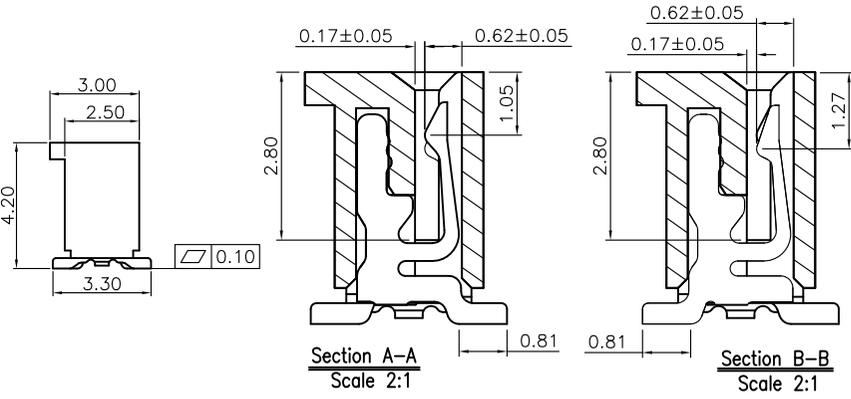
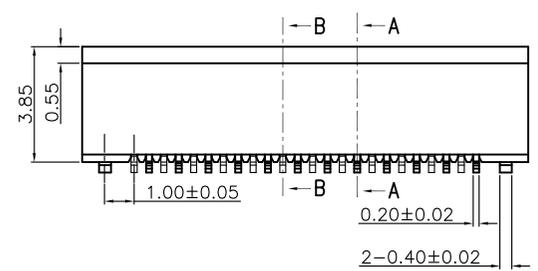
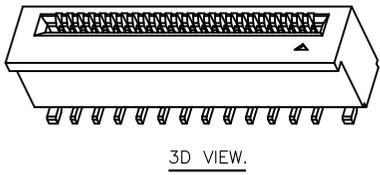
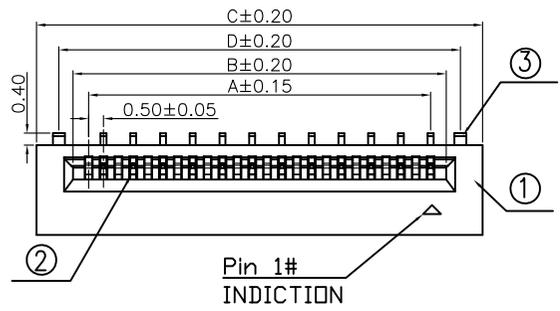


1	2	3	4		
REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
A	/	New version	May 2013-04-25	Rain 2013-04-25	Hongkui.Liu 2013-04-25
B	/	Modify drawings	May 2013-07-16	Rain 2013-07-16	Hongkui.Liu 2013-07-16

NOTE:
 1.ALL MATERIAL MUST BE COMPLY WITH SS-00259 OR RoHS.
 2.PART NO. LEGEND:
 HRS-F31G-1A**1-110**

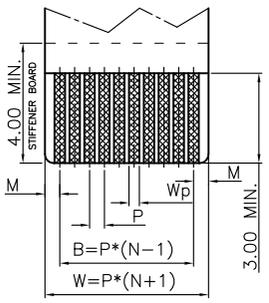
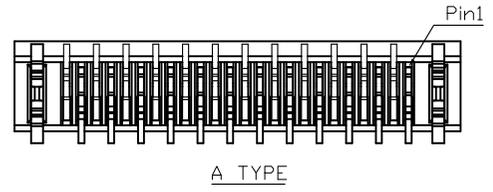
1G:A TYPE
 1K:B TYPE
 1A:LCP NATURAL

NO. OF POSITIONS
 7A:PHOSPHOR BRONZE
 MATTER TIN
 7H:PHOSPHOR BRONZE
 0.05um MIN Au(Au Area)



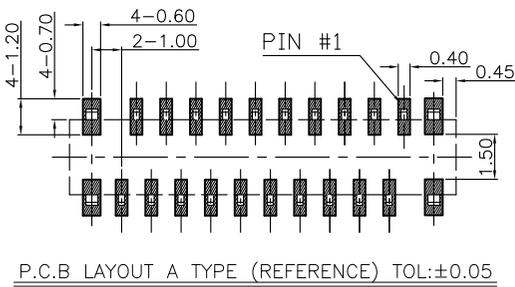
DIMENSION LIST:

