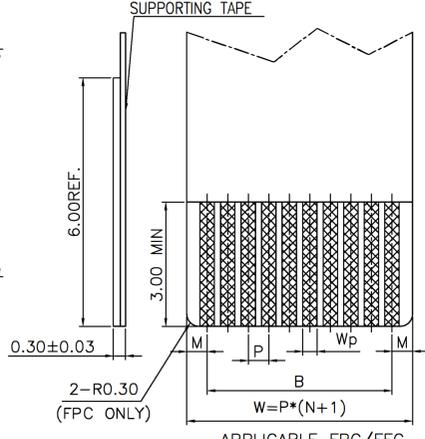
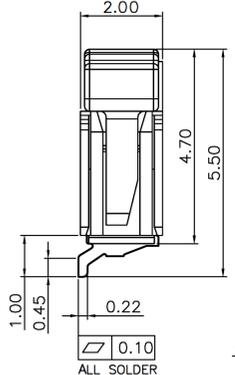
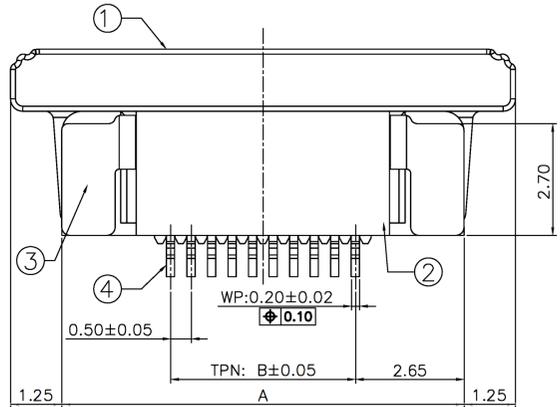
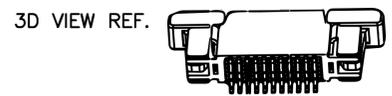
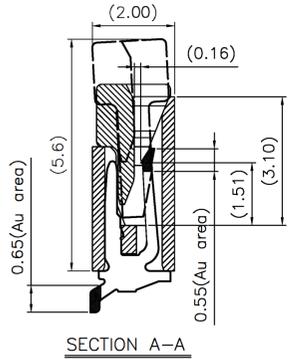
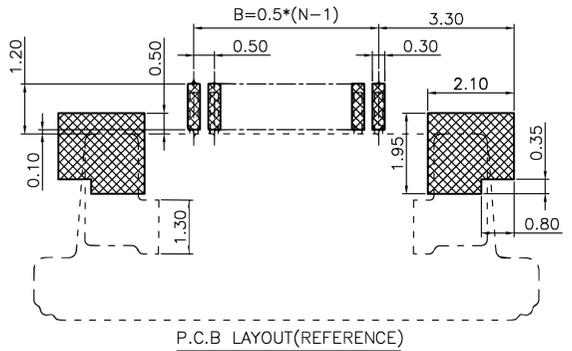


NOTE:
 1. ALL MATERIAL MUST BE COMPLY WITH SS-00259 OR RoHS.
 2. "▼" MARK IS IMPORTANT DIMENSIONS
 3. "▽" MARK IS CPK AND \bar{X} -R DIMENSION
 4. PART NO. LEGEND:
 HRS-F32* - 1A**1 - 110**

- NO. OF POSITIONS
- 7H: PHOSPHOR BRONZE
0.05um MIN Au(Au Area)
- 7A: PHOSPHOR BRONZE
MATTER TIN
- ⑩ AF: PHOSPHOR BRONZE
0.05um MIN Au(Au Area)
- 2Q: WITH Logo
- 2T: WITHOUT Logo



	FPC	FFC
M	0.5±0.05	0.5±0.05
P	0.5±0.03	0.5±0.03
B	B±0.05	B±0.05
W	W±0.05	W±0.05
Wp	0.35±0.03	0.30±0.03



DIMENSION LIST:

NO. OF POS.	A			NO. OF POS.	B			C		
	A	B	C		A	B	C	A	B	C
4	6.80	1.50	2.50	33	21.30	16.00	17.00			
5	7.30	2.00	3.00	34	21.80	16.50	17.50			
6	7.80	2.50	3.50	35	22.30	17.00	18.00			
7	8.30	3.00	4.00	36	22.80	17.50	18.50			
8	8.80	3.50	4.50	37	23.30	18.00	19.00			
9	9.30	4.00	5.00	38	23.80	18.50	19.50			
10	9.80	4.50	5.50	39	24.30	19.00	20.00			
11	10.30	5.00	6.00	40	24.80	19.50	20.50			
12	10.80	5.50	6.50	41	25.30	20.00	21.01			
13	11.30	6.00	7.00	42	25.80	20.50	21.51			
14	11.80	6.50	7.50	43	26.30	21.00	22.01			
15	12.30	7.00	8.00	44	26.80	21.50	22.51			
16	12.80	7.50	8.50	45	27.30	22.00	23.01			
17	13.30	8.00	9.00	46	27.80	22.50	23.51			
18	13.80	8.50	9.50	47	28.30	23.00	24.01			
19	14.30	9.00	10.00	48	28.80	23.50	24.51			
20	14.80	9.50	10.50	49	29.30	24.00	25.01			
21	15.30	10.00	11.00	50	29.80	24.50	25.51			
22	15.80	10.50	11.50	51	30.30	25.00	26.01			
23	16.30	11.00	12.00	52	30.80	25.50	26.51			
24	16.80	11.50	12.50	53	31.30	26.00	27.01			
25	17.30	12.00	13.00	54	31.80	26.50	27.51			
26	17.80	12.50	13.50	55	32.30	27.00	28.01			
27	18.30	13.00	14.00	56	32.80	27.50	28.51			
28	18.80	13.50	14.50	57	33.30	28.00	29.01			
29	19.30	14.00	15.00	58	33.80	28.50	29.51			
30	19.80	14.50	15.50	59	34.30	29.00	30.01			
31	20.30	15.00	16.00	60	34.80	29.50	30.51			
32	20.80	15.50	16.50							

