

产品规格书

PRODUCT SPECIFICATION

<u>产品系列 Product Series:</u> PAPER JACK		<u>版本 REVISION:</u> B/0	<u>页码 SHEET No.</u> 1 of 5
<u>修订 REVISED BY:</u> 张盼	<u>审核 CHECKED BY:</u> 黄烈清	<u>批准 APPROVED BY:</u> 薛顺勇	<u>发布日期 Issued Date:</u> 2022/7/15

1.0 适用范围 SCOPE

该规格书包含和覆盖试纸插座产品必要的机械性能、电气性能、环境性能及相关的测试方法。

This product specification covers the mechanical, electrical and environmental performances requirements and test methods for **Paper Jack** series products.

2.0 说明 APPLICABLE DOCUMENTS AND SPECIFICATIONS

所列入的所有文件中，如产品图和规格书有冲突的地方，请以产品图为准，如参考文件和规格书有冲突的地方，请以规格书为准。

The following documents from a part of this specification to the extent specified herewith. In the event of conflict between the requirements of specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of the specification and the referenced documents, this specification shall take precedence.

3.0 材质和结构尺寸 MATERIAL AND CONSTRUCTION

产品的材质、结构及尺寸，请见产品外形图。

Material、Construction and physical dimensions see the product drawings.

4.0 产品性能及实验说明 PERFORMANCE AND TEST DESCRIPTION

4.1 产品所必须具备的机械、电气、环境性能，请见 5.0。

Products shall be designed to meet the mechanical, electrical and environmental performance requirements specified in 5.0.

4.2 额定电压 **VOLTAGE: 30V DC**

4.3 额定电流 **CURRENT: 1A .**

4.4 温度条件 **TEMPERATURE**

工作温度 Operating Temperature Range: -25°C to +85°C

贮藏温度 Storage Temperature Range: -25°C to +85°C

产品规格书

PRODUCT SPECIFICATION

<u>产品系列 Product Series:</u> PAPER JACK		<u>版本 REVISION:</u> B/0	<u>页码 SHEET No.</u> 2 of 5
<u>修订 REVISED BY:</u> 张盼	<u>审核 CHECKED BY:</u> 黄烈清	<u>批准 APPROVED BY:</u> 薛顺勇	<u>发布日期 Issued Date:</u> 2022/7/15

5.0 机械、电气、环境性能及测试方法 Test Requirements and Procedures

编号 NO.	项目名称 DESCRIPTION	测试条件及方法 TEST CONDITION	要求 REQUIREMENT
5.1	接触电阻 Contact Resistance	用20mV / 1m A 测量。(当用插头插入进行测量时, 除去测试笔头表面的酸化镀层) Measure the contact resistance in terms of 20m V / 1m A. (When using measure pens (+/-) contact the terminal for measurement, the acid-treated coating of pens should be removed.)	1. 端子: $\leq 50m\Omega$ Terminals: $\leq 50m\Omega$
5.2	绝缘电阻 Insulation Resistance	相邻端子之间或端子与塑件之间施加 500V DC 条件下测定。 Apply 500V DC between adjacent terminals or between the terminal and plastics part.	绝缘电阻: $\geq 100M\Omega$ Insulation Resistance: $\geq 100M\Omega$
5.3	耐压 Withstand Voltage	相邻端子间或端子或端子与塑件之间施加 500V AC, 持续保持 1 分钟, 漏电流 1mA 条件测试。 Apply 500V AC for one minute between adjacent terminals or between terminal and plastics part, the leakage current is 1mA.	部件无击穿, 无闪烁, 无飞弧。 The parts not breakdown, twinkle, arcover.
5.4	插拔力 Insertion force	把适配插入片插入到位试纸座内, 应施加的力 The force is that the mate pin is inserted into the paper jack.	插入力: 100-300gf Insertion force: 100-300gf
	拔出力: Withdraw force	把适配的插入到试纸座内的插片拔出, 应施加的力。 The force is that the mate pin is withdrawn out from the paper jack.	拔出力: $\geq 20gf$ Withdraw force: $\geq 20gf$
5.5	寿命测试 Life Test	以每分钟 10~20 次的速度做如下测试。但试验用插头(钢制或其他材料)会由于摩擦发热, 在动作部分涂上润滑油(相当于黄油/白油)以防止磨损 Do the tests below at the speed of 10~20 cycles per minute. But test plug (made in steel or other material) will become heat due to friction, the movement section is added (eg. Butter or with oil) in order to prevent friction and wear. 。 无负荷插拔 10000 次。 10000 cycles without load.	满足以下规定要求: (requirements) 1. 接触电阻(contact resistance): 1.1 端子: $\leq 100m\Omega$ Terminals: $\leq 100m\Omega$ 2. 应满足 5.2 5.3 项要求 Should be satisfied the 5.2 5.3