No. OF POS.	A	B	C	D	No. OF POS.	A	B	C	D
4	1.50	2.55	5.00	3.50	28	13.50	14.55	17.00	15.50
5	2.00	3.05	5.50	4.00	29	14.00	15.05	17.50	16.00
6	2.50	3.55	6.00	4.50	30	14.50	15.55	18.00	16.50
7	3.00	4.05	6.50	5.00	31	15.00	16.05	18.50	17.00
8	3.50	4.55	7.00	5.50	32	15.50	16.55	19.00	17.50
9	4.00	5.05	7.50	6.00	33	16.00	17.05	19.50	18.00
10	4.50	5.55	8.00	6.50	34	16.50	17.55	20.00	18.50
11	5.00	6.05	8.50	7.00	35	17.00	18.05	20.50	19.00
12	5.50	6.55	9.00	7.50	36	17.50	18.55	21.00	19.50
13	6.00	7.05	9.50	8.00	37	18.00	19.05	21.50	20.00
14	6.50	7.55	10.00	8.50	38	18.50	19.55	22.00	20.50
15	7.00	8.05	10.50	9.00	39	19.00	20.05	22.50	21.00
16	7.50	8.55	11.00	9.50	40	19.50	20.55	23.00	21.50
17	8.00	9.05	11.50	10.00	41	20.00	21.05	23.50	22.00
18	8.50	9.55	12.00	10.50	42	20.50	21.55	24.00	22.50
19	9.00	10.05	12.50	11.00	43	21.00	22.05	24.50	23.00
20	9.50	10.55	13.00	11.50	44	21.50	22.55	25.00	23.50
21	10.00	11.05	13.50	12.00	45	22.00	23.05	25.50	24.00
22	10.50	11.55	14.00	12.50	46	22.50	23.55	26.00	24.50
23	11.00	12.05	14.50	13.00	47	23.00	24.05	26.50	25.00
24	11.50	12.55	15.00	13.50	48	23.50	24.55	27.00	25.50
25	12.00	13.05	15.50	14.00	49	24.00	25.05	27.50	26.00
26	12.50	13.55	16.00	14.50	50	24.50	25.55	28.00	26.50
27	13.00	14.05	16.50	15.00					



APPLICABLE FPC/FFC DIMENSION
 THICKNESS:T=0.30±0.05

	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±0.07	W±0.07
Wp	0.35±0.03	0.30±0.05



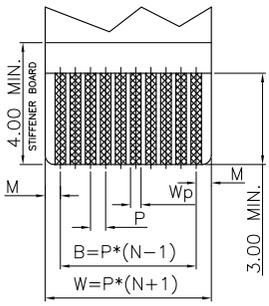
NO.	COMPONENTS	MATERIALS	SPECIFICATION:FINISH/COLOR	QTY.
1	HOUSING	GLASS FILLED LCP, UL94V-0	NATURAL	1
2	CONTACT	PHOSPHOR BRONZE, T=0.20mm	SURFACE PLATING:SEE "NOTE" UNDER PLATING:1~3 um Ni	N
3	ANCHOR-PLATE	BRASS,T=0.40mm	SURFACE PLATING:2~5 um Sn UNDER PLATING:1~3 um Ni	2

UNLESS OTHERWISE SPECIFIED TOLERANCES		ANGLE OF PROJECTION		 Horustech Horustech Electronics Co., LTD.	
X.	±0.50	X. °	± 1'		
X.X	±0.30	X.X °	± 0.5'	TITLE: Assembly Drawing For 0.5mm FPC NON-ZIF VERTICAL SMT TYPE 4~50PIN	
X.XX	±0.20	X.XX °	± 0.5'		
X.XXX	±0.10	X.XXX °	± 1'	SIZE: A4 DWG NO. A-S0104 REV. B	
LINEAR DIMS		ANGLES DIMS			
P/N:	HRS-F31G-1A**1-110**	DOC TYP	Customer Drw	SCALE: 1:1 UNIT: mm SHEET 1 OF 1	
MATERIAL	SEE NOTES	DRAWN DATE	May 2013-07-16		
FINISHED	SEE NOTES	DESIGN DATE	May 2013-07-16	APPROVED DATE: Hongkui.Liu 2013-07-16	
		CHECKED DATE	Rain 2013-07-16		

REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
A	/	NEW RELEASE	Henry 2013-04-25	Zhengxian.Ye 2013-04-25	Roy 2013-04-25
B	/	REVISED DRAWING	May 2019-06-28	Rain 2019-06-28	Hongkui.Liu 2019-06-28

NO.	COMPONENTS	MATERIALS	SPECIFICATION:FINISH/COLOR	QTY.
1	HOUSING	GLASS FILLED LCP, UL94V-0	NATURAL	1
2	ANCHOR-PLATE	BRASS, T=0.40mm	SURFACE PLATING:2~5 um Sn UNDER PLATING:1~3 um Ni	2
3	CONTACT	PHOSPHOR BRONZE, T=0.20mm	SURFACE PLATING:SEE "NOTE" UNDER PLATING:1~3 um Ni	N

	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±0.07	W±0.07
Wp	0.35±0.03	0.30±0.05



