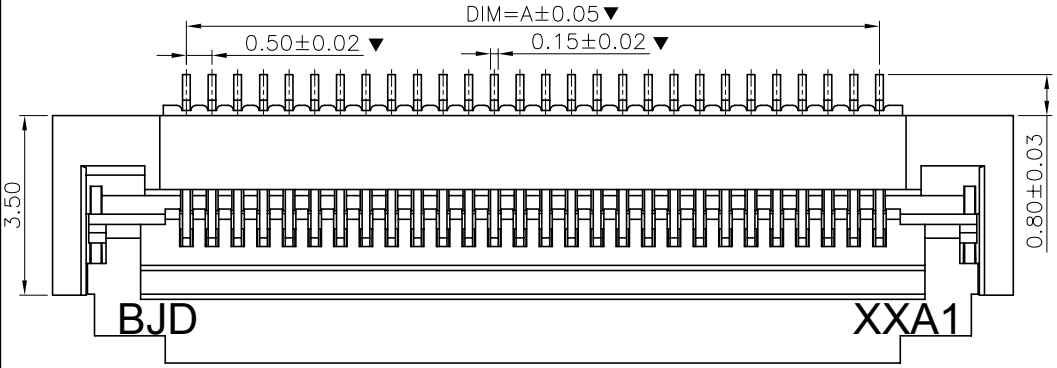
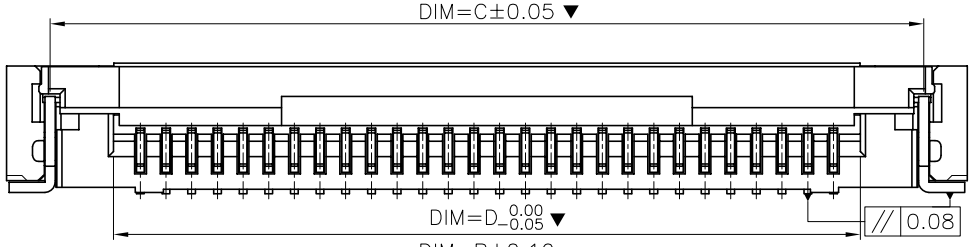
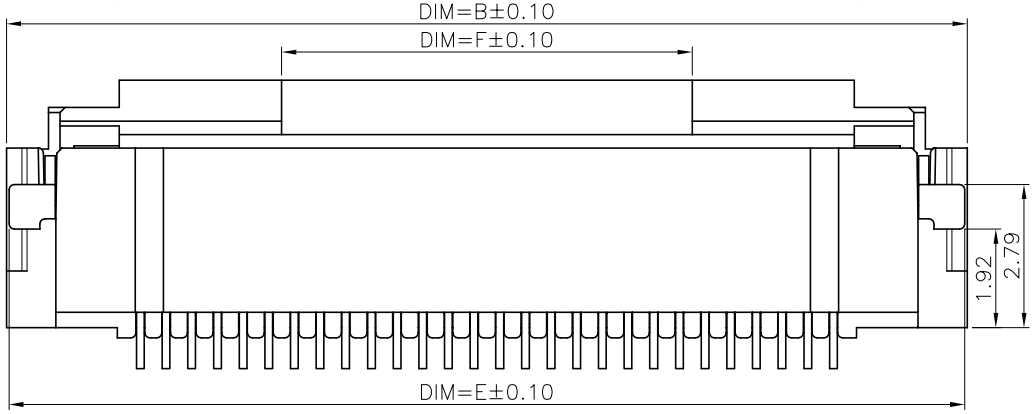




