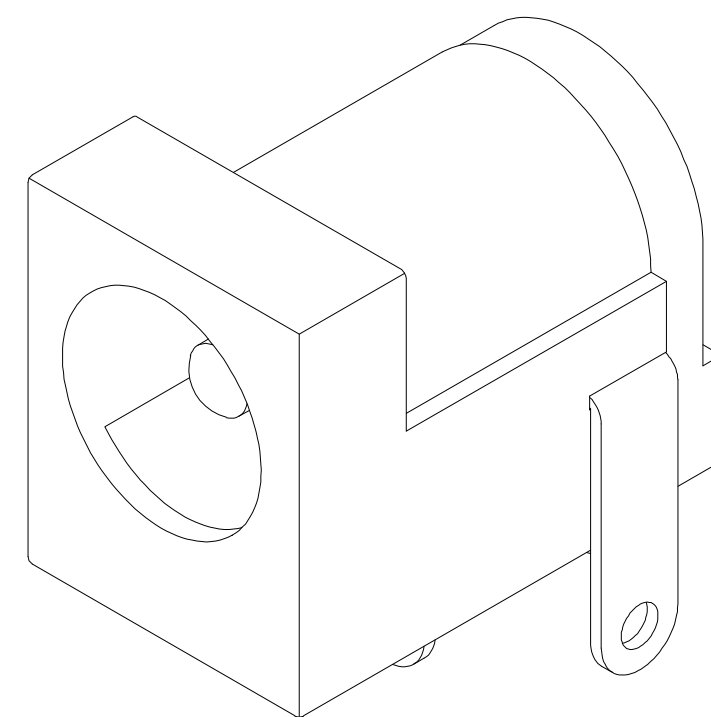
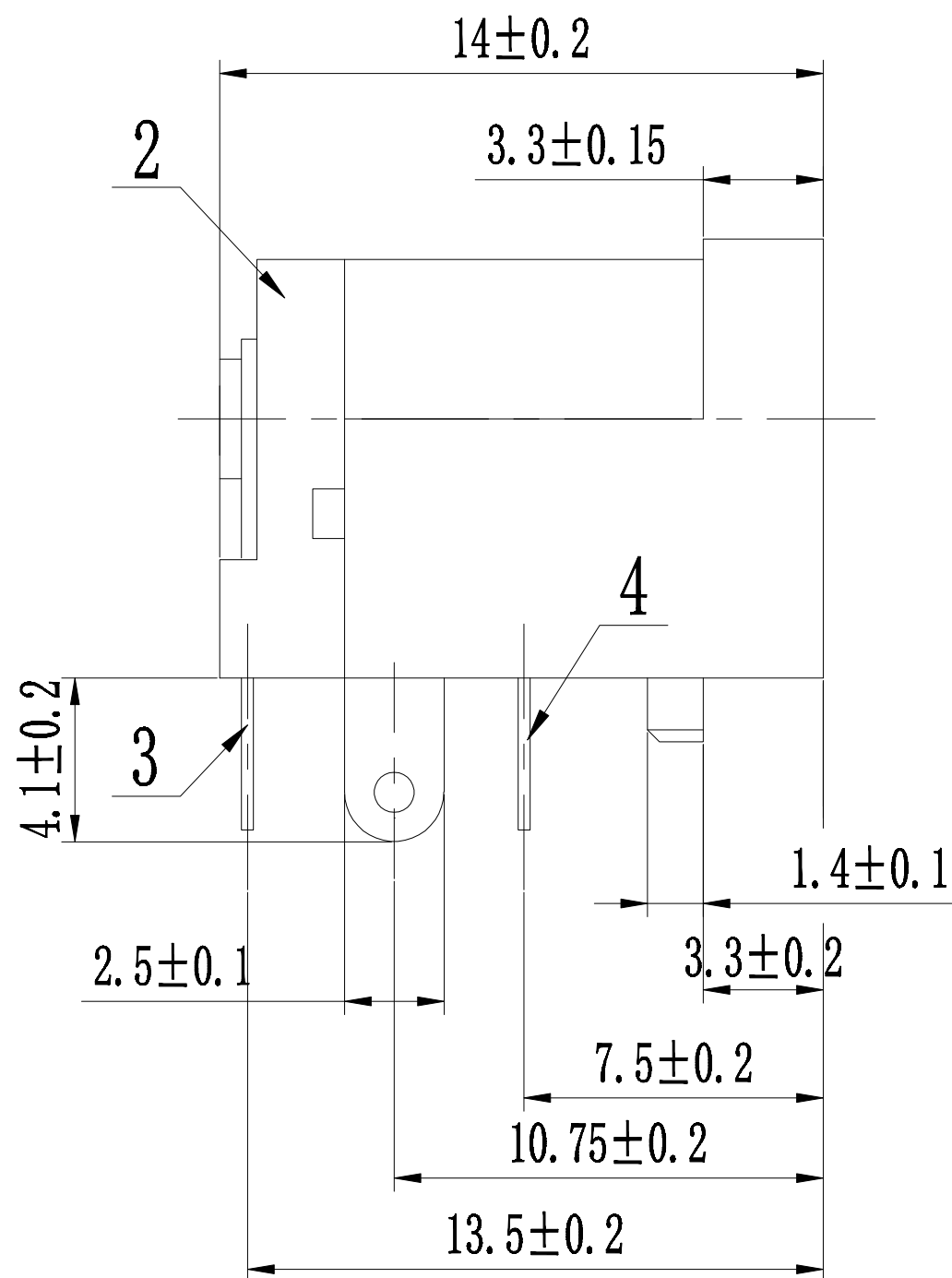