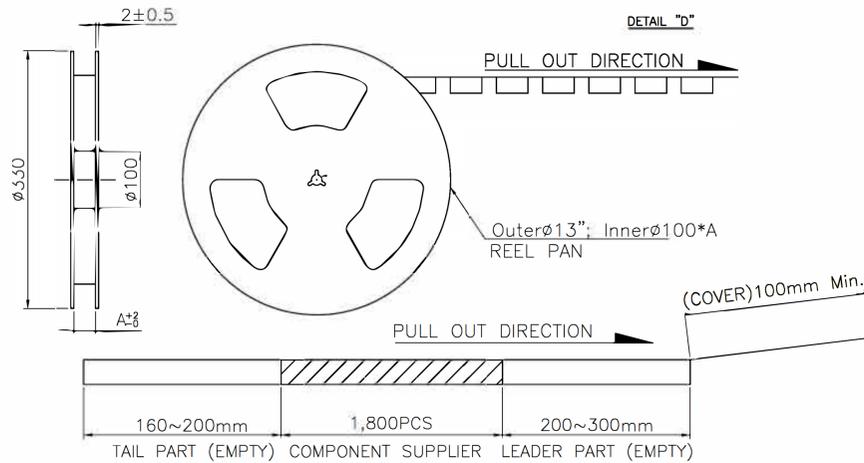
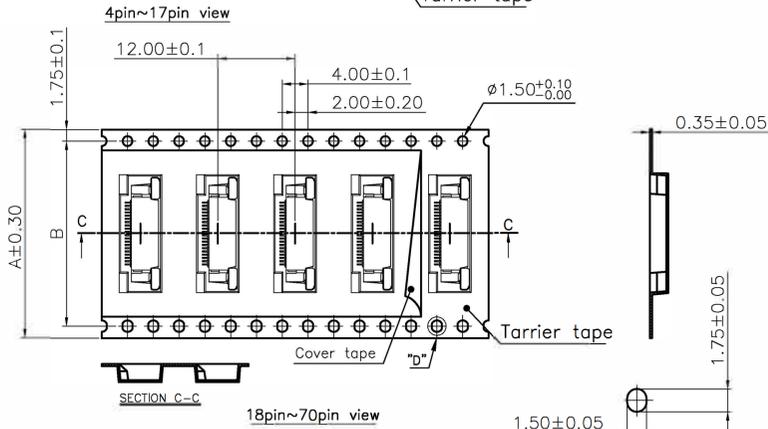
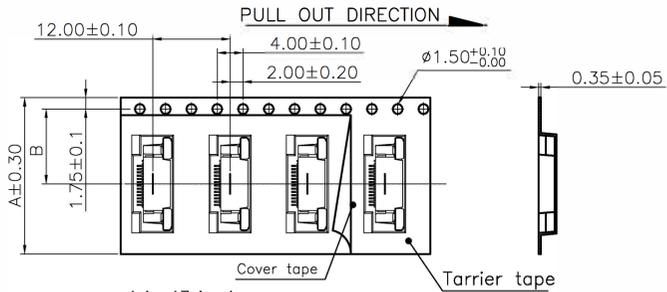
REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
B	/	Add new dimension	May.Wang 2014-12-24	Rain.Han 2014-12-24	Leo.Liu 2014-12-24
C	/	Unified FFC dimension	May.Wang 2019-01-19	Rain.Han 2019-01-19	Leo.Liu 2019-01-19
D	/	Update the drawing frame	May.Wang 2020-08-12	Rain.Han 2020-08-12	Leo.Liu 2020-08-12

NO.	COMPONENTS	MATERIALS	SPECIFICATION:FINISH/COLOR	QTY.
1	SLIDER	GLASS FILLED PA9T, UL94V-0	BLACK	1
2	HOUSING	GLASS FILLED LCP, UL94V-0	NATURAL	1
3	ANCHOR-PLATE	BRASS, T=0.20mm	SURFACE PLATING:2~5 um Sn UNDER PLATING:1~3 um Ni	2
4	CONTACT	PHOSPHOR BRONZE, T=0.20mm	SURFACE PLATING:SEE "NOTE" UNDER PLATING:1~3 um Ni	N

UNLESS OTHERWISE SPECIFIED TOLERANCES			ANGLE OF PROJECTION	
X.	±0.30	X. °	Customer Drw	
X.X	±0.25	X.X °	DOC Typ	
X.XX	±0.20	X.XX °	DRAWN DATE	
X.XXX	±0.15	X.XXX °	DESIGN DATE	
LINEAR DIMS		ANGLES DIMS	CHECKED DATE	
DWG NO.:	A-S0200		APPROVED DATE	
MATERIAL	SEE NOTES		SCALE	
FINISHED	SEE NOTES		UNIT : mm	

Horus Int. Electronics Co., LTD.		Horus Int. Electronics Co., LTD.	
TITLE:			
FPC P0.5 CONN ZIF R/A TYPE SMT (UPPER CONTACT)			
DWG NO.:	A-S0200	SIZE	A4
PART NUMBER:	HRS-F32Q-1A7*1-110**	REV.	D
	HRS-F32T-1A7*1-110**	SHEET	1 OF 2

1. PACKING INTO REEL:



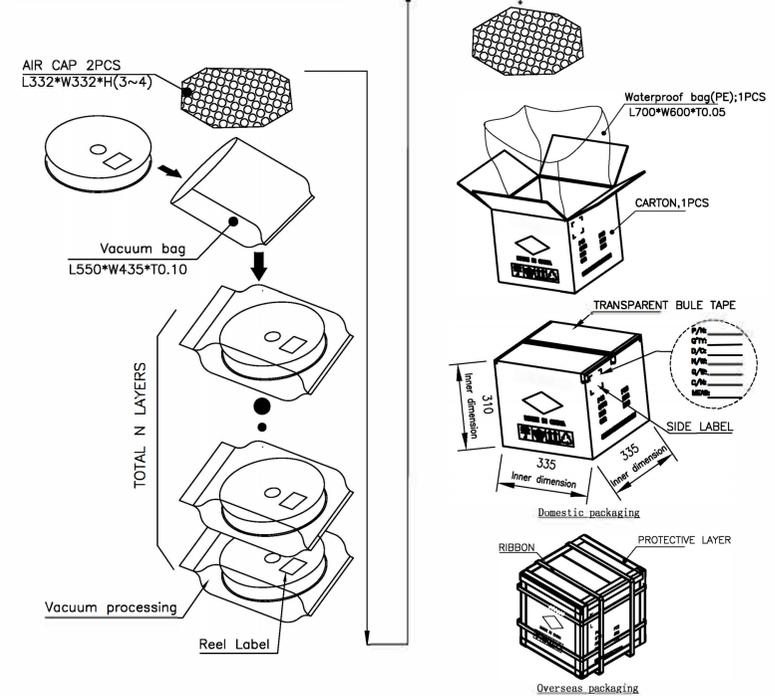
LIST:

NO.	DIM	A	B	N	TOL:PCS
4~17	PIN	24.0	11.50	10	18000
18~28	PIN	32.0	28.40	8	14400
29~50	PIN	44.0	40.40	6	10800
51~70	PIN	56.0	52.40	5	9000

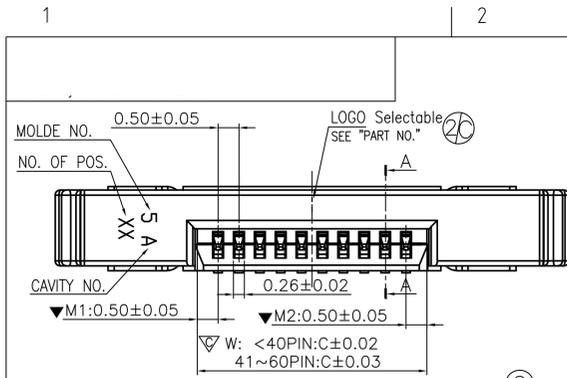
NOTES:

- MATERIAL:
 - CARRY TAPE:HIPS,T=0.35mm,CLEAR
 - REEL:HIPS,BLUE.
 - SHIM:PE,CLEAR.
- PRIMARY PACKING:1,800PCS/REEL.
- SECONDARY PACKING:"N"REELS/CARTON
("TOTAL"=N*1800/CARTON).
- PEELING RESISTANCE: 0.1N~0.7N(10~70gf);
PEELING ANGLE: 165°~180°;
PEELING SPEED: 300mm/minutes.