产品规格书

PRODUCT SPECIFICATION

<u>产品系列 Product Series:</u> PAPER JACK		<u>版本 REVISION:</u> B/0	<u>页码 SHEET No.</u> 3 of 5
<u>修订 REVISED BY:</u> 张盼	<u>审核 CHECKED BY:</u> 黄烈清	<u>批准 APPROVED BY:</u> 薛顺勇	<u>发布日期 Issued Date:</u> 2022/7/15

编号 NO.	项目名称 DESCRIPTION	测试条件及方法 TEST CONDITION	要求 REQUIREMENT
5.6	盐雾测试 Salt Spray Test	1. NaCl 浓度: 5%±1% 2. 测试温度: 35°C±2°C 3. 喷雾测试方式: 连续喷雾 4. 测试时长: 24 小时 5. 检测方法: 测试后, 用直来水冲洗表面后擦干水珠后检测。 1. NaCl density: 5%±1% 2. Test temperature: 35°C±2°C 3. Spray way: continue spray 4 Test time: 24 hours 5. Check way: washing part with straight water, then drop off the water after testing.	满足以下规定要求: (requirements) 1. 接触电阻(contact resistance): 1.1 端子: ≤100mΩ Terminals: ≤100mΩ 2. 表面应无明显的锈蚀, 大面积黑蚀点现象。 The surface should be no obvious corrosion, large surface black corrosion point.
5.7	可焊性 Solder ability	产品端子引脚焊接部分面, 浸入 245°C±5°C 的锡炉中, 保持 2-3 秒。 The face of weld of terminals of product dip into the tin furnace : Tin liquid temperature 245°C ±5°C for 2-3 secs.	端子焊接面的沾锡面积应达 90% 以上。 The area of welding terminals must more 90%.
5.8	耐焊接热 Solder heat resistance test	首先将测试样本置于厚度为 1.6mm 厚的 PCB 上方, 然后一同置于测试炉中: 测试前选择测试选段 (wave1), 最后测试, 最高温度: 250°C±5°C, 持续时间 8±1 分钟. 见下测试图: First, put the sample on the PCB of thickness is 1.6mm, then put them into the heat soldering tester, select the wave1 (furnace temperature: 250±5°C) to test for 8±1 min.	1. 端子面无明显的变色, 发黄, 发黑现象; 镀层无脱离, 起皮现象; 塑体无明显地起泡, 融化, 严重变色现象 The terminal surface has no obvious discoloration, yellow, black phenomenon; The coating on the terminal surface is not separated, peeling phenomenon; Plastic body has no obvious foaming, melting, serious discoloration phenomenon. 2. 接触电阻(contact resistance): 2.1 端子: ≤50mΩ Terminals: ≤50mΩ 3. 应满足 5.2 5.3 5.4 项要求: Should be satisfied the 5.2 5.3 5.4 .

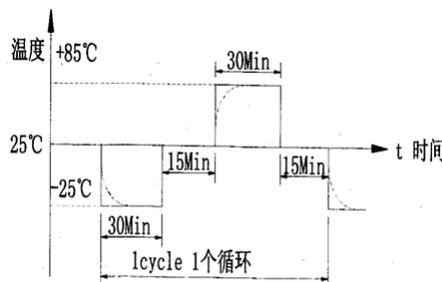


产品规格书

PRODUCT SPECIFICATION

产品系列 Product Series: PAPER JACK		版本 REVISION: B/0	页码 SHEET No. 4 of 5
修订 REVISED BY: 张盼	审核 CHECKED BY: 黄烈清	批准 APPROVED BY: 薛顺勇	发布日期 Issued Date: 2022/7/15