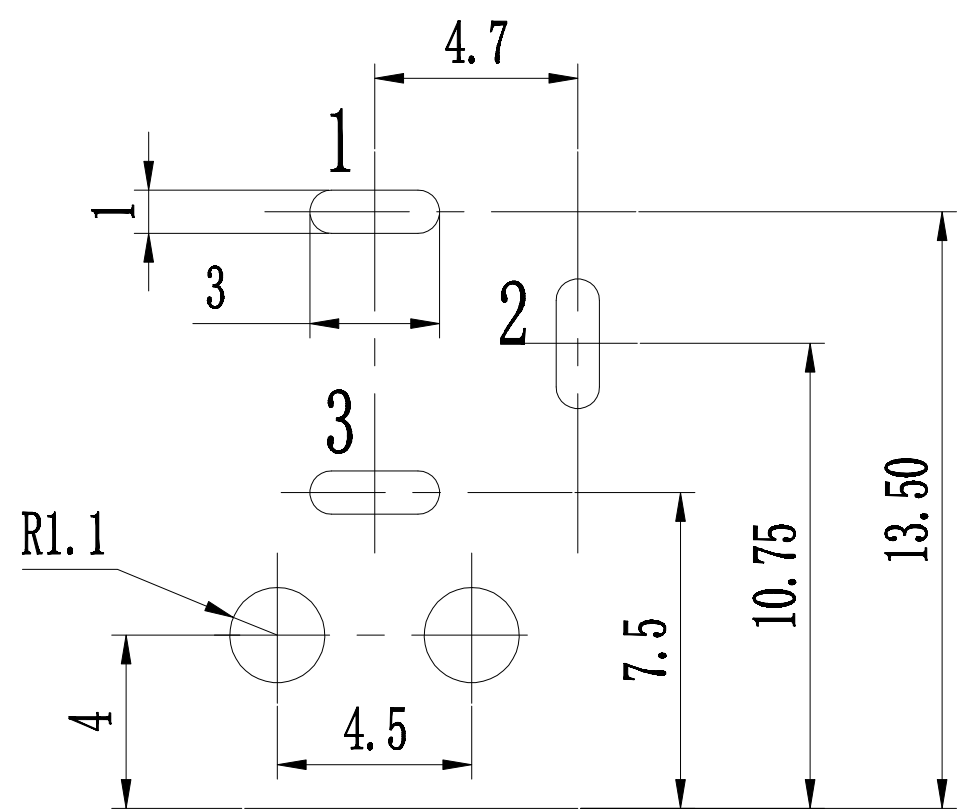
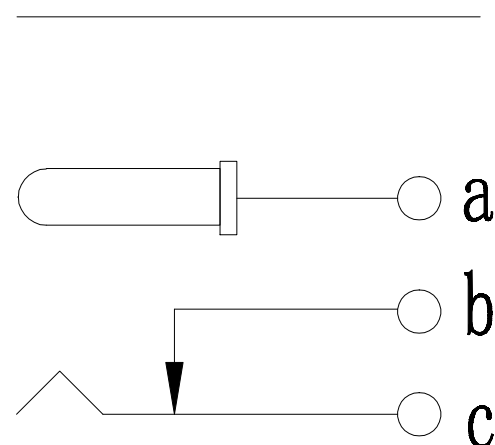