2:PACKING INTO OUTER BOX

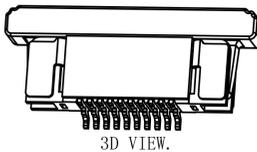
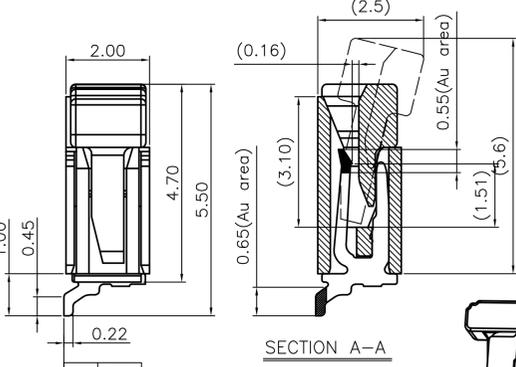
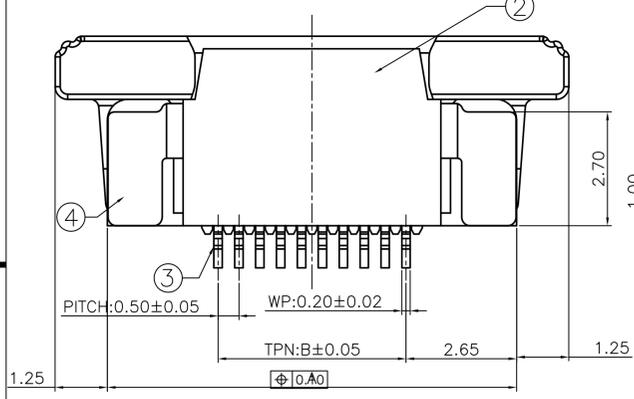


UNLESS OTHERWISE SPECIFIED TOLERANCES		ANGLE OF PROJECTION		Horus Int. Electronics Co., LTD. HorusTech Electronics Co., LTD.	
X.	±0.30	X.	± 5'	DOC TYP Customer Drw	TITLE: FPC P0.5 CONN ZIF R/A TYPE SMT (UPPER CONTACT)
X.X	±0.25	X.X	± 4'		
X.XX	±0.20	X.XX	± 3'	DRAWN DATE May 2014-07-28	PART NUMBER: HRS-F32Q-1A7*1-110** HRS-F32T-1A7*1-110**
X.XXX	±0.15	X.XXX	± 2'		
LINEAR DIMS	ANGLES DIMS	DESIGN DATE May 2014-07-28	SIZE A4	REV. D	SCALE 1:1
DWG NO.: A-S0200	SEE NOTES	CHECKED DATE Rain 2014-07-28	APPROVED DATE Leo.Liu 2014-07-28	SHEET 2 OF 2	
MATERIAL SEE NOTES		FINISHED SEE NOTES		UNIT : mm	

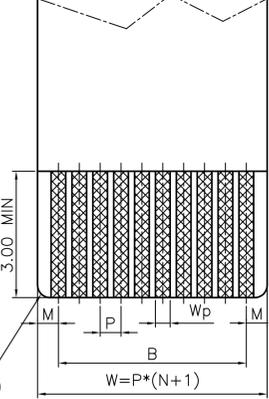
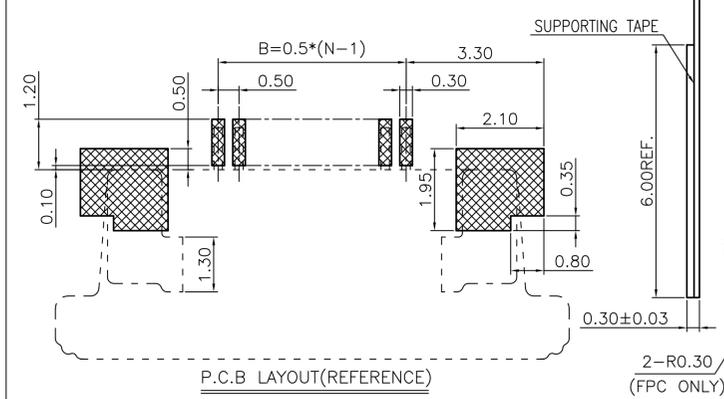


NOTE:
 1. ALL MATERIAL MUST BE COMPLY WITH SS-00259 OR RoHS.
 2. "▼" MARK IS IMPORTANT DIMENSIONS
 3. "▽" MARK IS CPK AND X-R DIMENSION
 4. PART NO. LEGEND:
 HRS-F32*-1A**1-110**

NO. OF POSITIONS
 7H:PHOSPHOR BRONZE
 0.05um MIN Au(Au Area)
 7A:PHOSPHOR BRONZE
 MATTER TIN
 2R:WITH Logo
 2J:WITHOUT Logo



3D VIEW.



REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
A	/	New version	May 2014-07-28	Rain 2014-07-28	Hongkui.liu 2014-07-28
B	/	Unified FFC dimension	May 2015-03-09	Rain 2015-03-09	Hongkui.liu 2015-03-09
C	/	Add without Logo connector	May 2019-01-28	Rain 2019-01-28	Hongkui.liu 2019-01-28

NO.	COMPONENTS	MATERIALS	SPECIFICATION:FINISH/COLOR	QTY.
1	SLIDER	GLASS FILLED PA9T, UL94V-0	BLACK	1
2	HOUSING	GLASS FILLED LCP, UL94V-0	NATURAL	1
3	ANCHOR-PLATE	BRASS, T=0.20mm	SURFACE PLATING:2~5 um Sn UNDER PLATING:1~3 um Ni	2
4	CONTACT	PHOSPHOR BRONZE, T=0.20mm	SURFACE PLATING:SEE "NOTE" UNDER PLATING:1~3 um Ni	N

DIMENSION LIST:

