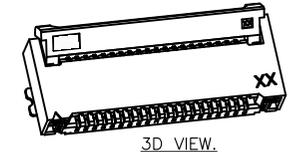


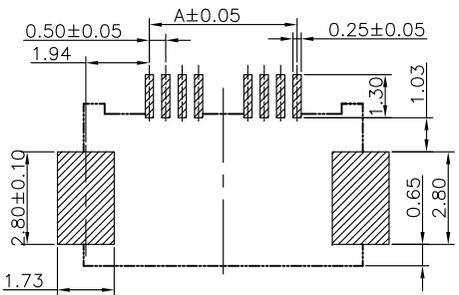
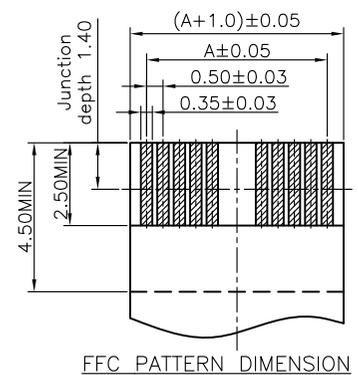
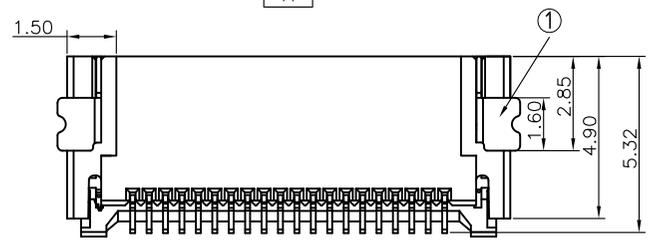
REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
B	/	Increase the material number of half gold Tin	May 2015-04-21	Rain 2015-04-21	Hongkui.Liu 2015-04-21
C	/	Improve the actuator off	May 2016-01-16	Rain 2016-01-16	Hongkui.Liu 2016-01-16
D	/	Unified the dimension	May 2016-08-11	Rain 2016-08-11	Hongkui.Liu 2016-08-11

NO.	COMPONENTS	MATERIALS	FINISH/COLOR SPECIFICATION	QUANTITY
1	STATOR	BRASS T=0.15mm	SEE NOTE	2 PCS
2	CONTACT	PHOSPHOR BRONZE T=0.15mm	SEE NOTE	N PCS
3	COVER	PA9T UL94V-0	BLACK	1 PCS
4	HOUSING	LCP UL94V-0	NATURAL	1 PCS



DIMENSION LIST:

NO. OF POSITIONS	SIZE A	SIZE B	SIZE C	SIZE D	NO. OF POSITIONS	SIZE A	SIZE B	SIZE C	SIZE D
4	1.50	2.55	5.50	6.10	28	13.50	14.55	17.50	18.10
5	2.00	3.05	6.00	6.60	30	14.50	15.55	18.50	19.10
6	2.50	3.55	6.50	7.10	32	15.50	16.55	19.50	20.10
8	3.50	4.55	7.50	8.10	34	16.50	17.55	20.50	21.10
9	4.00	5.05	8.00	8.60	36	17.50	18.55	21.50	22.10
10	4.50	5.55	8.50	9.10	38	18.50	19.55	22.50	23.10
12	5.50	6.55	9.50	10.10	40	19.50	20.55	23.50	24.10
14	6.50	7.55	10.50	11.10	42	20.50	21.55	24.50	25.10
15	7.00	8.05	11.00	11.60	45	22.00	23.05	26.00	26.60
16	7.50	8.55	11.50	12.10	50	24.50	25.55	28.50	29.10
18	8.50	9.55	12.50	13.10	54	26.50	27.55	30.50	31.10
20	9.50	10.55	13.50	14.10	55	27.00	28.05	31.00	31.60
22	10.50	11.55	14.50	15.10	58	28.50	29.55	32.50	33.10
24	11.50	12.55	15.50	16.10	60	29.50	30.55	33.50	34.10
26	12.50	13.55	16.50	17.10					



UNLESS OTHERWISE SPECIFIED TOLERANCES				ANGLE OF PROJECTION		Horus Int. Electronics Co., LTD. Horustech Electronics Co., LTD.	
X.	± 0.50	X. *	$\pm 1'$			TITLE: 0.5MM FFC/FPC DUAL CONTACT SIDE CONNECTOR (H=2.00)	
XX	± 0.30	XX *	$\pm 0.5'$				
XXX	± 0.20	XXX *	$\pm 0.5'$	DOC TYP Customer Drw		SIZE	DWG NO.
X.XXX	± 0.10	X.XXX *	$\pm 1'$	DRAWN DATE May 2016-08-11		A4	A-S0185
LINEAR DIMS				DESIGN DATE May 2016-08-11		REV. D	
ANGLES DIMS				CHECKED DATE Rain 2016-08-11		SCALE 1:1	
P/N: HRS-F32D-1A7*1-210**		MATERIAL SEE NOTES		APPROVED DATE Hongkui.Liu 2016-08-11		UNIT : mm SHEET 1 OF 1	
FINISHED		SEE NOTES					