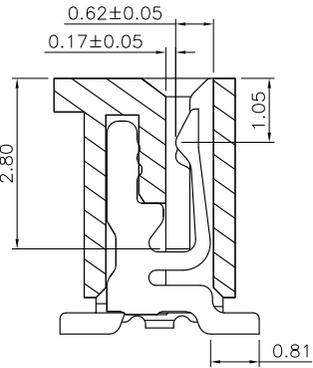
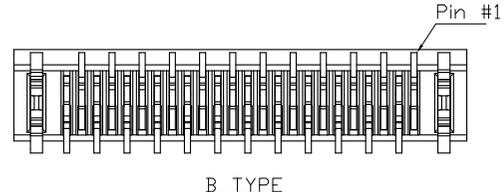
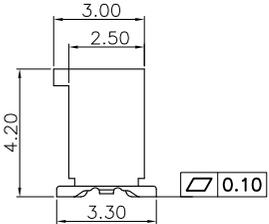
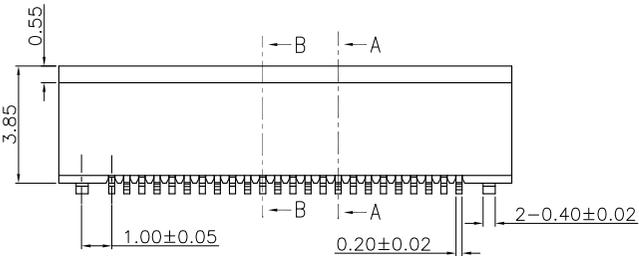
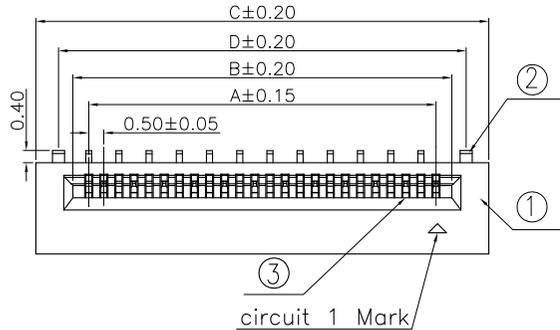
APPLICABLE FPC/FFC DIMENSION
THICKNESS:T=0.30±0.05

NOTE:
1.ALL MATERIAL MUST BE COMPLY WITH
SS-00259 OR RoHS.
2.PART NO. LEGEND:
HRS-F31K-1A**1-110**

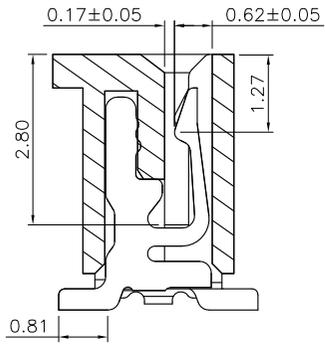
NO. OF POSITIONS
7A:PHOSPHOR BRONZE
MATTER TIN
7H:PHOSPHOR BRONZE
0.05um MIN Au(Au Area)
1A:LCP NATURAL
1K:B TYPE

DIMENSION LIST:

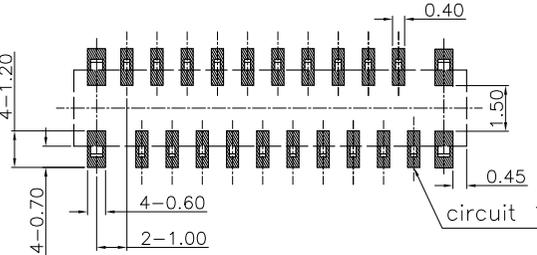
NO. OF POS.	A	B	C	D	NO. OF POS.	A	B	C	D
4	1.50	2.55	5.00	3.50	28	13.50	14.55	17.00	15.50
5	2.00	3.05	5.50	4.00	29	14.00	15.05	17.50	16.00
6	2.50	3.55	6.00	4.50	30	14.50	15.55	18.00	16.50
7	3.00	4.05	6.50	5.00	31	15.00	16.05	18.50	17.00
8	3.50	4.55	7.00	5.50	32	15.50	16.55	19.00	17.50
9	4.00	5.05	7.50	6.00	33	16.00	17.05	19.50	18.00
10	4.50	5.55	8.00	6.50	34	16.50	17.55	20.00	18.50
11	5.00	6.05	8.50	7.00	35	17.00	18.05	20.50	19.00
12	5.50	6.55	9.00	7.50	36	17.50	18.55	21.00	19.50
13	6.00	7.05	9.50	8.00	37	18.00	19.05	21.50	20.00
14	6.50	7.55	10.00	8.50	38	18.50	19.55	22.00	20.50
15	7.00	8.05	10.50	9.00	39	19.00	20.05	22.50	21.00
16	7.50	8.55	11.00	9.50	40	19.50	20.55	23.00	21.50
17	8.00	9.05	11.50	10.00	41	20.00	21.05	23.50	22.00
18	8.50	9.55	12.00	10.50	42	20.50	21.55	24.00	22.50
19	9.00	10.05	12.50	11.00	43	21.00	22.05	24.50	23.00
20	9.50	10.55	13.00	11.50	44	21.50	22.55	25.00	23.50
21	10.00	11.05	13.50	12.00	45	22.00	23.05	25.50	24.00
22	10.50	11.55	14.00	12.50	46	22.50	23.55	26.00	24.50
23	11.00	12.05	14.50	13.00	47	23.00	24.05	26.50	25.00
24	11.50	12.55	15.00	13.50	48	23.50	24.55	27.00	25.50
25	12.00	13.05	15.50	14.00	49	24.00	25.05	27.50	26.00
26	12.50	13.55	16.00	14.50	50	24.50	25.55	28.00	26.50
27	13.00	14.05	16.50	15.00					



