7.90	3.00	7.00	4.10		
6	7.40	2.50	6.50	3.60		
5	6.90	2.00	6.00	3.10		
4	6.40	1.50	5.50	2.60		

APPLICABLE FPC/FFC RECOMMENDED DIMENSION (THICKNESS:0.30±0.03)

1. MATERIAL:

- 1.1 HOUSING: LCP,UL94V-0; COLOR: NATURE.
- 1.2 ACTUATOR: LCP,UL94V-0; COLOR: BLACK.
- 1.3 CONTACT: C5191,T=0.20±0.01mm
- 1.4 SOLDER PAD: C2680,T=0.20±0.01mm

2. FINISH:

- 2.1 CONTACT:100u" MIN. TIN PLATED IN SOLDER AREA 50u" MIN. NICKEL UNDERPLATED OVERALL.
- 2.2 SOLDER PAD: 50u" MIN. NICKEL PLATED OVERALL. 100u" MIN. TIN PLATED OVERALL.

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X. ± 0.30	APPD: 罗小春
.X ± 0.25	CHKD: 张伟
.XX ± 0.20	DR: 黄彬
.XXX ±	UNITS: mm
X" ± 1"	SCALE: 1:1
X' ± 0.5"	

TITLE: HX0.5-10P XJH2.0 043	
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Dimension	
A	B
C	D

REV	DESCRIPTION	DATE
A	初版发行	2020/07/24

深圳市韩下电子有限公司

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深圳市韩下电子有限公司

Shenzhen Hanxia Electronic Co., Ltd
Tel: 0755-33819206 Fax: 0755-27597491

承 认 书

SPECIFICATION FOR APPROVAL

客 户 Customer:

产品名称 Project:

FPC

规格型号 Part No:

HX0.5-10P XJH2.0 043

贵公司承认印 Approval signatures

料 号/Part No.	签 章/Signatures

日期 Date:

拟制/Drawn	黄彬	
审核/Check	张伟	
批准/Approved	罗小春	

产 品 规 格 书

PRODUCT SPECIFICATION

【1】适用范围 SCOPE

本规格书适用于：0.5间距柔性扁平电缆连接器

This specification covers the 0.5mm Pitch FPC/FFC Connectors

【2】产品名称及型号 PRODUCT NAME AND PART NUMBER

产品名称 Product Name	产品型号 Part Number
FFC/FPC 扁平电缆连接器	

【3】定格 RATINGS

项目 Item	规 格	Requirement
最大容许电压 Rated Voltage(MAX)	50V	[AC/DC(有效值 Virtual value)50Hz]
最大容许电流 Rated Current(MAX)	0.4A	
使用温度范围 Ambient temperature Range		-55℃ ~ +85℃

【4】性能 PERFORMANCE

4.1 电气性能 Electrical Performance

项目 Item		条件 Test Condition	规格 Requirement
4.1.1	接触电阻 Contact Resistance	适合 FPC/FFC 嵌合；开放电压 20mV 以下；短路电流 10mA 的状态下测定。 Mate applicable FPC/FFC and measure by dry circuit, 20mV MAX, 10mA.	$\leq 30 \text{ m}\Omega$ MAX
4.1.2	绝缘电阻 Insulation Resistance	适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 DC 500V 下测定。 Mate applicable FPC/FFC and apply 500V DC between adjacent terminal or ground.	500M Ω MIN
4.1.3	耐电压 Dielectric	适合 FPC/FFC 嵌合；相邻端子间或端子与地面间加 AC 200V（有效值）历时 1 分钟下测定。 Mate applicable FPC/FFC and apply 200V AC (virtual value) for 1minute between adjacent terminal or ground.	无击穿现象 No Breakdown

4.2 机械性能 Mechanical Performance

项目 Item		条件 Test Condition	规格 Requirement
4.2.1	锁紧力及拔出力 Locking and Withdrawal Force	适合 0.3mm 厚的 FFC；用每分钟 $25 \pm 3\text{mm}$ 的速度；平行地插入、锁紧、拔出。 Insert and extract applicable FFC at the speed rate of $25 \pm 3\text{mm}/\text{minute}$.	锁紧力 Locking $1.96*n \text{ (N) MAX}$ 拔出力 Withdrawal $0.49*n \text{ (N) MIN}$
4.2.2	端子保持力 Terminal /Housing Retention Force	以用每分钟 $25 \pm 3\text{mm}$ 的速度平行向外拉 Pull the terminal at the speed rate of $25 \pm 3\text{mm per minute}$	3.92N MIN