1. Scope 适用范围:

This job specification is applicable to: FFC/FPC P0.5 H2.00 Back-flip double contact connector
 此作业规范适用于: FFC/FPC P0.5 H2.00前插后掀双接触式连接器

2. The related specifications:关联规格:

EIA - 364: electronic connectors and connector test procedure.

EIA-364 :电子连接器及接插件测试程序.

UL STD - 94: about plastic material equipment spare parts and equipment fire retardant test specification.

UL STD-94 :关于塑材设备零配件及器材阻燃性测试规范.

3. The structure, size, material

构造, 尺寸, 材料

3.1 See the chart. 参见结构图.

No	Parts 部位	Raw material suppliers 原材料供应商	Material name/Type name 材料名/品名	FLAME CLASS 防火等级	FILE NO. 文件编号
1	主体 (HOUSING)	住友	LCP E6808 (自然色)	V-0	
2	推杆 (SLIDER)	可乐丽 KURARAY CO., LTD	PA9T Polyamide 9T GN2450 (黑色)	V-0	E90350

3.2 design and construction:设计及结构:

1) series: FFC/FPC P0.5 H2.00 Back-flip double contact connector

系列名: FFC/FPC P0.5 H2.00 前插后掀双接触式连接器

2) PIN: see the finished product drawings PIN位: 详见成品图面

3) contact type: double contact 接触类型: 双面接触

4) terminal shape: SMT type 端子形状: SMT型

5) suitable for FPC thick: T = 0.3±0.02 mm 适合FPC厚: T=0.3±0.02mm

6) plating specification: gold plated 电镀规格: 点镀金

7) solder coplanar degrees: 0.10 mm MAX 焊锡共面度: 0.10mm MAX

4. 标准状态:

1)Rate Voltage: 50 V AC/ DC

额定电压:AC/DC 50V

2)Rate Current: 0.5 A

额定电流:0.5A`

This product contains no SS - 00259 and ROHS to ban the use of environmental material
 本产品不含 SS-00259 和 RoHS 禁止使用的环境物质

Product specification 制品仕様书		Part name 制品名称	FFC/FPC P0.5 H2.00 Back-flip double contact		
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.		PART NUMBER 料号	HRS-F32*-1A7Y1-210**		1/7
File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu

3) 温湿度范围:

- a. Operating temperature: -40° C to +105° C
操作温度:-40° c + 105° c
- b. Storage temperature : -40° C to +105° C
储存温度:-40° C + 105° C
- c. Keep humidity range: Relative humidity below 90% RH
保持湿度范围:相对湿度 90% RH 以下

5. Performance 性能:

5.1 structure 构造

No.	Test Description 测试描述	Test Procedures & Condition 测试程序和条件	Requirements 规格要求
1	Appearance 外观	Visual, method of measurement 目视, 寸法量测	Conform to the requirements of the drawings 符合图面要求

5.2 Electrical Performance 电气性能

No.	Test Description 项目	Test Procedures & Condition 测试程序和条件	Requirements 规格要求
1	Contact Resistance 接触阻抗	Subject mated contacts assembled in housing to closed circuit current of 10mA maximum at open circuit at 20mV maximum. 将配对的连接器放在封闭的容器内。最大开路电流为 10mA, 最大开路电压为 20mV.	30mΩ max.
2	Insulation Resistance 绝缘阻抗	This test method for evaluating FPC connector insulation impedance of the standard method, to confirm the plastic material the connectors, and other various filling the insulation performance of content, in under the action of DC voltage 500 v DC, assessing their impact potential leakage current from the connector components through the surface of the middle or ability. 试验方法作为评估 FPC 连接器绝缘阻抗的标准方法, 以确定连接器中的塑胶材料以及各种真充物的绝缘性能, 在直流电压 500V DC 的作用下, 评估它们阻碍潜在的漏电电流从连接器组件中间或表面通过的能力。	100MΩ Min.