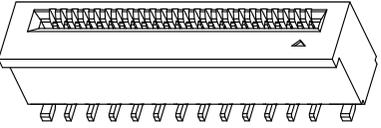
Section A-A;Scale 2:1



Section B-B;Scale 2:1



P.C.B LAYOUT B TYPE (REFERENCE) TOL:±0.05

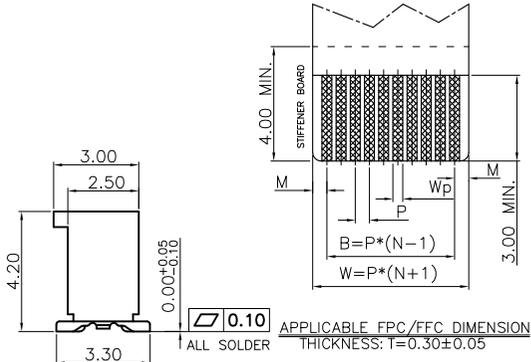
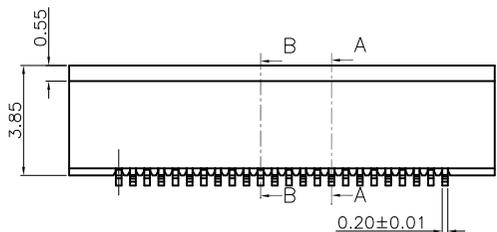
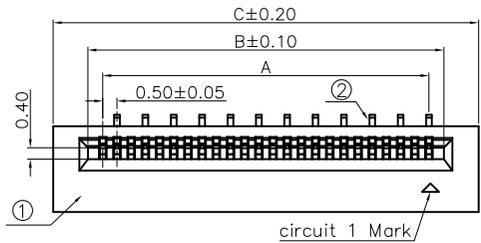


3D VIEW REF.

UNLESS OTHERWISE SPECIFIED TOLERANCES		ANGLE OF PROJECTION		Horus Int. Electronics. Co., LTD. Horustech Electronics. Co., LTD.	
X.	±0.50	X. °	± 3'	Customer Drw	
X.X	±0.30	X.X °	± 2'		
X.XX	±0.20	X.XX °	± 1'	DRAWN DATE May 2019-06-28	
X.XXX	±0.10	X.XXX °	± 1'		
LINEAR DIMS		ANGLES DIMS		DESIGN DATE May 2019-06-28	
P/N: HRS-F31K-1A**1-110**					
MATERIAL SEE NOTES		CHECKED DATE Rain 2019-06-28		TITLE: FPC NON-ZIF P0.5 VERTICAL SMT B_TYPE	
FINISHED SEE NOTES		APPROVED DATE Hongkui.Liu 2019-06-28		SIZE DWG NO. A4 A-S0068	
		SCALE 1:1		UNIT : mm SHEET 1 OF 1	

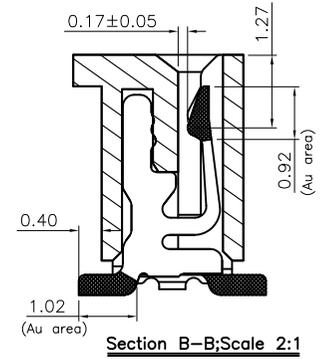
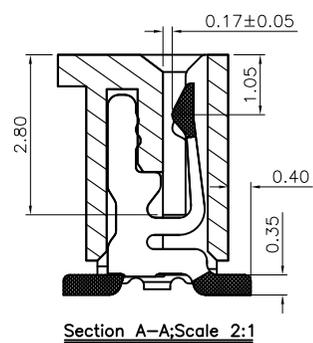
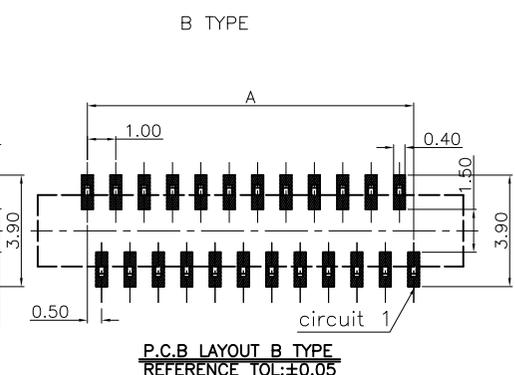
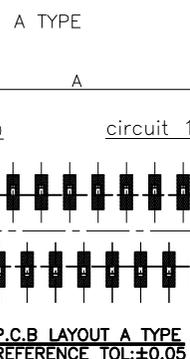
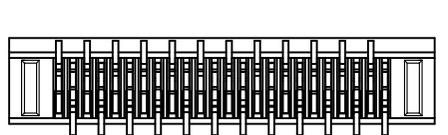
	FPC	FFC
M	0.5±0.05	0.5±0.05
P	0.5±0.03	0.5±0.03
B	B±0.05	B±0.05
W	W±0.07	W±0.07
Wp	0.35±0.03	0.30±0.05

REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
A	/	NEW VERSION	May 2014-10-29	Rain 2014-10-29	Hongkui.Liu 2014-10-29
B	/	Add pin	May 2015-10-21	Rain 2015-10-21	Hongkui.Liu 2015-10-21
C	/	PART Number is expected to upgrade	May 2016-09-18	Rain 2016-09-18	Hongkui.Liu 2016-09-18
D	/	Add 40pin	May 2020-01-16	Rain 2020-01-16	Hongkui.Liu 2020-01-16



NOTE:
 1.ALL MATERIAL MUST BE COMPLY WITH RoHS.
 2.PART NO. LEGEND:
 HRS-F3**-1A**1-110** (WITHOUT MYLAR,WITHOUT ANCHOR-PLATE)
 2Y:A TYPE NO. OF POSITIONS
 2P:B TYPE 7A:PHOSPHOR BRONZE MATTER TIN
 1A:LCP NATURAL 7H:PHOSPHOR BRONZE 0.05um MIN Au(Au Area)