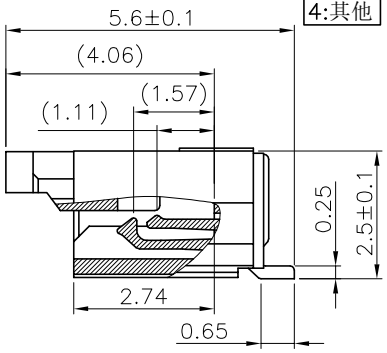


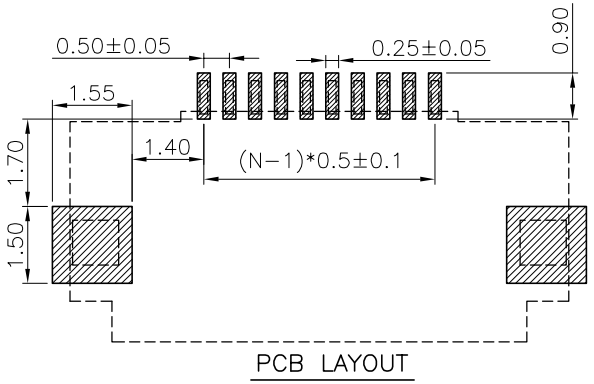
NOTES:
1.MATERIAL:
HOUSING:THERMOPLASTIC(UL94V−0)
ACTUATOR:THERMOPLASTIC(UL94V−0)
TERMINAL:PHOSPHOR BRONZE MATTE TIN PLATED
FITTING NAIL:BRASS MATTE TIN PLATED
2.PART NO. SPECIFICATION:101072−X0XXX0−HF