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Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.		PART NUMBER 料号	HRS-F32*-1A7Y1-210**	2/7	
File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu

3	Dielectric Withstanding Voltage 耐电压	<p>EIA 364- 20 easure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies. Test Potential : 500 V AC at sea level, 60Hz Test Duration : 60 seconds EIA 364- 20 在两邻近的端子间和两配合连接器接地电路间通以 500V AC 电流 测试电压: 500V AC 测试时间: 60 秒</p>	<p>1. No flashover, No spark over, No excess leakage, No breakdown. 2. Current leakage :0.5 mA 1. 无火花, 无击穿, 无电流泄露, 无损, 2. 漏电流: 低于 0.5mA</p>
4	Temperature Rise 温度上升	Measuring terminal temperature rise terminal at rated voltage, current at 端子在额定电压、电流下工作时测量端子上升的温度。	30°C Max.

5.3 Mechanical Performance 机械性能

No.	Test Description 项目	Test Procedures & Condition 测试程序和条件	Requirements 规格要求
1	FFC/FPC retention force FFC/FPC 皮线保持力	<p>FFC insert FPC connector products, after pressing lift cover, opens the cover, repeat this three times this action; Fourth or cover with 25 to 100 mm/points after average vertical pull out, as the measurement data record. FFC 插入 FPC 连接产品后, 压合掀盖, 打开掀盖, 此动作重复三次; 第四次合盖后以 25~100mm/分均速水平拔出, 此次作为测量资料的记录.</p>	<p>FFC: 40gf~70gf/PIN FPC: 40gf~75gf/PIN</p>
2	stator retention Force 固定片保持力	25~100mm/points to uniform vertical pullout 以 25~100mm/分的速度, 匀速垂直拔出	100gf MIN
3	Terminal retention Force 端子保持力	The terminal 25~100mm/uniform the vertically from the rubber core tank 将端子 25~100mm/分匀速垂直从胶芯槽内拔出	100gf MIN
4	Durability 插拔耐久性 (寿命测试)	<p>FPC insert, insert the SLIDER pull, pull out the SLIDER, FPC Continuous lock pressure under no-load condition 20 times, five times load condition Cycle rate: 10 times/min Max. FPC 插入、SLIDER 插入、SLIDER 拔出、FPC 拔出 连续无负荷状态下锁压 20 次, 负荷状态下 5 次 周期速率: 10 次/分钟 Max.</p>	<p>1. Contact impedance 50mΩ Max . 2. No abnormal appearance, no deformation. 3. FPC 30gf/pin Min pull-out force. 1. 接触阻抗 50mΩ Max 2. 外观无异常, 无变形 3. FPC 拔出力 30gf/pin Min</p>
5.	The lid into force 掀盖压入力	<p>Insert the FFC line subject, measuring lift force down the cover, the action after repeated three times, for the fourth time to make record of measurement data. 将 FFC 线插入主体, 测量掀盖下压的作用力, 此动作重复三次后, 第四次才作测量数据的记录.</p>	<p>Cover pressing force: 3000gf Max. 掀盖压入力: 3000gf Max.</p>

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Product specification 制品仕様书	Part name 制品名称	FFC/FPC P0.5 H2.00 Back-flip double contact			
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	PART NUMBER 料号	HRS-F32*-1A7Y1-210**		3/7	
File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY 核准 hongkui.liu

5.4 耐久性能

No.	Test Description 项目	Test Procedures & Condition 测试程序和条件	Requirements 规格要求
1	Vibration 耐振性	Terminal to current of 0.1 A, dc series conduction, amplitude of 1.5 mm, 10-55-10 hz frequency, X, Y, Z direction every 2 hours, A total of 6 hours 端子以电流 0.1A d.c 串联导通, 振幅 1.5mm, 频率 10-55-10Hz, X, Y, Z 方向各 2 小时, 共 6 小时	1. In 1 μ s or a longer period of time, do not produce fault transient. 1. 在 1 μ s 或更长的时间内, 不产生断瞬。 2. No evidence of damage 1. 没有明显损伤 2. The electrical performances should meet the pec. specified. 2. 电性能应符合规范
2	Shock 耐冲击性	Terminal to current of 0.1 A, dc series conduction, acceleration of 490 m/s ² , X, Y, Z direction of the 11ms, all three times, A total of 18 端子以电流 0.1A d.c 串联导通, 加速度 490m/s ² , X, Y, Z 方向各 11ms, 各 3 回, 共 18 回	
3	Cold 耐寒性	Temperature : -40 \pm 3 $^{\circ}$ C Duration : 96 hours 温度 -40 \pm 3 $^{\circ}$ C 中放置时间 96H.	
4	Dry heat 耐热性	Temperature : 105 \pm 2 $^{\circ}$ C Duration : 96 hours 温度 105 \pm 2 $^{\circ}$ C 中放置时间 96H	
5	Humidity 耐湿性	Temperature : 25 ~ 65 $^{\circ}$ C Humidity : 90 ~ 95% (R.H) Duration : 96 hours 温度 25-65 $^{\circ}$ C; 湿度 90~95% RH 中放置时间 96H	
6	The impact of hot and cold 冷热冲击	Placed in the temperature -55 \pm 3 $^{\circ}$ C; 85 \pm 2 $^{\circ}$ C each 30 minutes, totally 5 cycles, then left at room temperature for 1~2 hours, then the measurement, FPC chimeric state tests. -55 \pm 3 $^{\circ}$ C; 85 \pm 2 $^{\circ}$ C 的温度下各放置 30 分钟, 共进行 5 次循环, 之后在室温下放置 1~2 小时再进行测量, FPC 嵌合状态下测试	