4.3 环境和其他性能 Environmental Performance and Others

项目 Item		条件 Test Condition	规格 Requirement	
4.3.1	重复插拔 Repeated Insertion and Withdrawal	无通电状态；以 10 次/分钟的速度插拔 20 次 Insertion and withdrawal actuator up to 20 cycles at the speed rate of less than 10 cycles/minute	接触抵抗 Contact Resistance	$60 \text{ m}\Omega$ MAX
4.3.2	温度上升 Temperature Rise	适合 FPC/FFC 嵌合；最大容许电流通电，温度测定。（UL 498） Carrying rated current load. (UL 498)	温度上升 Temperature Rise	30 $^{\circ}\text{C}$ MAX

项目 Item		条件 Test Condition	规格 Requirement	
4.3.3	耐振动性	DC 1mA 通电状态下；嵌合轴沿 XYZ 三个方向振动；振幅 1.5mm；频率	外观 Appearance	无损坏 No Damage

	Vibration	10-55-10Hz/分; 历时 2 小时 Amplitude: 1.5mm P-P Sweep time: 10-55-10Hz in 1 minute Duration: 2 hours in each X.Y.Z. axes	接触抵抗 Contact Resistance	60 m Ω MAX
			瞬断 Discontinuity	1 ms MAX.
4.3.4	耐冲击性 Shock	DC 1mA 通电状态下; 嵌合轴沿相互垂直的 6 个方向; 以 490m/s ² {50G}冲击; 各 3 次 490m/s ² {50G}, 3 strokes in each X.Y.Z. axes.	外观 Appearance	无损坏 No Damage
			瞬断 Discontinuity	1 ms MAX.
4.3.5	耐热性 Heat Resistance	适合 FPC/FFC 嵌合; 85±2℃的空气中; 放置 96 小时; 再回到室温中放置 1-2 小时 85±2℃, 96 hour	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.6	耐寒性 Cold Resistance	适合 FPC/FFC 嵌合; -40±2℃的空气中; 放置 96 小时; 再回到室温中放置 1-2 小时 -40±2℃, 96 hour	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.7	耐湿性 Humidity	适合 FPC/FFC 嵌合; 40±2℃、相对湿度 90-95%的空气中; 放置 96 小时; 再回到室温中 0.5 小时内测定 Temperature: 40±2℃ Relative Humidity: 90-95% Duration: 96 Hours	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
			耐电压 Dielectric Strength	必须满足 4.1.3 Must meet 4.1.3
			绝缘抵抗 Insulation Resistance	20 M Ω MIN
4.3.8	温度循环 Temperature Cycling	适合 FPC/FFC 嵌合; -55±3℃ 30 分钟; 常温常湿 10-15 分钟; 85±2℃ 30 分钟; 常温常湿 10-15 分钟, 循环 5 次。 5 cycles of: a) -55±3℃ 30 minutes b) 85±2℃ 30 minutes	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
项目 Item		条件 Test Condition	规格 Requirement	
4.3.9	耐盐雾性 Salt Spray	适合 FPC/FFC 嵌合; 35±2℃、5±1% 的盐水喷雾 48 小时; 试验后常温水洗; 再室温干燥。 48 ± 4 hours exposure to a salt spray from the 5 ± 1% solution at 35 ± 2℃.	外观 Appearance	无损坏、腐蚀 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX

4.3.10	耐亚硫酸 SO2 Gas	适合 FPC/FFC 嵌合; 40±2℃、50±5ppm 的亚硫酸中放置 24 小时 24 hours exposure to 50 ± 5ppm. SO2 gas at 40±2℃.	接触抵抗 Contact Resistance	60 m Ω MAX
4.3.11	耐氨性 NH3 Gas	适合 FPC/FFC 嵌合; 浓度为 28% 的氨水容器中; 放置 40 分钟。 40 minutes exposure to NH3 gas evaporating from 28% Ammonia solution	外观 Appearance	无损坏 No Damage
			接触抵抗 Contact Resistance	60 m Ω MAX
4.3.12	可焊性 Solder ability	端子前端基准面 0.2mm 处浸入 245±5℃ 的锡槽中; 历时 2±0.5 sec。 Soldering Time: 2±0.5 sec. Soldering Temperature: 245±5℃ 0.2 mm from terminal tip	沾敷性 Solder Wetting	沾敷面积 95%以上
4.3.13	耐焊接热 Resistance to Soldering heat	在 245±5℃ 热风炉中经 30±5sec 条件下, 至少进行 5 次。 Soldering Time: 30±5 sec. Soldering Temperature: 245±5℃	外观 Appearance	无损坏、变形 No Damage

() : 参考规格 Reference Standard

{ } : 参考单位 Reference Unit

【5】外观形状、寸法及材质 PRODUCT SHAPE, DIMENSIONS AND MATERIALS

图面参照 Refer to the drawing.

名称 NAME	材质 MATERIALS
主体 Main body	LCP UL 94V-0
锁扣 Housing Lock	LCP UL 94V-0
端子 Sit up	磷青铜 Phosphor Bronze
焊片 Contact	磷青铜 Phosphor Bronze
备注 Remark	金属表面镀锡