Ⓜ HRS-F3**-1A**1-110**-B200(PART Number is expected to upgrade)
 2Y:A TYPE WITHOUT MYLAR
 2P:B TYPE A TYPE (WITHOUT ANCHOR-PLATE)
 1A:LCP NATURAL NO. OF POSITIONS
 7A:PHOSPHOR BRONZE MATTER TIN
 7H:PHOSPHOR BRONZE 0.05um MIN Au(Au Area)



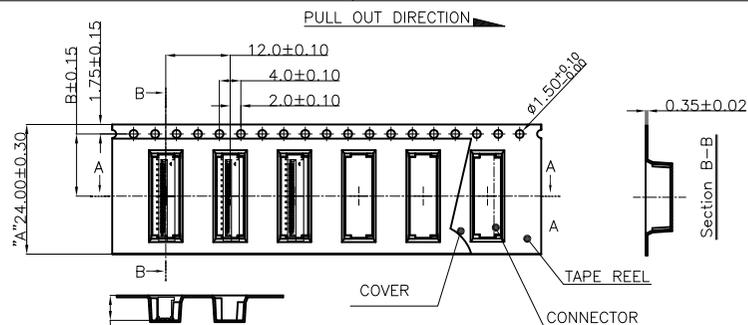
DIMENSION LIST:

No. of Pos.	A	B	C
4	1.50	2.55	5.00
5	2.00	3.05	5.50
6	2.50	3.55	6.00
7	3.00	4.05	6.50
8	3.50	4.55	7.00
9	4.00	5.05	7.50
10	4.50	5.55	8.00
11	5.00	6.05	8.50
12	5.50	6.55	9.00
13	6.00	7.05	9.50
14	6.50	7.55	10.00
15	7.00	8.05	10.50
16	7.50	8.55	11.00
17	8.00	9.05	11.50
18	8.50	9.55	12.00
19	9.00	10.05	12.50
20	9.50	10.55	13.00
21	10.00	11.05	13.50
22	10.50	11.55	14.00
23	11.00	12.05	14.50
24	11.50	12.55	15.00
25	12.00	13.05	15.50
26	12.50	13.55	16.00
27	13.00	14.05	16.50
28	13.50	14.55	17.00
29	14.00	15.05	17.50
30	14.50	15.55	18.00
31	15.00	16.05	18.50
32	15.50	16.55	19.00
33	16.00	17.05	19.50
34	16.50	17.55	20.00
35	17.00	18.05	20.50
36	17.50	18.55	21.00
37	18.00	19.05	21.50
38	18.50	19.55	22.00
39	19.00	20.05	22.50
40	19.50	20.55	23.00

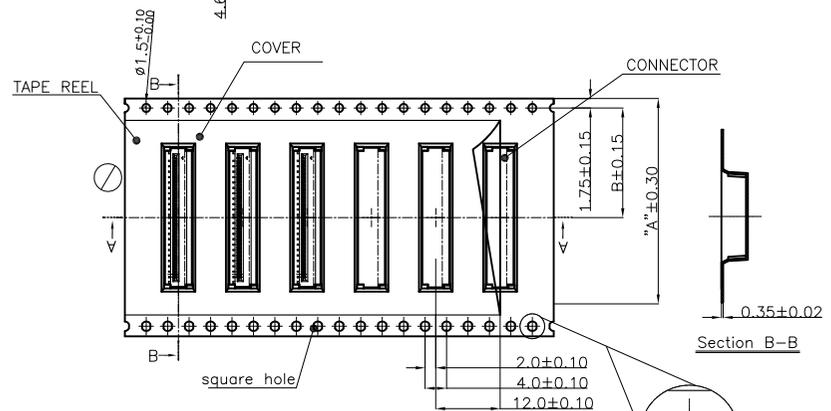
NO.	COMPONENTS	MATERIALS	SPECIFICATION:FINISH/COLOR	QTY.
1	HOUSING	GLASS FILLED LCP, UL94V-0	NATURAL	1
2	CONTACT	PHOSPHOR BRONZE, T=0.20mm	SURFACE PLATING:SEE "NOTE" UNDER PLATING:1~3 um Ni	N

UNLESS OTHERWISE SPECIFIED TOLERANCES		ANGLE OF PROJECTION		Horus Int. Electronics. Co., LTD. HorusTech Electronics. Co., LTD.	
X.	±0.30	X. °	± 5'	Customer Drw	
X.X	±0.25	X.X °	± 4'		
X.XX	±0.20	X.XX °	± 3'	DRAWN DATE May 2014-10-29	
X.XXX	±0.15	X.XXX °	± 2'	DESIGN DATE May 2014-10-29	
LINEAR DIMS		ANGLES DIMS		CHECKED DATE Rain 2014-10-29	
DWG NO.: A-S0199		MATERIAL SEE NOTES		APPROVED DATE Hongkui.Liu 2014-10-29	
FINISHED SEE NOTES		SCALE 1:8		UNIT : mm SHEET 1 OF 2	
TITLE: Assembly Drawing For 0.5mm FPC NON-ZIF VERTICAL NO-ANCHOR PLATE SMT TYPE 4~40PIN		PART NUMBER: HRS-F32Y/2P-1A**1-110** HRS-F32Y/2P-1A**1-110**-B200		REV. D	