NO. OF POS.	A	B	C	NO. OF POS.	A	B	C
4	6.80	1.50	2.50	33	21.30	16.00	17.00
5	7.30	2.00	3.00	34	21.80	16.50	17.50
6	7.80	2.50	3.50	35	22.30	17.00	18.00
7	8.30	3.00	4.00	36	22.80	17.50	18.50
8	8.80	3.50	4.50	37	23.30	18.00	19.00
9	9.30	4.00	5.00	38	23.80	18.50	19.50
10	9.80	4.50	5.50	39	24.30	19.00	20.00
11	10.30	5.00	6.00	40	24.80	19.50	20.50
12	10.80	5.50	6.50	41	25.30	20.00	21.00
13	11.30	6.00	7.00	42	25.80	20.50	21.50
14	11.80	6.50	7.50	43	26.30	21.00	22.00
15	12.30	7.00	8.00	44	26.80	21.50	22.50
16	12.80	7.50	8.50	45	27.30	22.00	23.00
17	13.30	8.00	9.00	46	27.80	22.50	23.50
18	13.80	8.50	9.50	47	28.30	23.00	24.00
19	14.30	9.00	10.00	48	28.80	23.50	24.50
20	14.80	9.50	10.50	49	29.30	24.00	25.00
21	15.30	10.00	11.00	50	29.80	24.50	25.50
22	15.80	10.50	11.50	51	30.30	25.00	26.00
23	16.30	11.00	12.00	52	30.80	25.50	26.50
24	16.80	11.50	12.50	53	31.30	26.00	27.00
25	17.30	12.00	13.00	54	31.80	26.50	27.50
26	17.80	12.50	13.50	55	32.30	27.00	28.00
27	18.30	13.00	14.00	56	32.80	27.50	28.50
28	18.80	13.50	14.50	57	33.30	28.00	29.00
29	19.30	14.00	15.00	58	33.80	28.50	29.50
30	19.80	14.50	15.50	59	34.30	29.00	30.00
31	20.30	15.00	16.00	60	34.80	29.50	30.50
32	20.80	15.50	16.50				

	FPC	FFC
M	0.5±0.05	0.5±0.05
P	0.5±0.03	0.5±0.03
B	B±0.05	B±0.05
W	W±0.05	W±0.05
Wp	0.35±0.03	0.30±0.03

UNLESS OTHERWISE SPECIFIED TOLERANCES

X.	±0.50	X.	± 1°
X.X	±0.30	X.X	± 0.5°
X.XX	±0.20	X.XX	± 0.5°
X.XXX	±0.10	X.XXX	± 1°

LINEAR DIMS ANGLES DIMS

P/N: HRS-F32R-1A7*1-110**
HRS-F32J-1A7*1-110**

MATERIAL SEE NOTES
FINISHED SEE NOTES

ANGLE OF PROJECTION

DOC TYP Customer Drw

DRAWN DATE May 2019-01-28
DESIGN DATE May 2019-01-28
CHECKED DATE Rain 2019-01-28
APPROVED DATE Hongkui.liu 2019-01-28

Horus Int. Electronics Co., LTD.
 Forustech Horustech Electronics Co., LTD.

TITLE: FPC P0.5 CONN ZIF R/A TYPE SMT (Bottom CONTACT)

SCALE 1:1 UNIT: mm SHEET 1 OF 1

REV. C

DWG NO. A4 A-S0201

A

A

B

B

1. 适用范围 Scope:

此作业规范适用于: 0.5/1.0Pitch FPC/FFC 卧式抽屉式系列 SMT(上接/下接) H2.0

This product specifications is applied for: 0.5/1.0 FPC/FFC Push pull up and down contact type H2.0

与FPC/FFC连接方式 Connected to the FPC/FFC : ZIF

FPC/FFC 适合厚度 FPC/FFC is suitable for thickness : 0.30±0.03mm

2. 关联规格 Related specifications:

EIA-364 : 电子连接器及接插件测试程序 Electronic connectors and connector test procedure

UL STD-94 : 关于塑材设备零配件及器材阻燃性测试规范 On the plastic material and equipment spare parts and equipment flame retardancy test specification

3. 构造 尺寸 材料 Configurations dimensions and materials :

参见结构图 Reference the drawing.

序号 No.	部位 Position	原材料供应商 material suppliers	材料名/Type名 Materials	防火等级 FLAME CLASS	UL 编号 FILE NO.
1	主体 (HOUSING)	宝理/住友 POLYPLASTICS CO., LTD	LCP Liquid crystal polymer473i(自然色 Natural)	V-0	E106764
2	推杆 (ACTUATOR)	可乐丽 KURARAY CO., LTD	PA9T Polyamide 9T GN2450(黑色 Black)	V-0	E90350

4. 标准状态:

4.1 额定电压 Rating voltage: AC/DC 50V

4.2 额定电流 Rating current: 0.5A

4.3 温湿度范围 Temperature and humidity range

4.3.1 使用温度范围 operation temperature: -40℃~+105℃;

4.3.2 储存温度范围 storage temperature: -40℃~+105℃;

4.3.3 开封使用温度范围 Kaifeng temperature range: +5℃~+35℃;

开封使用湿度 Kaifeng Humidity 60%RH MAX.;

4.3.4 保存湿度范围: 相对湿度 45~80%RH; Keep humidity range: Relative humidity45~80%RH;

5. 性能 Performance

5.1 构造 Structure

序号 NO.	项目 Item	测试方法 Test conditions	规格要求 Specifications
1	外观 Appearance	目视 Visual	无损坏 No physical damage

5.2 电气性能 Electrical Performance

序号 NO.	项目 Item	测试方法 Test conditions	规格要求 Specifications
1	接触阻抗 Contact Resistance	适配 FFC 标准线, 开放电压: 20mV 以下, 短路电流: 10mA 以下 Mate applicable FPC, measure by dry circuit, 20mV MAXIMUM, 10mA MAXIMUM	30mΩ Max.
2	绝缘阻抗 Insulation Resistance	相邻端子间 DC 500V, 1 分钟。 DC 500V between adjacent terminals, 1 minutes	500MΩ Min.
3	耐电压 Dielectric withstanding voltage	相邻端子间 AC 500V, 感度电流 2mA, 1 分钟。 AC 500V between adjacent terminals, sensitivity of current 2mA, 1 minutes	无击穿, 无短路 No Breakdown.
4	温度上升 Temperature rise	端子在额定电压·电流下工作时测量端子上升的温度 The rising temperature measurement terminal terminal at rated current under.	30℃ max

本制品不含 SS-00259 和 ROHS 禁止使用的环境物质

This product does not contain SS-00259 and ROHS banned the use of environmental substances