编号 NO.	项目名称 DESCRIPTION	测试条件及方法 TEST CONDITION	要求 REQUIREMENT
5.9	高温测试 Heat test	把样本置于 85℃±2℃的试验测试箱中，持续 96 小时。测试完后置于室温条件 1-2 小时后检测产品。 The samples are test in a tester for testing. The temperature:85℃±2℃, Test teime:96 hours. Then check them after them keep for 1-2 hours in room condition.	满足以下规定要求： (requirements) 1. 接触电阻(contact resistance): 1.1 端子镀金/银类: ≤50mΩ Terminals coated Au/Ag:≤50mΩ 1.2 端子镀锡类: ≤100mΩ Terminals coated Sn:≤100mΩ 1.3 端子镀镍类: ≤500mΩ Terminals coated Ni:≤500mΩ 2. 应满足 5.2 5.3 5.4 项要求: Should be satisfied the 5.2 5.3 5.4 .
5.10	低温试验 Cold test	把样本置于-25℃±2℃的试验测试箱中，持续 96 小时。测试完后置于室温条件 1-2 小时后检测产品。 The samples are test in a tester for testing. The temperature:-25℃±2℃, Test teime:96 hours. Then check them after them keep for 1-2 hours room condition.	
5.11	耐湿测试 Humidity test	把样本置于 40℃±2℃，相对湿度 90-95% 的试验测试箱中，持续 96 小时。测试完后，去水滴后置于室温条件 1-2 小时后检测产品。 The samples are test in a tester for testing. The temperature:40℃±2℃,Hhumidity: 90-95%RH, Test teime:96 hours. Then check them after them keep for 1-2 hours in room condition before remove the water drop.	
5.12	高低温循环试验 Heat-cold cyclic test	5个循环的下列试验。在温度为85℃±2℃箱内保持 30 分钟，在温度为-25℃±2℃箱内保持30 分钟，转换过渡温度25℃，时间15分钟。试验后，产品应单独置于室温下放置24小时进行测试。 5 cycles of following test. Keep it in the temperature 85℃±2℃ 30 min, Keep it in the temperature -25℃±2℃30 min, Conversion transition temperature 25℃、time 15 min. After connector be left alone for 24 hours under the conditions of normal temperature and humidity, measure it.。	



产品规格书
PRODUCT SPECIFICATION

<u>产品系列 Product Series:</u> PAPER JACK		<u>版本 REVISION:</u> B/0	<u>页码 SHEET No.</u> 5 of 5
<u>修订 REVISED BY:</u> 张盼	<u>审核 CHECKED BY:</u> 黄烈清	<u>批准 APPROVED BY:</u> 薛顺勇	<u>发布日期 Issued Date:</u> 2022/7/15

6.0 包装要求：详见包装图

Package requirement: Package refer to packing drawing.

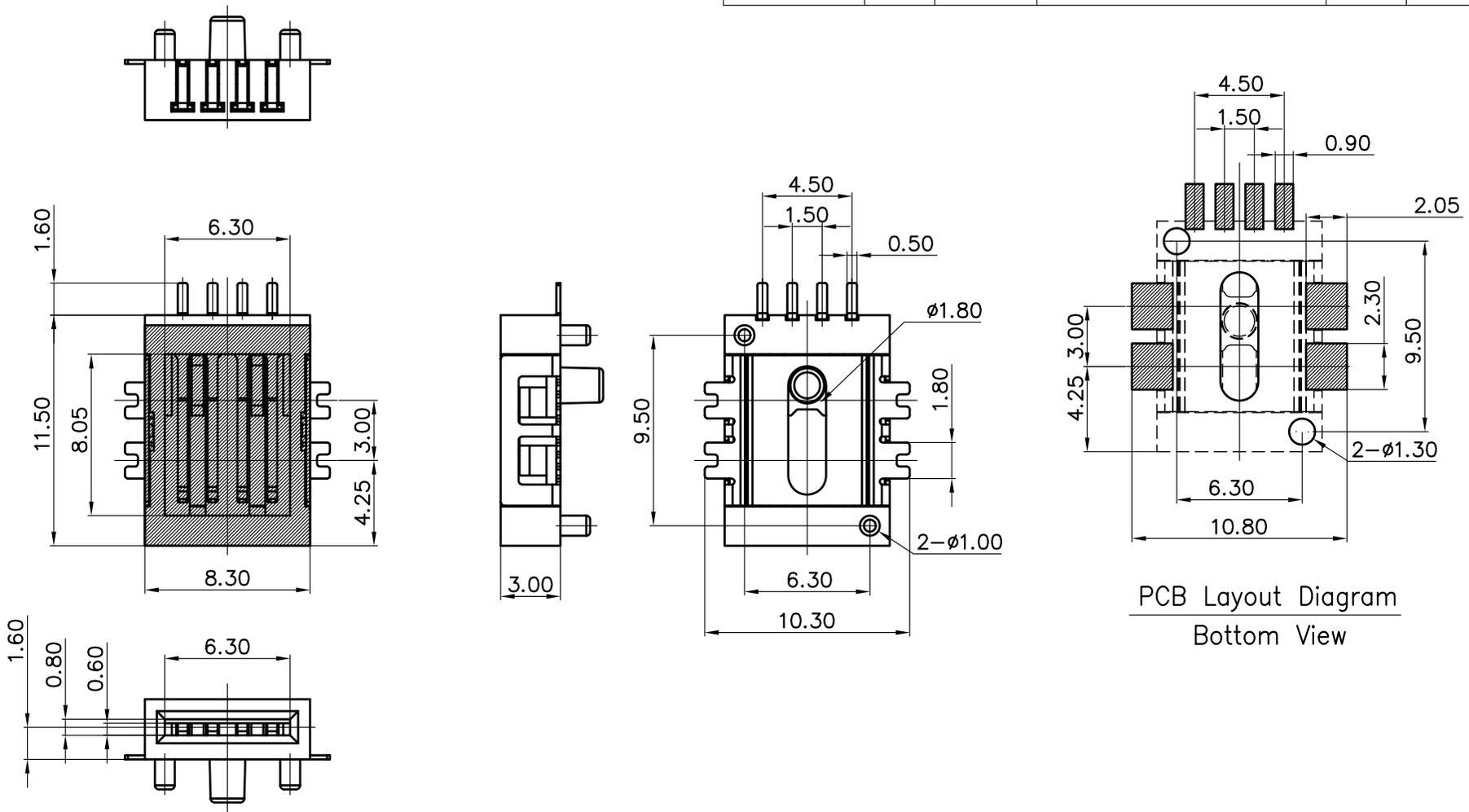
7.0 环保要求:Requirements of environmental protection.