	Temperature	Time
1	-55 $^{+0}_{-3}$ $^{\circ}$ C	30min
2	25 $^{+10}_{-5}$ $^{\circ}$ C	5min
3	85 $^{+3}_{0}$ $^{\circ}$ C	30min
4	25 $^{+10}_{-5}$ $^{\circ}$ C	5min

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Product specification 制品仕様书	Part name 制品名称	FFC/FPC P0.5 H2.00 Back-flip double contact			
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	PART NUMBER 料号	HRS-F32*-1A7Y1-210**			4/7
File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu

7	Salt Spray 盐雾试验	温度 35±2℃；盐水比重 5±1% 喷雾试验： A: 镀金 48h B: 镀锡 24h C: 单 pin 端子 48h The specimens shall be subjected to a salt water spray (concentration : 5±1%) at a temperature of 35±2℃ for 48 hours	1. No evidence of damage. 2. There should be no corrosion detrimental to contact connection. 3. Insulation Resistance: 100MΩ Min. 4. Contact Resistance: 40mΩ max. 1. 没有明显损伤 2. 没有腐蚀及有害接触连接 3. 绝缘阻抗: 100MΩ Min. 4. 接触阻抗: 40mΩ max.
8	Solderability 沾锡性	Soldering Temperature: 245±5℃ Soldering Time: 3±0.5 seconds 沾锡温度 245±5℃ 时间 3±0.5S	Continuous solder coating with a min. 95% coverage 吃锡饱满, 在 95% 以上
9	The heat resistance of Reflow Reflow 耐热性	The pre heating time: 150℃ 80s , 180℃~230℃ 40s, MAX 230℃~240℃ 25s, Do it twice ※Does note: product lock must be carried out in the open state. ※注意事项: 产品锁扣必须在开启状态下进行。	No deformation on the housing, the pin leg and the ground plate flatness is 0.10mm Max. 产品主体无变形起泡, 产品的锡脚与接地片平整度 0.10mm Max.

※Does special warning: after we lock products and traditional (draw) and (cover) production process is different, must be inserted in the process of commissioning or use after SMT FPC line can press the lock. Any other location shall press lock, otherwise it will cause: 1. Not easy to insert the FPC line. 2. Press the lock will cause the product deformation after SMT. Press the lock after SMT will cause poor contact.

※特别警示: 我司后锁式产品与传统(抽拉式)和(翻盖)的产品生产工艺有所不同, 必须在 SMT 后试机或使用过程中插入 FPC 排线方可压下锁扣。其它任何工位均不得压下锁扣, 否则将会造成: 1. 不易插入 FPC 排线。2. 压下锁扣 SMT 后会造产品变形。3. 压下锁扣 SMT 后会造造成接触不良隐患。

6. Description 说明:

6.1 the points for attention during the operation 操作时的注意事项

1) the FPC line parallel to the insert, Please note that the connector contact slightly prominent, if you can't make the FPC correctly inserted row line between a conductive part and touch point contact, terminal signal mismatch cause equipment will not be able to work properly

FPC 排线平行插入, 请注意, 连接器的触点稍突出, 如果不能正确插入使 FPC 排线导电部分与触点接触, 端子信号不匹配导致设备将无法正常工作。

2) confirm the FPC line line fully inserted, otherwise may cause poor contact.