1:管装
2:卷装
3:袋装
4:其他

PIN数

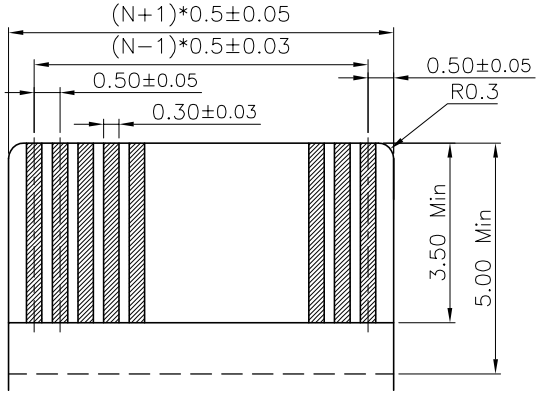
1:雾锡
2:亮锡
3:镀金1u′
5:镀金3u′
6:半金锡



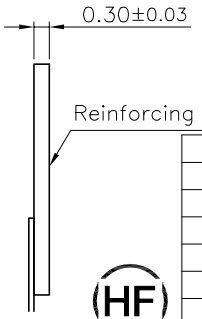


PCB LAYOUT

NO. OF PIN	DIMENSION A	B	C	D	E	F
4	1.50	6.72	5.02	2.55	6.62	NA
5	2.00	7.22	5.52	3.05	7.12	NA
6	2.50	7.72	6.02	3.55	7.62	NA
7	3.00	8.22	6.52	4.05	8.12	NA
8	3.50	8.72	7.02	4.55	8.62	NA
9	4.00	9.22	7.52	5.05	9.12	NA
10	4.50	9.72	8.02	5.55	9.62	NA
11	5.00	10.22	8.52	6.05	10.12	NA
12	5.50	10.72	9.02	6.55	10.62	NA
13	6.00	11.22	9.52	7.05	11.12	NA
14	6.50	11.72	10.02	7.55	11.62	NA
15	7.00	12.22	10.52	8.05	12.12	NA
16	7.50	12.72	11.02	8.55	12.62	NA
17	8.00	13.22	11.52	9.05	13.12	NA
18	8.50	13.72	12.02	9.55	13.62	NA
19	9.00	14.22	12.52	10.05	14.12	NA
20	9.50	14.72	13.02	10.55	14.62	NA
21	10.00	15.22	13.52	11.05	15.12	NA
22	10.50	15.72	14.02	11.55	15.62	NA
23	11.00	16.22	14.52	12.05	16.12	NA
24	11.50	16.72	15.02	12.55	16.62	NA
25	12.00	17.22	15.52	13.05	17.12	NA
26	12.50	17.72	16.02	13.55	17.62	NA
27	13.00	18.22	16.52	14.05	18.12	NA
28	13.50	18.72	17.02	14.55	18.62	NA
29	14.00	19.22	17.52	15.05	19.12	NA
30	14.50	19.72	18.02	15.55	19.62	NA
31	15.00	20.22	18.52	16.05	20.12	NA
32	15.50	20.72	19.02	16.55	20.62	NA
33	16.00	21.22	19.52	17.05	21.12	NA
34	16.50	21.72	20.02	17.55	21.62	NA
35	17.00	22.22	20.52	18.05	22.12	NA
36	17.50	22.72	21.02	18.55	22.62	NA
37	18.00	23.22	21.52	19.05	23.12	NA
38	18.50	23.72	22.02	19.55	23.62	NA
39	19.00	24.22	22.52	20.05	24.12	NA
40	19.50	24.72	23.02	20.55	24.62	8.00
41	20.00	25.22	23.52	21.05	25.12	8.00
42	20.50	25.72	24.02	21.55	25.62	8.00
43	21.00	26.22	24.52	22.05	26.12	8.00
44	21.50	26.72	25.02	22.55	26.62	8.00
45	22.00	27.22	25.52	23.05	27.12	8.00
46	22.50	27.72	26.02	23.55	27.62	8.00
47	23.00	28.22	26.52	24.05	28.12	8.50
48	23.50	28.72	27.02	24.55	28.62	9.00
49	24.00	29.22	27.52	25.05	29.12	9.50
50	24.50	29.72	28.02	25.55	29.62	10.00
51	25.00	30.22	28.52	26.05	30.12	10.50
52	25.50	30.72	29.02	26.55	30.62	11.00
53	26.00	31.22	29.52	27.05	31.12	11.50
54	26.50	31.72	30.02	27.55	31.62	12.00
55	27.00	32.22	30.52	28.05	32.12	12.50
56	27.50	32.72	31.02	28.55	32.62	13.00
57	28.00	33.22	31.52	29.05	33.12	13.50
58	28.50	33.72	32.02	29.55	33.62	14.00
59	29.00	34.22	32.52	30.05	34.12	14.50
60	29.50	34.72	33.02	30.55	34.62	15.00
61	30.00	35.22	33.52	31.05	35.12	15.50
62	30.50	35.72	34.02	31.55	35.62	16.00
63	31.00	36.22	34.52	32.05	36.12	16.50
64	31.50	36.72	35.02	32.55	36.62	17.00



RECOMMENDED FFC/FPC DIMENSION



SER	REVISIONS	CHK	DATE

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
X.
X.X ±0.20
X.XX ±0.10
X.XXX
ANG. ±0°30′