制品仕様书 Product specification	Part name	0.5/1.0pitch FPC/FFC Push pull up and down contact type H2.0)			
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	Part No.	HRS-F32Q-1A7*1-110** (UP) HRS-F32R-1A7*1-110** (Down) HRS-F32R-1A7H1-01A-11070 HRS-F52Q-1A7*1-110** (UP) HRS-F52R-1A7*1-110** (Down)	1/8		
Document No.: IS.EQC.001	Date:2016/09/27	Rev.: D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

5.3 机械性能 Mechanical performance

序号 NO.	项目 Item	测试方法 Test conditions	规格要求 Specifications
1	FFC/FPC 保持力 FFC/FPC Retention Force	FFC/FPC(标配厚度 0.30MM)插入 FPC 连接器产品后, 压入推杆, 拔出推杆, 此动作重复三次; 第四次压入推杆后以 25~100mm/分均速水平拔出, 此次作为测量资料的记录。 FFC/FPC(T=0.30) insert FPC connector products, pushed into the slider, pull out the slider, repeat this three times this action; Fourth after pushed into the slider to pull out from 25 to 100 mm/min average level, as the measurement data record.	见“FFC/FPC 保持力” SEE FFC/FPC Retention Force
2	端子保持力 Terminal Retention Force	将端子 25~100mm/分匀速垂直从胶芯槽内拔出 Apply axial pull out force on the terminal assembled in the housing at the speed rate of 25~100mm per minute.	100gf/terminal Min.
3	固定片保持力 Anchor-Plate Retention Force	将固定片 25~100mm/分匀速垂直从胶芯槽内拔出 Apply axial pull out force on the Anchor-Plate assembled in the housing at the speed rate of 25~100mm per minute.	100gf/terminal Min.
4	Slider 作用力 Slider Force	将 FFC 线插入主体, 测量 SLIDER 插入和拔出的作用力 Insert the FFC line into the main body, measure the Slider insert and withdraw the force	见“推杆作用力” SEE “SLIDER Force”
5	插拔耐久性 Durability	以下动作进行 30 次巡回: FPC 插入、SLIDER 插入、SLIDER 拔出、FPC 拔出 The following action 30 Tour FPC insert, Slider insert, Slider withdraw, FPC withdraw	接触阻抗 Contact Resistance 50mΩ Max. 无变形 No deformation

5.4 环境性能和其它 Environmental Performance and Others

序号 NO.	项目 Item	测试方法 Test conditions	规格要求 Specifications
1	耐振性 Vibration	配合合适的 FPC, 按以下条件, X、Y、Z 方向各 2 小时, 共 6 小时在测试过程中通过直流 1mA, 振幅 1.5mm, 频率 10-55-10Hz/分。 Mate applicable FPC, according to the following conditions, X, Z, Y direction of each 2 hours, a total of 6 hours passing DC 1mA during the test. Amplitude : 1.5mm P-P Frequency : 10-55-10 Hz Shall be traversed in 1 minute.	接触阻抗 50mΩ Max. Contact Resistance: 50mΩ Max.
2	耐冲击性 Shock	配合合适的 FPC, 按以下条件, X, Y, Z 方向各 11ms, 各 3 回, 共 18 回, 在测试过程中通过直流 1mA, 加速度 490m/s ² , Mate applicable FPC, according to the following conditions, X, Z, Y direction of the 11ms, the 3 times, a total of 18 times during the test process by DC 1mA. Test pulse : Half Sine Peak value : 490m/s ² {50G} Duration : 11 milliseconds	瞬断 1μs 以内; Discontinuity: 1μs Max. 外观无异常 No abnormal appearance
3	耐寒性 Cold Resistance	配合合适的 FPC, -25±3℃中放置时间 48H 后取出, 1~2 小时常温放置后进行测试。 Mate applicable FPC, after -25±3℃, the time of 48H was removed, and the test was conducted at room temperature for 1~2 hours.	1. 接触阻抗: 30mΩ Max. 2. 绝缘阻抗: 100 MΩ Min. 3. 耐电压: 无击穿, 短路 4. 外观: 无异常
4	耐热性 Heat Resistance	配合合适的 FPC, 85 ± 2℃中放置时间 96H 后取出, 1~2 小时常温放置后进行测试。 Mate applicable FPC, after 85±2℃, the time of 96H was removed, and the test was conducted at room temperature for 1~2 hours.	1. Contact Resistance: 30mΩ Max. 2. Insulation Resistance : 100 MΩ Min.
5	耐湿性 Humidity	配合合适的 FPC, 40±3℃、相对湿度 90~95%中放置时间 96H 后取出, 1~2 小时常温放置后进行测试。 Mate applicable FPC, 40±3℃, relative humidity 90~95% in the time of 96H after removal, 1~2 hours after room temperature for testing.	3. Dielectric withstanding voltage: No Breakdown. 4. No abnormal appearance

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制品仕様书 Product specification	Part name	0.5/1.0pitch FPC/FPC Push pull up and down contact type H2.0)			
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	Part No.	HRS-F32Q-1A7*1-110**(UP) HRS-F32R-1A7*1-110**(Down) HRS-F32R-1A7H1-01A-11070 HRS-F52Q-1A7*1-110**(UP) HRS-F52R-1A7*1-110**(Down)	2/8		
Document No. : IS.EQC.001	Date: 2016/09/27	Rev. : D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