产品所有材质均符合 RoHS 或客户其他特殊要求.

All of materials used by the product must comply with RoHS or Special requirements of customer.

RoHS

5	6	7	8
ECN NO.	REV	DATE	DESCRIPTION

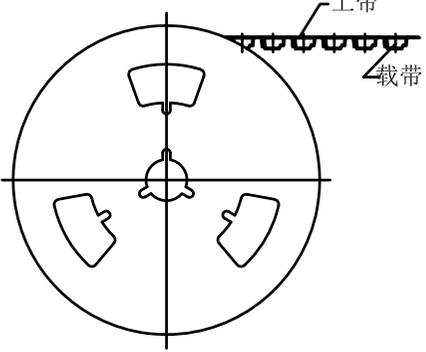
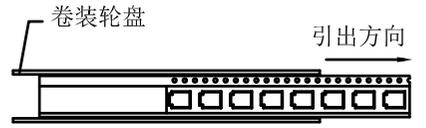
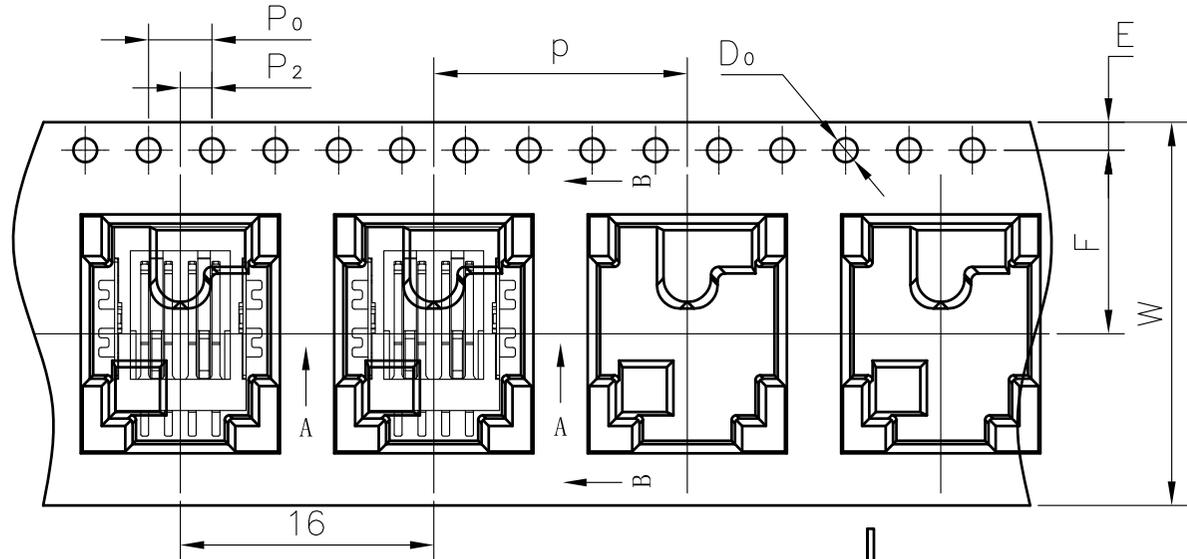