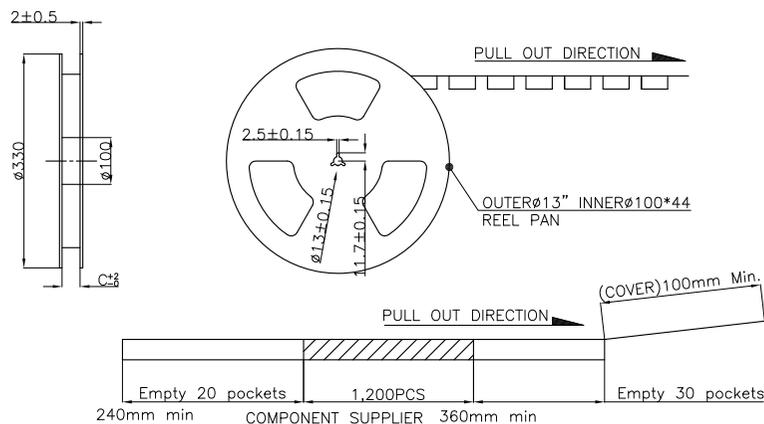
REV.	ECR/ECN No.	DESCRIPTION	DRAWN/DATE	CHECKED/DATE	APPROVED/DATE
C	/	PART Number is expected to upgrade	May 2016-09-18	Rain.Han 2016-09-18	Leo.Liu 2016-09-18
D	/	Add 40pin	May 2020-01-16	Rain.Han 2020-01-16	Leo.Liu 2020-01-16



CHART(1)



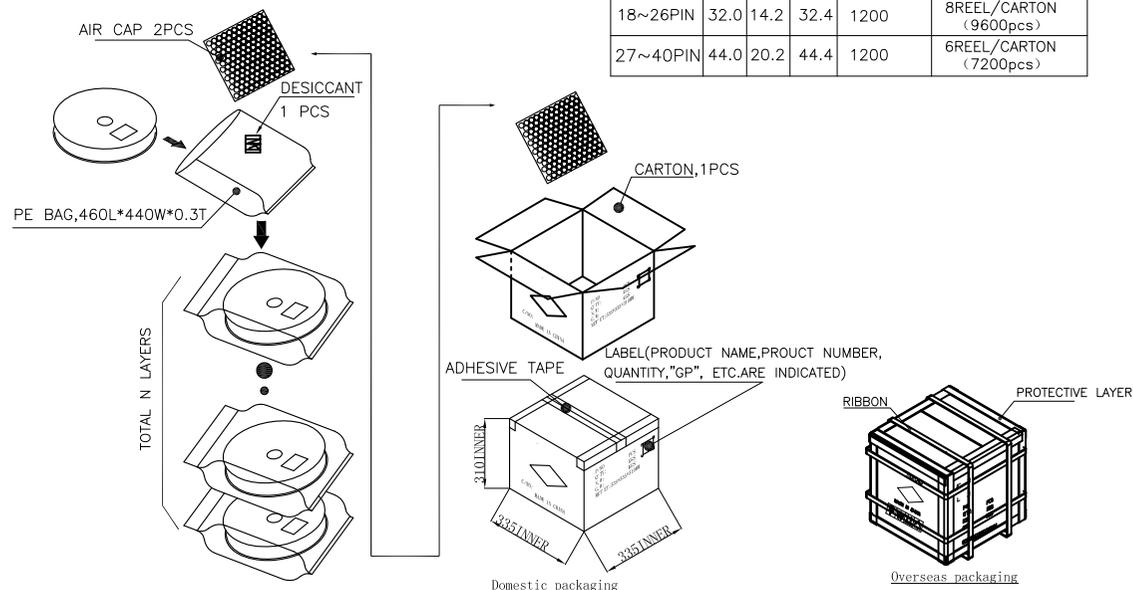
CHART(2)



NOTES:

- MATERIAL:
 - CARRY TAPE:HIPS,T=0.35mm,CLEAR
 - REEL:HIPS,BLUE.
 - SHIM:PE,CLEAR.
- PRIMARY PACKING:1,200PCS/REEL.
- SECONDARY PACKING:"N"REELS/CARTON("TOTAL"=N*1200/CARTON).
- PEELING RESISTANCE: 0.1N~0.7N(10~70gf);
PEELING ANGLE: 165°~180°;
PEELING SPEED: 300mm/minutes.
BANDWIDTH IS 24mm SELECTION CHART(1) LOADING PACKING
- THE DIMENSION LIST AND QUANTITY PACKING:

NO. OF POS	A	B	C	PCS/REEL	NREEL/CARTON (TOL PCS)
4~17PIN	24.0	11.5	24.4	1200	10REEL/CARTON (12000pcs)
18~26PIN	32.0	14.2	32.4	1200	8REEL/CARTON (9600pcs)
27~40PIN	44.0	20.2	44.4	1200	6REEL/CARTON (7200pcs)



REELED PRODUCTS SHALL BE PACKED INTO PE BAG WITH DESICCANT THAT IS CONSIDERED TO LIGHT DAMP PROOF.