PCB LAYOUT (TOP VIEW)  
(tolerance±0.05)



电路图



序号	零件料号	名称	材料	数量	镀层/颜色	备注
6		轴芯	H65 $\phi$ 2.5	1	Ag	※
5		静片	H62Y	1	Ag	※
4		动片	QSn6.5-0.1Y	1	Ag	※
3		接地片	H62Y	1	Ag	※
2		盖板	PBT	1	黑色	※
1		底座	PBT	1	黑色	※

**深圳金佳润电子科技有限公司**  
Shenzhen JinJiaRun Electronics Technology Co., Ltd

DC插座  
外形图

设计	胡正特	日期	2014.5.5	产品名称	2.0 DC电源座 带定位		
审核	朱于静	日期	2014.5.5		产品料号	DC+02IB	
批准	管奎	日期	2014.5.5	页码		1 OF 1	A4
比例	3:1	单位	mm				

变更单号	版本	日期	内容描述	变更	审核	批准	未注公差
	A/0						角度 $\pm 3^\circ$ >30~ $\pm 0.35$ >10~30 $\pm 0.25$ ~10 $\pm 0.15$

# SPECIFICATION 规格书

Model Type: 类型型号:	DC POWER JACK
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## 1. Scope/适用范围

This specification applies to DC POWER JACK which is used in the electronic products.  
本规格书适用于电子产品上的电源插座连接器。

## 2. Rated / 额定值

- 2-1. Practical temperature range:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
适用温度范围:  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
Humidity range: 85% RH. MAX.  
湿度范围: 85% RH. MAX.
- 2-2. Preservation temperature range:  $-10^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$   
保存温度范围:  $-10^{\circ}\text{C}$  至  $+40^{\circ}\text{C}$   
Humidity range: 85% RH. MAX.  
湿度范围: 85% RH. MAX.
- 2-3. Rated voltage and current (MAX.): 30V DC , 2A  
最大额定电压和额定电流: 30V DC , 2A
- 2-4. Appearance : No scratches、soil、rust or discoloration on the surface.  
外观: 表面无划伤、脏污、生锈或变色等现象。

## 3. Construction / 说明

- 3-1. Outline And Dimension / 外观和尺寸  
The appearance and dimensions of the socket should match the attachment drawing.  
插座的外观和尺寸应与附件图纸相符。
- 3-2. Part And Material 部件和材料  
Parts and materials should be consistent with the material list specifications.  
部件和材料应与材料清单规格一致。

## 4. Electrical efficiency / 电气特性

Item 项目	Property 特性	Test condition 测试条件	Performance 判定
4-1	Withstand Voltage 耐电压	Withstand AC 500V (50/60Hz RMS) between two non-contact terminals for 1 minute 在两个不接触的端子之间, 能承受交流500V (50/60Hz RMS)并持续1分钟。	No dielectric breakdown shall occur. 无击穿现象发生
4-2	Insulation Resistance 绝缘阻抗	Apply 500V DC between any contactless terminal and the other terminal, with an insulation gauge and last for 1 minute $\pm$ 5 seconds. 在任何一个不接触的端子与另一个端子之间施加500V直流电, 用绝缘测量仪, 并能持续1分钟 $\pm$ 5秒。	100 M $\Omega$ Min. 最小100 兆欧