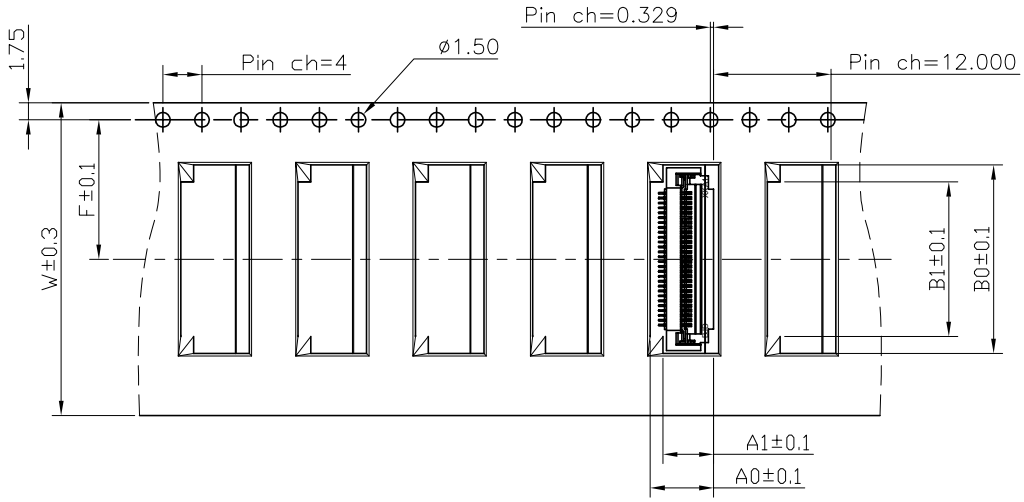
UNIT MM

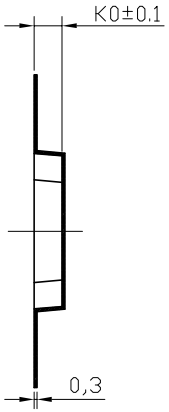
客户图 Drawings

北极大电子科技有限公司
BEIJIDA ELECTRONICS TECHNOLOGY CO. LIMITED

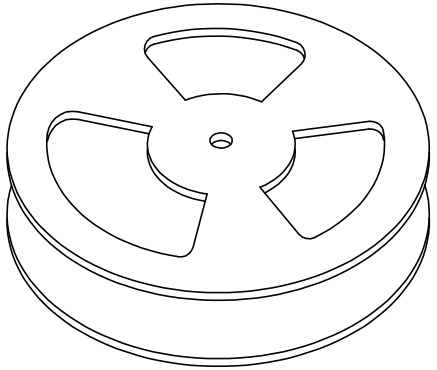
APPROVED	DATE	COMPUTER NO
		101072-X0XXX0-HF
CHECKED 陈天舒	DATE 2016−10−09	NAME FPC0.5-15C代H2.5掀盖式成品
DRAWN 张运兴	DATE 2016−10−09	SIZE A4 / SCALE 7:1 / REV A

Pin数	A0	A1	B0	B1	K0	F	W	卷数量
4			7.30	3.90		6.25	16	
5			7.80	4.40		6.25	16	
6			8.30	4.90		10.25	24	
7			8.80	5.40		10.25	24	
8			9.30	5.90		10.25	24	
9			9.80	6.40		10.25	24	
10			10.30	6.90		10.25	24	
11			10.80	7.40		10.25	24	
12			11.30	7.90		10.25	24	
13			11.80	8.40		10.25	24	
14			12.30	8.90		10.25	24	
15			12.80	9.40		10.25	24	
16			13.30	9.90		10.25	24	
17			13.80	10.40		10.25	24	
18			14.30	10.90		10.25	24	
19			14.80	11.40		10.25	24	
20			15.30	11.90		10.25	24	
21			15.80	12.40		10.25	24	
22			16.30	12.90		14.25	32	
23			16.80	13.40		14.25	32	
24			17.30	13.90		14.25	32	
25			17.80	14.40		14.25	32	
26			18.30	14.90		14.25	32	
27			18.80	15.40		14.25	32	
28			19.30	15.90		14.25	32	
29			19.80	16.40		14.25	32	
30			20.30	16.90		14.25	32	
31			20.80	17.40		14.25	32	
32			21.30	17.90		14.25	32	
33			21.80	18.40		14.25	32	
34	6.50	5.20	22.30	18.90	2.70	14.25	32	2000PCS /卷
35			22.80	19.40		14.25	32	
36			23.30	19.90		14.25	32	
37			23.80	20.40		20.25	44	
38			24.30	20.90		20.25	44	
39			24.80	21.40		20.25	44	
40			25.30	21.90		20.25	44	
41			25.80	22.40		20.25	44	
42			26.30	22.90		20.25	44	
43			26.80	23.40		20.25	44	
44			27.30	23.90		20.25	44	
45			27.80	24.40		20.25	44	
46			28.30	24.90		20.25	44	
47			28.80	25.40		20.25	44	
48			29.30	25.90		20.25	44	
49			29.80	26.40		20.25	44	
50			30.30	26.90		20.25	44	
51			30.80	27.40		20.25	44	
52			31.30	27.90		20.25	44	
53			31.80	28.40		20.25	44	
54			32.30	28.90		20.25	44	
55			32.80	29.40		20.25	44	
56			33.30	29.90		20.25	44	
57			33.80	30.40		20.25	44	
58			34.30	30.90		20.25	44	
59			34.80	31.40		20.25	44	
60			35.30	31.90		20.25	44	
61			35.80	32.40		20.25	44	
62			36.30	32.90		20.25	44	
63			36.80	33.40		20.25	44	
64			37.30	33.90		20.25	44	