UNLESS OTHERWISE SPECIFIED TOLERANCES			ANGLE OF PROJECTION		Horus Int. Electronics Co., LTD. HorusTech Electronics Co., LTD.	
X.	±0.30	X. °	± 5'		TITLE: Assembly Drawing For 0.5mm FPC NON-ZIF VERTICAL NO-ANCHOR PLATE SMT TYPE 4~40PIN	
X.X	±0.25	X.X °	± 4'			
X.XX	±0.20	X.XX °	± 3'	DOC TYP	Customer Drw	
X.XXX	±0.15	X.XXX °	± 2'	DRAWN	DATE	May 2014-10-29
LINEAR DIMS			ANGLES DIMS		DESIGN	DATE
DWG NO.: A-S0199					DATE	May 2014-10-29
MATERIAL			SEE NOTES		CHECKED	DATE
FINISHED			SEE NOTES		DATE	May 2014-10-29
					APPROVED	DATE
					DATE	May 2014-10-29
					SIZE	A4
					PART NUMBER:	HRS-F32Y/2P-1A**1-110** HRS-F32Y/2P-1A**1-110**-B200
					SCALE	1:2
					UNIT	mm
					SHEET	2 OF 2
					REV.	D

1. Scope of application 适用范围:

This job specification is applicable to: FPC pitch 0.50MM/1.0mm NON-ZIF VERTICAL SMT TYPE

此作业规范适用于: FPC pin 距 0.50 及 1.0 立式 NON-ZIF SMT 系列

FPC is suitable for thickness: 0.30±0.03MM

FPC 适用厚度: 0.30±0.03MM

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)	宝理 POLYPLASTICS CO., LTD	LCP Liquid crystal polymer	V-0	E106764

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

3) Temperature and humidity range: 温湿度范围:

a. Operating temperature: -40°C ~ +105°C

操作温度: -40°C ~ +105°C

b. Storage temperature: -40°C ~ +105°C

储存温度: -40°C ~ +105°C

c. Keep humidity range: relative humidity 45~80%RH

保持湿度范围: 相对湿度 45~80%RH

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Horus Int. Electronics. Co., LTD. Horustech Electronics. Co., LTD.		PART NUMBER 料 号	HRS-F31G-1A7*1-110** HRS-F31K-1A7*1-110** HRS-F51G-1A7*1-110** HRS-F51K-1A7*1-110** HRS-F32Y/2P-1A7*1-110**	1/6	
File number 文件编号 IS.EQC.035	DATE 日期: 2017-09-04	REV 版本: B	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY: 核准: Xiaohong. Zhu

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	The same terminal testing , current: 10mA (DC), Voltage: below 20mV , the use of wires: adapting FFC standard line 同一根端子测试, 电流: 10mA (DC), 电压: 20mV 以下, 使用电线: 适配 FFC 标准线	30mΩ max.
2	Insulation Resistance 绝缘阻抗	Insulation resistance between adjacent terminals DC 500V, 1 minutes. 相邻端子间 DC 500V, 1 分钟	500MΩ Min.
3	Pressure 耐压测试	Adjacent terminals AC 500V, Current sensitivity in 2mA, 1minutes 相邻端子间 DC 500V, 感度电流 2mA, 1 分钟	NO breakdown, No short circuit 无击穿, 无短路
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	FFC (T=0.30mm) into the FPC bond, 25~100mm/points to uniform vertical pull out, this action was repeated 3 times, measurement data record at fourth. FFC(标配厚度为 0.30MM)插入 FPC 连接器后, 以 25~100mm/分匀速垂直拔出, 此动作重复三次后第四次作测量资料的记录	20gf/PIN Min
2	FFC/FPC insertion force FFC/FPC 插入力	FFC to 25~100mm/uniform vertically inserted into FPC FFC 以 25~100/分匀速垂直插入 FPC	3000gf Max
3	Terminal retention force 端子保持力	The terminal 25.4±3mm/uniform the vertically from the rubber core tank 将端子以 25.4/分匀速垂直从胶芯槽内拔出	300gf/terminal Min.

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4	Stator retention force 固定片保持力	The stator 25.4±3mm/uniform the vertically from the rubber core tank 将固定片以 25.4/分匀速垂直从胶芯槽内拔出	400gf/terminal Min.
5	Durability 插拔耐久性	The following actions are repeat 30 times: FPC insert, FPC pull out. Periodic rate:10times/min max 以下动作进行 30 次巡回:FPC 插入, FPC 拔出 周期速率: 10 次/分钟 MAX	<ol style="list-style-type: none"> Appearance: no abnormal Contact impedance: 50 mΩ Max FPC/FPC insertion force: 3,000gf MAX FPC/FPC retention force: 20gf/pin min <ol style="list-style-type: none"> 接触阻抗 50 mΩ 最大 外观无异常 FPC/FPC 插入力:3000gf max FPC/FPC 拔出力: 20gf/pin 最小