# SPECIFICATION 规格书

<b>Model Type:</b> 类型型号:	<b>DC POWER JACK</b>
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Item 项目	Property 特性	Test condition 测试条件	Performance 判定
4-3	Contact Resistance 接触阻抗	<p>Take a pair of matched terminals and measure the tail end of each terminal (voltage maximum 20mV, current maximum 100mA)</p> <p>取一对匹配好的端子，测量各端子的尾端点 (电压最大 20mV，电流最大 100mA)。</p>	30 mΩ MAX. 最大30毫欧

## 5. Mechanical Performance 机械特性

Item 项目	Property 特性	Test condition 测试条件	Performance 判定
5-1	Insertion and Extraction Force 插入力&拔出力	<p>Plug and unplug with a matching plug at a frequency of 20-30 times per minute.</p> <p>用相匹配的插头以每分钟 20-30 次的频率均速插头进行插拔。</p>	Insertion and extraction force is 0.3~ 3kgf 插入和拔出力 的值为 0.3 ~ 3kgf.
5-2	Terminal Strength 端子强度	<p>Every terminal should be capable of withstand a force of 0.5 kgf for 10 seconds.</p> <p>每个端子都应能承受 0.5 kgf 的力，并持续 10 秒。</p>	There is no looseness, damage, etc., but the terminal deformation is acceptable. 无松脱、破损等 现象，但是端子 变形可以接受。

## 6. Durability / 耐久性能

Item 项目	Property 特性	Test condition 测试条件	Performance 判定
6-1	Life test 寿命试验	<p>Under the condition of no load, plug and unplug with a matching plug for 5000 times in total, at a frequency of 20-30 times per minute.</p> <p>在没有负载的条件下，以每分钟20-30次的频率，均速，用相匹配的插头进行插拔5000次。</p>	No obvious change in appearance, destruction. Contact resistance: less than 30 mΩ. The insertion and extraction force values : 0.3 to 3 kgf. 外观无明显改变,破坏. 接触电阻: 小于 30 毫欧. 插入和拔出力 的值为 0.3 ~ 3kgf.



# SPECIFICATION 规格书

Model Type: 类型型号:	DC POWER JACK
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## 7. Solderability / 焊锡试验

Item 项目	Property 特性	Test condition 测试条件	Performance 判定
7-1	Resistance to soldering heat 耐焊性	The jack terminal should be dipped in solder under the condition as specified below: Temperature of solder: $260 \pm 3^{\circ}\text{C}$ . Dip time: $5 \pm 1$ seconds.  端子浸入锡炉里, 按以下条件测试: 焊锡温度: $260^{\circ}\text{C} \pm 3^{\circ}\text{C}$ . 浸入时间: $5 \pm 1$ 秒.	After the test, the plastic base should not be deformed and the terminals should not fall off the plastic base. 试验后塑胶基座不应变形, 端子不从塑胶基座上脱落下来
7-2	Solderability 可焊性	Temperature of solder: $245 \pm 3^{\circ}\text{C}$ . Time of dip: $3 \pm 0.5$ seconds.  焊锡温度: $245 \pm 3^{\circ}\text{C}$ . 浸入时间: $3 \pm 0.5$ 秒	Coating of solder area should be more than 95% 焊锡面积要求达到95%以上