序号 NO.	项目 Item	测试方法 Test conditions	规格要求 Specifications												
6	盐雾试验 Salt Spray	配合合适的 FPC，温度 $35 \pm 2^\circ\text{C}$ ；盐水比重 $5 \pm 1\%$ 喷雾试验，试验后常温水洗干燥后进行测试。 A: 镀金 48h B: 镀锡 24h C: 单 pin 端子 48h Mate applicable FPC, the temperature of $35 \pm 2^\circ\text{C}$, the proportion of salt water was $5 \pm 1\%$ the test was carried out at room temperature after washing and drying. A: gold plating 48H B: tin 24h C: single pin terminal 48H	1. 接触阻抗: $30\text{m}\Omega$ Max. 2. 绝缘阻抗: $100\text{M}\Omega$ Min. 3. 耐电压: 无击穿, 短路 4. 外观: 无异常												
7	冷热冲击 Thermal Shock	配合合适的 FPC， $-55 \pm 3^\circ\text{C}$ ； $85 \pm 2^\circ\text{C}$ 的温度下各放置 30 分钟，共进行 5 次循环 Mate applicable FPC, $-55 \pm 3^\circ\text{C}$, $85 \pm 2^\circ\text{C}$, 30 minutes, 5 cycles were performed. 1: -55°C 30 minutes 2: $+85^\circ\text{C}$ 30 minutes	1. Contact Resistance: $30\text{m}\Omega$ Max. 2. Insulation Resistance : $100\text{M}\Omega$ Min. 3. Dielectric withstanding voltage: No Breakdown. 4. No abnormal appearance												
8	耐湿性 (温湿度循环) Humidity (Temperature and Humidity Cycle)	配合合适的 FPC，依照下面曲线完成 5 次循环试验。 Mate applicable FPC, complete the 5 cycle test according to the curve below. 	1. Contact Resistance: $30\text{m}\Omega$ Max. 2. Insulation Resistance : $100\text{M}\Omega$ Min. 3. Dielectric withstanding voltage: No Breakdown. 4. No abnormal appearance												
9	沾锡性 Solderability	端子焊脚和固定片前端 0.3mm, 沾锡温度 $245 \pm 5^\circ\text{C}$ (Sn: Lead Free); 时间 $3 \pm 0.5\text{S}$ Terminal welding feet and fitting nail front 0.3mm, soldering temperature $245 \pm 5^\circ\text{C}$ (Sn: Lead Free); time $3 \pm 0.5\text{S}$	吃锡饱满，在 95% 以上 95% of immersed area must show no voids, pin holes 外观无异常， No abnormal appearance 满足电气性能 Meet the electrical properties												
10	焊锡耐热性 Resistance to Soldering Heat	端子焊脚和固定片前端 0.3mm, 烙铁温度 $350 \pm 10^\circ\text{C}$ (Sn: Lead Free); 时间 $10+1/-0\text{S}$ Terminal welding feet and fitting nail front 0.3mm, soldering Iron temperature $350 \pm 10^\circ\text{C}$ (Sn: Lead Free), time: $10+1/-0\text{S}$	共面度 0.10mm Max. 外观无异常， Coplanar degree 0.10mm Max. No abnormal appearance.												
11	Reflow	预备加热时间 Pre-heating time: $170^\circ\text{C} \sim 190^\circ\text{C}$ $60 \sim 180\text{s}$. 焊锡温度时间 Soldering Temperature Time: 260°C 10sMAX .	共面度 0.10mm Max. 外观无异常， Coplanar degree 0.10mm Max. No abnormal appearance.												
12	耐硫化性 (镀金品) Sulfidation resistance (Gold)	满足三种混合气体的试验的要求 Meet the requirements of the test of three kinds of mixed gas <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>H₂S</th> <th>NO₂</th> <th>SO₂</th> <th>Temperature</th> <th>Humidity</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0.5ppm</td> <td style="text-align: center;">1.0ppm</td> <td style="text-align: center;">1.0ppm</td> <td style="text-align: center;">35°C</td> <td style="text-align: center;">70%RH</td> <td style="text-align: center;">72H</td> </tr> </tbody> </table>	H ₂ S	NO ₂	SO ₂	Temperature	Humidity	Time	0.5ppm	1.0ppm	1.0ppm	35°C	70%RH	72H	接触阻抗是初值的两倍以下 触点附近无明显腐蚀。 Contact resistance is two times the initial value Nearby contact no significant corrosion
H ₂ S	NO ₂	SO ₂	Temperature	Humidity	Time										
0.5ppm	1.0ppm	1.0ppm	35°C	70%RH	72H										
13	Whisker (Tin 镀锡品)	过 reflow 后插入 FPC，放置 500H, 观察 WHISKER 的长度 Insert FPC after reflow, place 500H, observe the length of Whisker	100um max												
14	耐溶剂 Solvent	将产品放入异丙基酒精容器中 90 秒后取出。Product into the isopropyl alcohol container removed after 90 seconds.	满足电气性能， 外观无异常。 Meet electrical performance No abnormal appearance.												

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Document No.: IS.EQC.001	Date: 2016/09/27	Rev.: D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

6. 包装 Packing

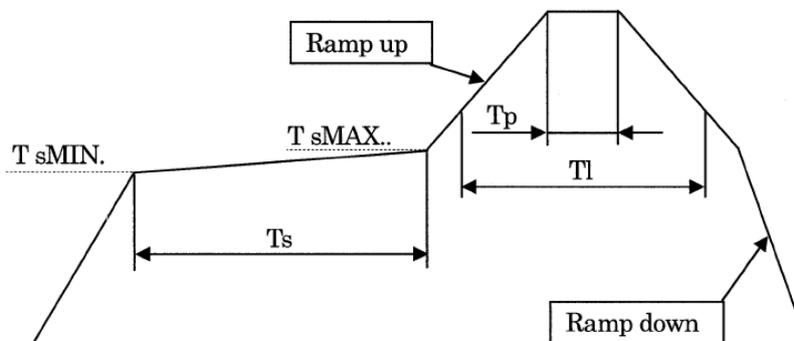
参见捆包图。See the drawing

7. 修改内容 Change content

版本 Rev.	改正日期 Modify date	改正内容 Modifications	Written by	Checked by
A	2012/05/02	New	Robin	Roy
B	2015/12/29	更新为中英对照及增加操作说明 Update for the Chinese and English and increase the operating instructions	May	Rain
C	2016/06/15	新增料号 Add new materials issue	May	Rain
D	2016/09/27	更新 FFC/FPC 保持力测试操作方法及焊锡温度条件 Update the FFC/FPC retention test operation method and reflow condition	May	Rain

Reflow Condition:

Profile Feature	Lead-free Eutectic Assembly
温度上升 Ramp up Rate(Tsmax to Tp)	:1~4°C/S
. Pre-heat Ts MIN. Ts MAX. Time(Ts MIN. TO Ts MAX.)	:170°C MIN :190°C MAX :60~180S
T l 温度 (temperature) 时间 (time)	:225°C MIN :60~150S
T p(Peak) 温度 (temperature) 时间 (time)	:260°C MAX(255°C MIN.) :10S MAX



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Document No. : IS.EQC.001	Date: 2016/09/27	Rev. : D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

SLIDER 作用力 Slider Force: (Unit kgf)