确认 FPC 排线完全插入, 否则可能导致接触不良。

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File number 文件编号 IS.EQC.052	DATE 日期: 2016-05-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu

- 3) insert the FPC line not line, please don't press the lock.
未插入 FPC 排线时请不要压下锁扣。
- 4) inserted FPC line pull lines do not force too much, otherwise may cause the connector damage or poor contact.
 拔插 FPC 排线时不要用力过大, 否则可能导致连接器损坏或接触不良。
- 5) once the lock out, breaking with the main body of the connector do not use again.
 一旦锁扣与主体发生脱离、断裂, 该连接器请勿再使用。
- 6) press the lock, please with the fingers on both sides of the fixed position, moderate ensure lock average stress down completely, if the lock is not completely down, can lead to poor contact.
 下压锁扣时, 请用手指头固定两边适中位置, 确保锁扣完全平均受力下压, 如果锁扣未完全下压, 可能导致接触不良。
- 7) When press the lock, but in a horizontal direction (the direction of the parallel placodes) hard.
 下压锁扣时, 可在水平方向(平行于基板的方向)用力。
- 8) remove lock, at the same time seize the moderate position on both ends of the lock, or grab the lock up slowly, not only bring about too much, it will cause damage and poor contact.
 解除锁扣时, 应同时抓住锁扣两端适中位置, 或抓住整个锁扣慢慢掀起, 不可仅掀起一边过多, 这样会导致损坏及接触不良。
- 9) lift lock, pull out plug FPC platoon line, attention should be paid to avoid deformation of the following can lead to damages connector, terminal and the operation of the poor contact:
 掀起锁扣、拔插 FPC 排线时, 应注意避免以下可能导致连接器损坏、端子变形及接触不良的操作:
 Not pulled it inserted FPC ribbon cable lock.
 一未掀起锁扣就拔插 FPC 排线。
 Pull out plug FPC line line tilt up and down, left and right.
 一拔插 FPC 排线时在上下、左右方向发生倾斜。

7. packaging 包装

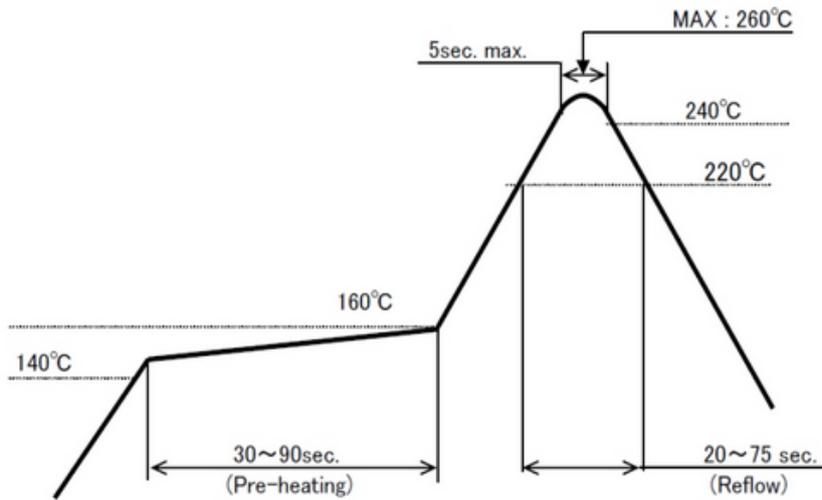
See figure packaging 参见包装图



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Product specification 制品仕样书		Part name 制品名称	FFC/FPC P0.5 H2.00 Back-flip double contact		
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File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu

8. Reflow conditions 回流条件:



REFLOW TEMPERATURE PROFILE
(Temperature on the product surface)

9. Alter content 修改内容

No.	DATE 日期	Modify content 修改内容	REVISED BY: 编制	CHECKED BY: 审核	APPROVED BY: 核准
A	2014/05/08	New edition 新版发行	韩奇	/	Hongkui.liu
B	2016/01/21	Update the English version 更新中英文版	韩奇	/	Hongkui.liu
C	2016/03/18	Modify the salt spray test standards 修改盐雾实验标准	Rain	/	Hongkui.liu
D	2016/6/1	Increase the FFC retention test conditions Lift the cover pressure standard 增加 FFC 保持力测试条件及掀盖压力标准	May	Rain	Hongkui.liu
E	2016/6/12	Update the FFC retention standard 更新 FFC 保持力标准	May	Rain	Hongkui.liu
F	2016/7/11	Increase the FPC retention standard 增加 FPC 保持力标准	May	Rain	Hongkui.liu
G	2016/8/12	Update Terminal retention Force standard 更新端子保持力标准	May	Rain	Hongkui.liu

This product contains no SS - 00259 and ROHS to ban the use of environmental material
本制品不含 SS-00259 和 RoHS 禁止使用的环境物质

Product specification 制品仕様书	Part name 制品名称	FFC/FPC P0.5 H2.00 Back-flip double contact			
Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	PART NUMBER 料 号	HRS-F32*-1A7Y1-210**			7/7
File number 文件编号 IS.EQC.052	DATE 日期: 2016-08-12	REV 版本: G	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准 hongkui.liu