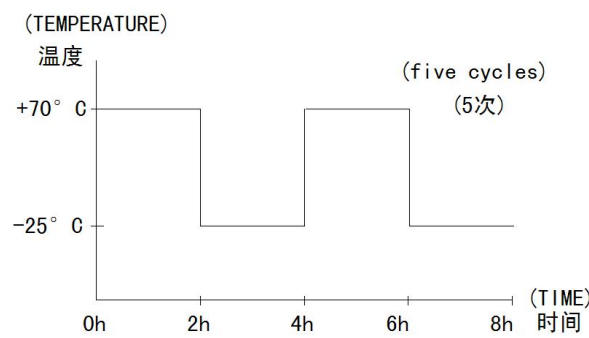
## 8. Environment test / 环境试验

Item 项目	Property 特性	Test condition 测试条件	Performance 判定
8-1	Cold test 低温测试	Place the housing for 96 hours at a low temperature of $-25 \pm 3^{\circ}\text{C}$ . Then, place it under standard atmospheric conditions for 1 hour and test.  在 $-25 \pm 3^{\circ}\text{C}$ 低温条件下将基座放置96小时, 再在标准大气条件下放置1小时, 然后再测试。	No obvious change in appearance Contact resistance: $100\text{m}\Omega$ max. Insulation resistance: $100\text{M}\Omega$ min. Withstand voltage: AC 500V.
8-2	Heat test 高温测试	The housing should be stored at a temperature of $85 \pm 2^{\circ}\text{C}$ for 96 hours. Then it should be subjected to standard atmospheric conditions for 1 hour and test  在 $85 \pm 2^{\circ}\text{C}$ 高温条件下将基座放置96小时, 再在标准大气条件下放置1小时, 然后再测试。	外观没有明显的改变。 接触电阻: 小于 $100\text{m}\Omega$ 。 绝缘阻抗: 大于 $100\text{M}\Omega$ 。 耐电压: AC 500V.



# SPECIFICATION 规格书

<b>Model Type:</b> <b>类型型号:</b>	<b>DC POWER JACK</b>
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Item 项目	Property 特性	Test condition 测试条件	Performance 判定
8-3	Humidity test 耐湿试验	<p>The housing should be stored at a temperature of <math>40 \pm 3^{\circ}\text{C}</math> with relative humidity of 90% ~ 95% for 96 h. Then it should be subjected to standard atmospheric conditions for 1 hour and test</p> <p>在温度为 <math>40 \pm 3^{\circ}\text{C}</math>，相对湿度为 90%~95% 条件下，将基座放置 96 小时，再在标准大气条件下放置 1 小时，然后再测试。</p>	<p>No obvious change in appearance</p> <p>Contact resistance: <math>100\text{m}\Omega</math> max.</p> <p>Insulation resistance: <math>100\text{M}\Omega</math> min. Withstand voltage: AC 500V.</p> <p>外观没有明显的改变。</p> <p>接触电阻：小于 100 毫欧。</p> <p>绝缘阻抗：大于 100 兆欧。</p> <p>耐电压： AC 500V。</p>
8-4	Temperature Cycling 温度循环	<p>Place the Jack under the conditions shown below and then place it in the stand at room temperature for 30 minutes.</p> <p>将插座放置于如下所示条件下进行试验，然后在室温条件下放置 30 分钟。</p> <div style="text-align: center;"> <p>(TEMPERATURE) 温度</p>  <p>(five cycles) (5次)</p> <p>(TIME) 时间</p> </div>	



# SPECIFICATION 规格书

Model Type: 类型型号:		DC POWER JACK	
Item 项目	Property 特性	Test condition 测试条件	Performance 判定
8-6	Salt spray test 盐雾测试	Temperature: $35 \pm 2^{\circ}\text{C}$ Solution: $5 \pm 1\%$ Spray time: 24hours Wash and dry it at room temperature after the experiment.  温度 $35 \pm 2^{\circ}\text{C}$ 盐水浓度 $5 \pm 1\%$ 盐雾时间24小时。实验后常温水洗，室温干燥。	No obvious rust in the appearance.  外观没有明显的生锈现象。

## 9. Test condition / 测试条件

Unless otherwise specified, the test and measurement temperature is between  $15^{\circ}\text{C}$  and  $35^{\circ}\text{C}$ , the relative humidity is between 25% and 85%, and the atmospheric pressure is between 86 kPa and 106 kPa.