PCB Layout Diagram
Bottom View

NO.	PART NAME	Q'TY	MATERIAL	PLATING & COLOR
④	ML PIN	1	ML PAPER T=0.07	YELLOW
③	SHELL	1	BRASS T=0.2mm	Ni-Plating
②	TERMINAL	4	PHOSPHOR BRONZE,T=0.2mm	Au-Plating under Ni-Plating
①	HOUSING	1	LCP	BLACK

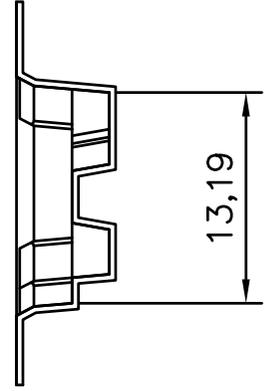
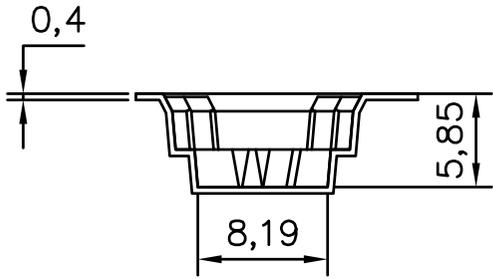
UNLESS OTHERWISE SPECIFIED TOLERANCES				宏端电子(东莞)有限公司					
DECIMALS:	X	:±0.30	X	:±3'	DSND	Huanglieqing	DATE	2025-11-19	TITLE:
	X.X	:±0.25			CHKD	Linanzou	DATE	2025-11-19	1.5间距4P试纸座(贴膜)
	X.XX	:±0.20			APVD	Xueshunyong	DATE	2025-11-19	PART NO.:
	X.XXX	:±0.10			WEIGHT:		SCALE:	SIZE:A4	VIEW:
					SHEET 1 OF 1	UNIT:mm	REV.:A/0	OBJECT:MY	XTY-015-4P-ML
									DRAW NO.:MY-CP-

版本	更正记录	修订人	审核



卷装示意图仅供参考

尺寸栏	
E	1.75±0.10
F	11.50±0.10
P2	2.00±0.10
∅Do	1.50 ^{+0.10} _{-0.00}
∅D1	
PO	4.00±0.10
10PO	40.00±0.20
W	24.00±0.30
P	16.00±0.10
AO	8.19±0.10
BO	13.19±0.10
KO	5.85±0.10
t	0.40±0.05



A-A

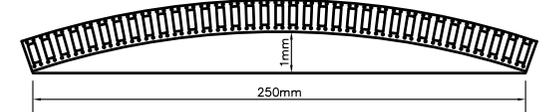
B-B

生产参数	
模数	90模
颗数	720颗
卷轮	13"/24
包装数	700颗

说明:

- 10个边孔的累计公差不能超过±0.2mm.
- 材料规格: PS 黑色抗静电, 厚度 0.4 mm.
- 13英寸卷轮卷装长度: 11.52米. (前段空包长度: 0.24米, 零件包装长度: 11.04 米, 后段空包长度: 0.24米).
- 13吋卷轮包装零件总颗数: 720 颗. (前段空包颗数: 10颗, 实际包装零件颗数: 700颗, 后段空包颗数: 10颗).

5. 所有尺寸设计参照EIA-481-C-2003.
6. 载带在250mm长度以内最大弯曲度不超过1mm (见下图).



0.1-1	±0.03	MeiYang Electronics Co.Ltd	模具编号:	SK-0012-040-100
1-6	±0.10			XTY-015-4P
6-12	±0.15	审核: 薛顺勇	客户料号:	SK-0012-040-100
12-16	±0.2	日期: 2025-04-25		
16-32	±0.3	绘图: 黄烈清	客户代号:	-
尺寸	公差	日期: 2025-04-25	单位: mm	
未注公差列表			页码	比例
			1/1	1:1
			版本	A