极数 No. Of CKT	插入力(MAX.) Insertion Force(Max.)		拔出力(MAX.) Withdrawal Force(Max.)		极数 No. Of CKT	插入力(MAX.) Insertion Force(Max.)		拔出力(MAX.) Withdrawal Force(Max.)	
	初回	30回	初回	30回		初回	30回	初回	30回
	1st	30th	1st	30th		1st	30th	1st	30th
4	2.9	2.7	3.8	3.4	44	6.9	6.7	7.8	7.4
5	3.0	2.8	3.9	3.5	45	7.0	6.8	7.9	7.5
6	3.1	2.9	4.0	3.6	46	7.1	6.9	8.0	7.6
7	3.2	3.0	4.1	3.7	47	7.2	7.0	8.1	7.7
8	3.3	3.1	4.2	3.8	48	7.3	7.1	8.2	7.8
9	3.4	3.2	4.3	3.9	49	7.4	7.2	8.3	7.9
10	3.5	3.3	4.4	4.0	50	7.5	7.3	8.4	8.0
11	3.6	3.4	4.5	4.1	51	7.6	7.4	8.5	8.1
12	3.7	3.5	4.6	4.2	52	7.7	7.5	8.6	8.2
13	3.8	3.6	4.7	4.3	53	7.8	7.6	8.7	8.3
14	3.9	3.7	4.8	4.4	54	7.9	7.7	8.8	8.4
15	4.0	3.8	4.9	4.5	55	8.0	7.8	8.9	8.5
16	4.1	3.9	5.0	4.6	56	8.1	7.9	9	8.6
17	4.2	4.0	5.1	4.7	57	8.2	8	9.1	8.7
18	4.3	4.1	5.2	4.8	58	8.3	8.1	9.2	8.8
19	4.4	4.2	5.3	4.9	59	8.4	8.2	9.3	8.9
20	4.5	4.3	5.4	5.0	60	8.5	8.3	9.4	9
21	4.6	4.4	5.5	5.1	61	8.6	8.4	9.5	9.1
22	4.7	4.5	5.6	5.2	62	8.7	8.5	9.6	9.2
23	4.8	4.6	5.7	5.3	63	8.8	8.6	9.7	9.3
24	4.9	4.7	5.8	5.4	64	8.9	8.7	9.8	9.4
25	5.0	4.8	5.9	5.5	65	9.0	8.8	9.9	9.5
26	5.1	4.9	6.0	5.6	66	9.1	8.9	10	9.6
27	5.2	5.0	6.1	5.7	67	9.2	9	10.1	9.7
28	5.3	5.1	6.2	5.8	68	9.3	9.1	10.2	9.8
29	5.4	5.2	6.3	5.9	69	9.4	9.2	10.3	9.9
30	5.5	5.3	6.4	6.0	70	9.5	9.3	10.4	10
31	5.6	5.4	6.5	6.1	71	9.6	9.4	10.5	10.1
32	5.7	5.5	6.6	6.2	72	9.7	9.5	10.6	10.2
33	5.8	5.6	6.7	6.3	73	9.8	9.6	10.7	10.3
34	5.9	5.7	6.8	6.4	74	9.9	9.7	10.8	10.4
35	6.0	5.8	6.9	6.5	75	10.0	9.8	10.9	10.5
36	6.1	5.9	7.0	6.6	76	10.1	9.9	11	10.6
37	6.2	6.0	7.1	6.7	77	10.2	10	11.1	10.7
38	6.3	6.1	7.2	6.8	78	10.3	10.1	11.2	10.8
39	6.4	6.2	7.3	6.9	79	10.4	10.2	11.3	10.9
40	6.5	6.3	7.4	7.0	80	10.5	10.3	11.4	11
41	6.6	6.4	7.5	7.1					
42	6.7	6.5	7.6	7.2					
43	6.8	6.6	7.7	7.3					

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Horus Int. Electronics. Co., LTD. Horustech Electronics. Co., LTD.		Part No. HRS-F32Q-1A7*1-110** (UP) HRS-F32R-1A7*1-110** (Down) HRS-F32R-1A7H1-01A-11070 HRS-F52Q-1A7*1-110** (UP) HRS-F52R-1A7*1-110** (Down)
Document No. : IS.EQC.001	Date: 2016/09/27	Rev. : D Written by: May Checked by: Rain Approved by: Hongkui.liu

FFC/FPC 保持力 FFC/FPC Retention Force: (Unit:kgf)

极数 No. Of CKT	保持力(MIN.) Retention Force		极数 No. Of CKT	保持力(MIN.) Retention Force		极数 No. Of CKT	保持力(MIN.) Retention Force	
	初回 1st	30回 30th		初回 1st	30回 30th		初回 1st	30回 30th
4	0.15	0.14	38	1.49	0.98	72	1.83	1.32
5	0.20	0.16	39	1.50	0.99	73	1.84	1.33
6	0.25	0.20	40	1.51	1.00	74	1.85	1.34
7	0.30	0.23	41	1.52	1.01	75	1.86	1.35
8	0.35	0.26	42	1.53	1.02	76	1.87	1.36
9	0.40	0.29	43	1.54	1.03	77	1.88	1.37
10	0.45	0.32	44	1.55	1.04	78	1.89	1.38
11	0.50	0.35	45	1.56	1.05	79	1.90	1.39
12	0.55	0.38	46	1.57	1.06	80	1.91	1.40
13	0.60	0.41	47	1.58	1.07			
14	0.65	0.44	48	1.59	1.08			
15	0.70	0.47	49	1.60	1.09			
16	0.75	0.50	50	1.61	1.10			
17	0.80	0.53	51	1.62	1.11			
18	0.85	0.56	52	1.63	1.12			
19	0.90	0.59	53	1.64	1.13			
20	0.95	0.62	54	1.65	1.14			
21	1.00	0.65	55	1.66	1.15			
22	1.05	0.68	56	1.67	1.16			
23	1.10	0.71	57	1.68	1.17			
24	1.15	0.74	58	1.69	1.18			
25	1.20	0.77	59	1.70	1.19			
26	1.25	0.80	60	1.71	1.20			
27	1.30	0.83	61	1.72	1.21			
28	1.35	0.86	62	1.73	1.22			
29	1.40	0.89	63	1.74	1.23			
30	1.41	0.90	64	1.75	1.24			
31	1.42	0.91	65	1.76	1.25			
32	1.43	0.92	66	1.77	1.26			
33	1.44	0.93	67	1.78	1.27			
34	1.45	0.94	68	1.79	1.28			
35	1.46	0.95	69	1.80	1.29			
36	1.47	0.96	70	1.81	1.30			
37	1.48	0.97	71	1.82	1.31			

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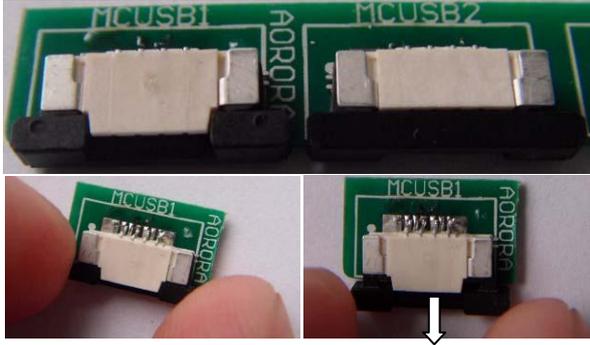
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Document No. : IS.EQC.001	Date: 2016/09/27	Rev. : D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

操作说明和注意事项 Operating instructions and matters needing attention

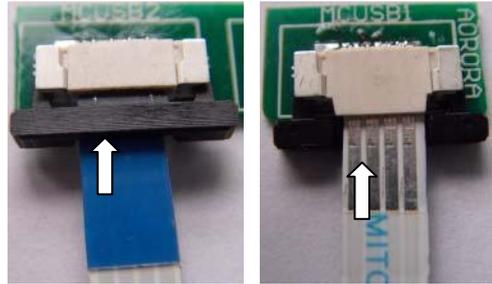
1): FFC 插入方法: 打开, 关闭推杆, 请在连接器装在电路板上的状态下实施, 用手的拇指和食指配合向外拉开推杆两端的扣手位以解除锁定. 本产品在设计上, 推杆的拉开距离不可超过 1.00mm, 所以在后部不要施加超出此范围的拉力, 否则推杆容易松脱或损坏.