User Direction of Unreeling



PART NO. SPECIFICATION:101072-20XXX0-HF

PIN数

1:雾锡
2:亮锡
3:镀金1u'
5:镀金3u'
6:半金锡

SER	REVISIONS	CHK	DATE

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
X.
X.X ±0.1
X.XX ±0.05
X.XXX
ANG. ±0°30'

UNIT MM

包装图 Packaging Figure

北极大电子科技有限公司
BEIJIDA ELECTRONICS TECHNOLOGY CO. LIMITED

APPROVED	DATE	COMPUTER NO
		101072-20XXX0-HF
CHECKED 陈天舒	DATE 2016-10-09	NAME FPC0.5-15C代H2.5掀盖式卷装图
DRAWN 张运兴	DATE 2016-10-09	SIZE A4 / SCALE 3:4 / REV A

FPC 连接器产品规格书
FPC CONNECTOR SPECIFICATION

【1】参考文献
References:

◎EIA-364
ELECTRONICS INDUSTRIES ASSOCIATION

◎MIL-STD-202
Test Methods for Electronic and Electrical Component Parts

◎GB 5095.8
电子设备用机电元件基本试验规程及测试方法 第八部份
Part eighth of Electromecanical component’s basic test procedures
And test methods for electronic equipment

【2】产品适用范围
Scope of product application

◎本规范使用于 0.5 系列 FPC 连接器，包含了产品的性能、试验方法和要求。
This specification applies to 0.5 bar FPC connector series,contains the product performance,test methods and requirements.

Product Name	Customer P/N	BJD/PN
FPC CONN 0.5-15C Series	/	101072-X0XXX0

【3】额定值
Ratings

项目 Item	规格 Standard	
最大容许电压 Maximum allowable voltage	50V	[AC(有效值 rms)/DC]
最大容许电流 Maximum allowable current	0.5A	
使用温度范围 Temperature range	-40℃ ～ +105℃	

【4】保管条件
Sorage condition (reference item)

项目 Item	规格内容 Standard
储存温度 Storage temperature	20±8℃
储存湿度 Storage humidity	65%以下 Less than 65%
储存期限 Storage life	1 年(焊接贴板最佳时段为 6 个月内) one year

① 产品储存区域应保持清洁干燥，以免产品被污染或受潮变质。
To avoid product contamination or moisture deterioration ,Product storage area should be kept clean and dry,

② 产品的摆放应整齐，排列井然有序，叠放時要做到“上小下大、上轻下重”。
Products should be placed neatly in an orderly. The bigger and heavier the product is , the lower you put .

③ 产品不可直接堆放在地板上，用卡板堆放。
Products should not directly stacked on the floor, please put them by card-board.

【5】性能
Performance
试验条件 Test Conditions
1) 标准状态 Standard conditions
试验及测量如果没有特别的规定，就按周围温度 5～35℃，相对温度为 85%以下，普通气压 86～106kPa 来实施。但是，如果按此标准测量出的值有疑义时，以判定状态为准。
The test and measurement shall be conducted at the ambient temperature of5～35℃.relative Humidity of85%or less,and normal atmospheric pressure of86～106kPa unless otherwise Specified.If the judgment made on the basis of the values measured standard conditions is doubtful the test and measurement should be made under the judgment conditions.

2) 判定状态
Judgment conditions
判定状态是指:有规定环境条件下测量。周围温度 20±2℃，相对温度为 60-70%以下，普通气压 86～106kPa 的环境状态下测量。
Judgment conditions,environmental conditions under which the measurement is conducted.Are the conditions of ambient temperature of 20±2℃ relative humidity of 60-70%normal atmospheric pressure of86-106kPa.