5.3 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	Amplitude:1.5mm, pp Scan time;10~55~10Hz 1 minutes Duration:2 hours in each of the x y z - axis 振幅: 1.5 mm, pp 扫描时间: 10~55~10 赫兹 1 分钟 持续时间: 2 小时在每个 x y z 轴	<ol style="list-style-type: none"> Appearance: no abnormal Contact impedance: 50 mΩ Max discontinuous conduction within 1s <ol style="list-style-type: none"> 外观无异常 接触阻抗 50 mΩ 最大 不连续导通 1 μs 以内
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 rounds 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 resistance 耐寒性	Placing time after 96H in temperature-40±3°C, placed in room temperature for 1~2 hours, then the measurement. 温度-40±3°C中放置时间 96H 后放置在室温环境下 1~2 小时再进行测量	<ol style="list-style-type: none"> Appearance: no abnormal Contact impedance: 50 mΩ Max <ol style="list-style-type: none"> 外观无异常 接触阻抗 50 mΩ 最大
4	Heat resistance 耐热性	Placing time after 96H in temperature105±2°C, placed in room temperature for 1~2 hours, then the measurement. 温度 105±2°C中放置时间 96H 后放置在室温环境下 1~2 小时再进行测量	

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File number 文件编号 IS.EQC.035	DATE 日期: 2017-09-04	REV 版本: B	REVISED BY: 制作: May	CHECKED BY: 审核: Rain	APPROVED BY 批准: xiaohong. Zhu

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	Moisture resistance 耐湿性	Standing time after 96H in temperature 60±2℃; Moisture 90~95%RH placed in the room temperature 1~2H again then the measurement. 温度 60±2℃; 湿度 90~95%RH 中放置时间 96 小时后在室温环境下 1~2 小时再进行测量	1. Appearance: no abnormal 2. Contact impedance: 50 mΩ Max
2	Salt Spray 盐雾试验	Temperature 35±2℃; Saline specific gravity of 5±1% spray test for 48H 镀金: 温度 35±2℃; 盐水比重 5±1% 喷雾试验 48H 单 PIN 端子: 温度 35±2℃; 盐水比重 5±1% 喷雾试验 48H	1. 外观无异常 2. 接触阻抗 50 mΩ 最大
3	The impact of hot and cold 冷热冲击	Placed in the temperature -55±3℃; 85±2℃ each 30 minutes, totally 5 cycles, then left at room temperature for 1~2hours, then the measurement. -55±3℃; 85±2℃ 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.	1. Appearance: no abnormal 2. Contact impedance: 50 mΩ Max 1. 外观无异常 2. 接触阻抗 50 mΩ 最大
4	Sulfidation resistance 耐硫化性	Concentration conditions: 50±5ppm sulfur dioxide gas Environmental temperature: 40±2℃ Placing time: 24Hrs 浓度条件: 50±5ppm 二氧化硫气体 环境温度: 40±2℃ 放置时间: 24 小时	1. Appearance: no abnormal 2. Contact impedance: 50 mΩ Max 1. 外观无异常 2. 接触阻抗 50 mΩ 最大
5	High ammonia 耐氨气	Placing conditions: 10CM conditions, the surface of 28% ammonia solution. Placing time: 40 minutes 放置条件: 10CM 条件, 表面 28% 的氨水溶液中 放置时间: 40 分钟	1. Appearance: no abnormal 2. Contact impedance: 50 mΩ Max 1. 外观无异常 2. 接触阻抗 50 mΩ 最大
6	Solderability 沾锡性	Soldering Temperature: 245±5℃ (Sn: lead Free) Time: 3±0.5 seconds 沾锡温度 245±5℃ (Sn: lead Free) 时间 3±0.5S	Continuous solder coating with a min. 95% coverage 吃锡饱满, 在 95% 以上

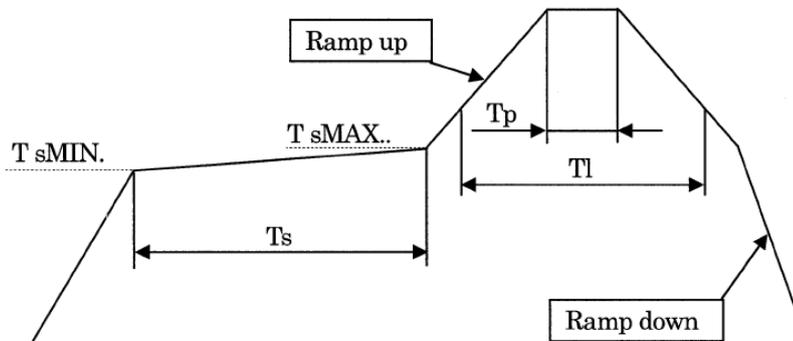
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7	The heat resistance of Reflow Reflow 耐热性	预备加热时间 Pre-heating time: 170°C~190°C 60~180s. 焊锡温度时间 Soldering Temperature Time: 260°C 10sMAX.	No deformation on the housing, the pin leg and the ground plate flatness is 0.10mm Max. 产品主体无变形起泡, 产品的锡脚与接地片平整度 0.10mm Max.
8	WHISKER (Tin Plated) WHISKER 镀锡品	Insert the FPC after Reflow, then place 500H, Then observation of WHISKER length. 过 Reflow 后插入 FPC, 放置 500H, 观察 WHISKER 的长度	100um Max

5.5 Reflux conditions 回流条件:

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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7. packaging 包装

See figure packaging 参见包装图


7.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
1	2015/09/26	New content 新版发行	叶兵	韩奇	刘红奎
2	2016/10/13	更新焊锡温度条件 Update the soldering temperature conditions	May	Rain	xiaohong.zhu

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