1) FFC insertion method: open, closed push rod, please in the connector is arranged on the circuit board under the state of implementation, with hand thumb and index finger with outward pull push rod at both ends of the buckle to release the lock. This product in the structure design, push rod open distance is not more than 1.00mm, to in the rear don't applied beyond this range of tension, or putting easy to loose or damaged.



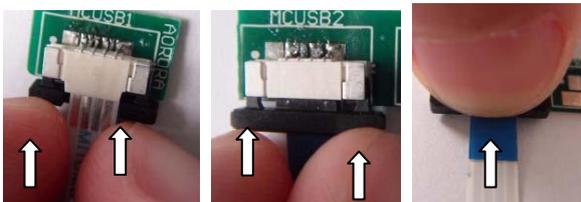
2): 插入 FFC 时, 请在推杆完全打开的状态进行, 上接触产品时 FFC 的导体面朝上, 下接触产品时 FFC 的导体面朝下, FFC 相对连接器垂直插入, 要确认 FFC 插入到连接器本体的底部.

2) insert the FFC, please push rod in the fully open state, contact the products FFC conductor face up, under contact with the product of the FFC conductor face down FFC relative connector is vertically inserted into the, to confirm the FFC is inserted into the bottom of the connector body.



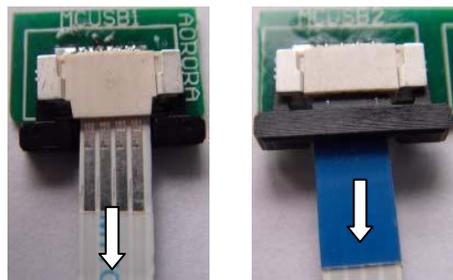
3): 用手的拇指和食指配合推产品推杆的左右两端, 使 FFC 锁紧, 如果是大 PIN 数产品, 10PIN 以上的产品请推推杆的中间部位或使用辅助工具(使用辅助工具时注意不要损伤 FFC 和连接器), FFC 半插入或插入错位极大时, 可能会对接触性能造成影响, 此时要按 4) 拔出 FFC 的方法取出 FFC, 再从 1) 开始操作.

3) Hand thumb and forefinger with push rod ends of the left and right, the FFC locking, if high pin number product, 10PIN above products, please push rod in the middle part or the use of auxiliary tool (using auxiliary tools attention not to damage the FFC and connector), FFC semi inserts or inserted into the dislocation greatly, may have an impact on the contact performance, this time should be according to 4) pull out the FFC FFC removed, and then from 1) began operation.



4): 拔出 FFC 的方法, 依照 1) 的方法进行打开推杆, 在拔出 FFC 时请在推杆完全打开的状态下进行, 如果在推杆未完全打开的状态下拔出 FFC, 重新装入 FFC 时, 请确认触点部位是否有附着物.

4) FFC pull-out method. According to the method of push rod to open, in the FFC is drawn out please push rod in the fully open state of, if pulled out under the push bar does not fully open state of FFC, reload the FFC, please confirm contact parts of any attachments.



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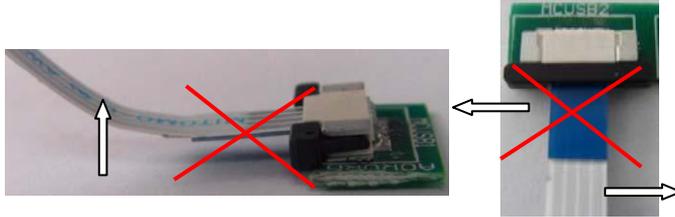
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Document No.: IS.EQC.001	Date: 2016/09/27	Rev.: D	Written by: May	Checked by: Rain	Approved by: Hongkui.liu

操作说明和注意事项 Operating instructions and matters needing attention

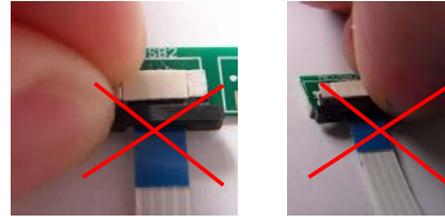
5) :对 FFC, 请在其上方不要施加拉力, 或在其端子间距方向施加撬动力。

5) On FFC, please do not apply a pull on the top of it, or force the direction of the terminal spacing.



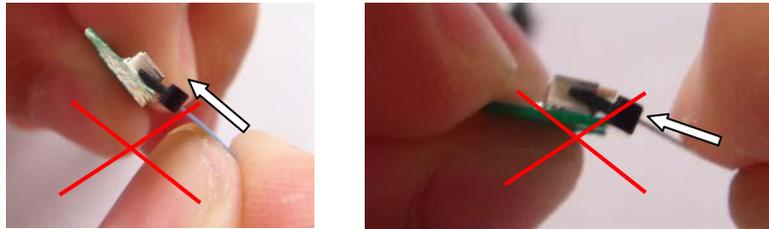
6) : 打开和关闭推杆时, 请避免单边操作, 这样可能会损伤推杆。

6) When you open and close the push rod, avoid a single operation, which may damage the push rod.



7) : 请将 FFC 正确地插入连接器的插入口. 要确认 FFC 插到顶住本体的底部, 如果不正确的插入, 会导致短路, 导通不良. 插入 FFC 时, 不要用力擦蹭连接器插入口的下面, 否则端子会与 FFC 强烈碰撞, 导致端子变形, FFC 导体剥落等的不良。

7) Please the FFC correctly inserted into the connector insertion port. To confirm the FFC in to withstand the body at the bottom of the, if not correct insertion will cause a short circuit, bad conduction. When inserting the FFC, do not rub rub connector into the mouth below. Otherwise, the terminal will and the strong impact of FFC, leading to end deformation, FFC conductor spalling of adverse.



本制品不含 SS-00259 和 ROHS 禁止使用的环境物质

This product does not contain SS-00259 and ROHS banned the use of environmental substances

制品仕様书 Product specification		Part name	0.5/1.0pitch FPC/FFC Push pull up and down contact type H2.0)		
Horus Int. Electronics. Co., LTD. Horustech Electronics. Co., LTD.		Part No.	HRS-F32Q-1A7*1-110** (UP) HRS-F32R-1A7*1-110** (Down) HRS-F32R-1A7H1-01A-11070 HRS-F52Q-1A7*1-110** (UP) HRS-F52R-1A7*1-110** (Down)	8/8	
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