5-1.电气性能
Electrical performance

NO.	试验项目 Items	试验条件 Test Condition	规格 Requirement
5.1.1	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 measured by dry circuit,20mV MAX., 10mA	20 mΩ MAX
5.1.2	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.	500MΩMIN
5.1.3	耐电压 Voltage resistance	适合 FPC/FFC 嵌合; 相邻端子间或端子与地面间加 AC 500V（有效值）历时 1 分钟下测定。 Mate applicable FPC/FFC and apply 500V AC (rms) for 1 minute between adjacent terminal or ground.	无击穿现象 No breakdown

5-2.机械性能
Mechanical Performance

NO.	试验项目 Items	试验条件 Test Condition	规格 Requirement
5.2.1	FPC 保持力 FPC Retention Force	适合 0.3mm 厚的 FFC;后盖锁好,用每分钟 25±3mm 的速度; 平行地拔出 。 Mate applicable thick 0.3mm FFC/FPC, Insert the actuator, pull the FPC at the speed rate of 25±3mm/minute	0.3*n (N) MIN
5.2.2	端子保持力 Terminal/Housing Retention Force	单一端子,以用每分钟 25±3mm 的速度平行向外拉 Apply axial pull out force at the speed rate of 25±3mm/minute on the terminal assembled in the housing	1.0 N MIN
5.2.3	重复插拔 Repeated pluggable	无通电状态,以 10 次/分钟的速度插拔 30 次 The power is off, Insert and withdraw actuator up to 30 cycles at the speed rate of less than 10 cycles/minute.	30 mΩ MAX

5-3.环境性能

Environment Performance

NO.	试验项目 Items	试验条件 Test Condition	规格 Requirement	
5.3.1	耐振动性 Vibration	DC 1mA 通电状态下；嵌合轴沿 XYZ 三个方向振动；振幅 10mm max；频率（8.3±1）-（200±4）-（8.3±1）Hz/分；历时 2 小时 The power is on with Current: DC 1mA Amplitude: 1.5mm P-P Sweep time:10-55-10Hz in 1 minute Duration:2 hours in each X.Y.Z. axes	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30mΩ MAX
			瞬断 Transient breaking	1 μs.MAX.
5.3.2	耐冲击性 Shock	在 DC 1 ma 通电的状态下，嵌合沿相互垂直的 6 个方向;每 3 次加速度 490 米/s2 {50g}。 Mate applicable FPC and subject to the following shock conditions. 3 times of shocks shall beapplied for each 6 directions along 3 mutuallyperpendicular axes, passing DC 1mA currentduring the test.(Total of 18 shocks)Test pulse : Half SinePeak value : 490m/s2 {50G}Duration : 6 milliseconds.	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30mΩ MAX
			瞬断 Transient breaking	1 μs.MAX.
5.3.3	耐热性 Heat resistance	适合 FPC/FFC 嵌合；105±2℃的空气中；放置 96 小时；再回到室温中放置 1-2 小时 Mate applicable FPC/FFC. in the air 105 ± 2 ℃ for 96 hours; to return to room temperature for 1-2 hours in the place	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30 mΩ MAX
5.3.4	耐寒性 cold resistance	适合 FPC/FFC 嵌合；-40±3℃的空气中；放置 96 小时；再回到室温中放置 1-2 小时 Mate applicable FPC/FFC, in the air -40 ± 2 ℃ for 96 hours;to return to room temperature for 1-2 hours in the place	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30 mΩ MAX