However, when any doubts arise on the judgment value under the above condition, the test and measurement are carried out at  $20 \pm 1^{\circ}\text{C}$ , the relative humidity is 63% to 67%, and the air pressure is performed at 86 kPa to 106 kPa.

除非另有指定，否则测试和测量温度在  $15^{\circ}\text{C} \sim 35^{\circ}\text{C}$ ，相对湿度在 25%~85%，气压在 86kPa~106kPa 条件下进行。

当在这个条件下判定出现疑问时，测试和测量在  $20 \pm 1^{\circ}\text{C}$ ，相对湿度 63%~67%，气压在 86kPa~106kPa 条件下进行。

## 10. Amendment / 变更修正

When it is necessary to amend the specifications, it should be negotiated and agreed by the manufacturer and the customer before proceeding.

当有必要对规格书进行变更修正时，应该在制造商和客户共同商议及同意后才可以进行。

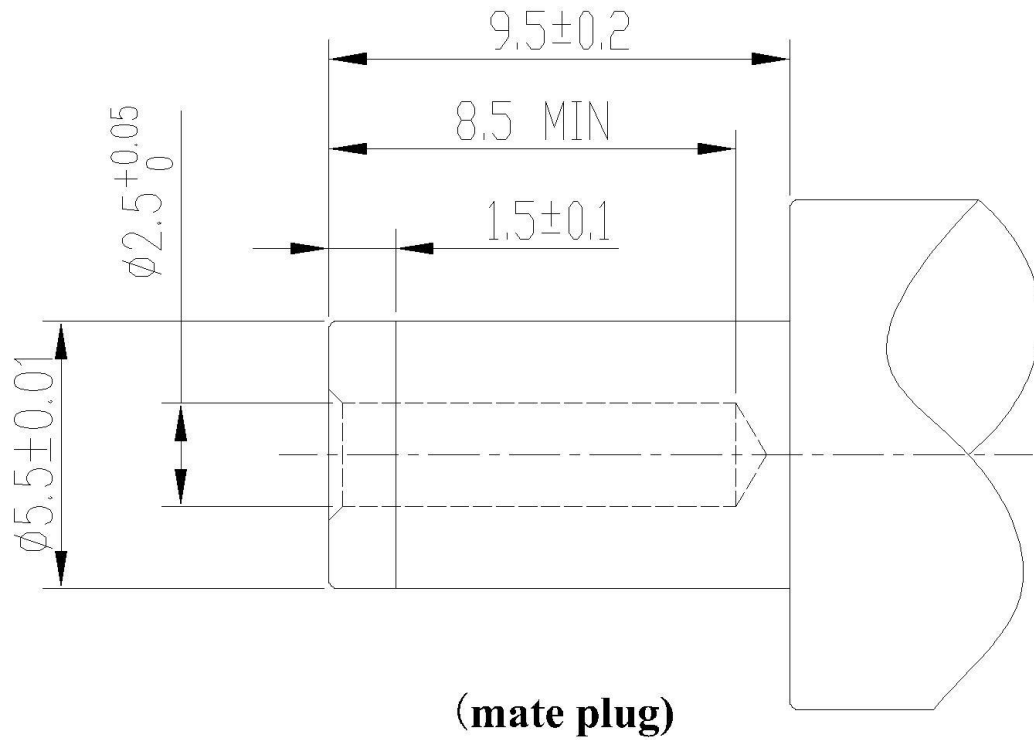


# SPECIFICATION 规格书

Model Type:  
类型型号:

DC POWER JACK

## 11. Standard dimension of gauge plug / 标准插头尺寸



※ Specifications are recorded in both English and Chinese, but Chinese is preferred in the case of doubts.

规格书同时记入中英文，但发生疑义的场所以中文优先。