NO.	试验项目 Items	试验条件 Test Condition	规格 Requirement	
5.3.5	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 1-2 小时内测定 in the air of Temperature 40 ± 2 ℃ and 90-95% relative humidity for 96 hours; to return to room temperature for 1-2 hours in the place	外观 Appearance	无损坏 No damage
			耐电压 Dielectric Strength	满足 5.1.3
			绝缘抵抗 Insulation resistance	50 MΩ MIN
			接触抵抗 Contact resistance	30 mΩ MAX
5.3.6	温度循环 Temperatur e cycling	适合 FPC/FFC 嵌合；-40±3℃ 30 分钟；常温常湿 10-15 分钟；105±2℃ 30 分钟；常温常湿 10-15 分钟，循环 5 次。 5 cycles of: A)-40±3℃ 30 minutes B)Room temperature and humidity from 10 to 15 minutes C)105±2℃ 30 minutes D)Room temperature and humidity from 10 to 15 minute	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30 mΩ MAX
5.3.7	耐盐雾性 Salt Spray	适合 FPC/FFC 嵌合；35±2℃、5±1%的盐水喷雾(Sn 24H Au 48H)；试验后常温水洗；再室温干燥，常温常湿放置 1-2 小时。 Mate applicable FPC/FFC. (Sn 24 Au 48H)exposure to a salt spray from 5±1% solution at 35±2℃ . Use water at room temperature to wash ;To dry at room temperature Keep wet for 1-2 hours.	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30 mΩ MAX
5.3.8	耐亚硫酸 SO2 Gas	适合 FPC/FFC 嵌合；40±2℃、25±5ppm 的亚硫酸中放置 24 小时 Mate applicable FPC/FFC. 24H exposure to 25±5ppm SO2 Gas at 40±2℃	接触抵抗 Contact resistance	50 mΩ MAX

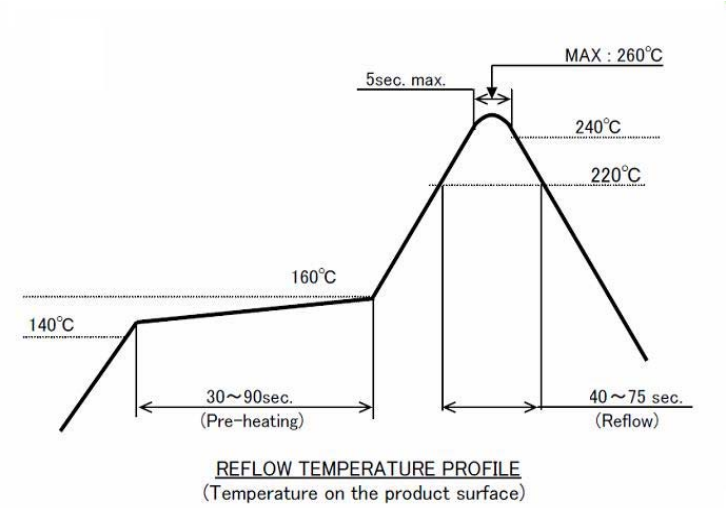
NO.	试验项目 Items	试验条件 Test Condition	规格 Requirement	
5.3.9	耐氨性 NH3 Gas	适合 FPC/FFC 嵌合；浓度为 28%的氨水容器中；放置 24 小时（产品不能接触氨水）。 Mate applicable FPC/FFC. 40 minutes exposure to NH3Gas evaporating from 28% Ammonia solution.	外观 Appearance	无损坏 No damage
			接触抵抗 Contact resistance	30 mΩ MAX
5.3.10	可焊性 Solderability	端子前端基准面 0.2mm 处浸入 250±5℃的锡槽中；历时 2±0.5 sec。 Soldering time: 2±0.5 sec Soldering temperature: 250±5℃	沾敷性 Solder Wetting	沾锡面积 95%以上 Soldering area more than 95%
5.3.11	耐焊热 Resistance to soldering Heat	高温烤箱 260±5℃,60 秒。 Soldering temperature 260±5℃,60sec。	外观 Appearance	无损坏 No damage

【6】焊接条件(参考项)
soldering condition (reference item)

（1）回流焊接条件： Reflow soldering conditions		（2）手工焊接条件 Manual soldering conditions	
预热 Preheat	140～160℃	温度 temperature	370-400℃
预热时间 Preheat time	30～90sec	焊接时 soldering time	3sec Max（一个 Pin 脚） 3sec max on each pin
最高温度 the highest temperature	Max 260℃		
焊接时间 soldering time	5sec Max		
条件 Condition	参照温度曲线图 Look at reflow condition picture		

◎焊接曲线图

Reflow condition picture



REFLOW TEMPERATURE PROFILE
(Temperature on the product surface)