

承 认 书

SPECIFICATION FOR APPROVAL

客户名: _____

产品名称: 电源适配器

型号规格: ABT03050 (5V 3A)

文件编号: _____

版 本: A.0

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| 编 制 | 审 核 | 批 准 |
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| 周天运 | | |
| 2014-5-26 | | |

| 客 户 确 认 | | |
|---------|-----|-----|
| 部 门 | 签 名 | 日 期 |
| 品质部 | | |
| 工程部 | | |
| 核 准 | | |

E. C. LIST/变更记录

| Rev.版本 | Description of Change/变更内容描述 | | Changed Date/日期 | Remark |
|--------|------------------------------|-----------|-----------------|--------|
| | Before/变更前 | After/变更后 | | |
| A | | | | |
| B | | | | |
| C | | | | |
| D | | | | |
| E | | | | |
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1. SCOPE/概述

The document details the electrical, mechanical and environmental specifications of a SMPS, the power supply provides **15W** continuous output power.

资料详细描述了一款 **15W**(连续输出功率)开关电源的电气性,结构性及环境等要求.

The power supply shall meet the **RoHS** requirements. 此款电源符合 RoHS 要求.

- SMPS Adaptor(Wall mount)/插墙式适配器 SMPS Adaptor(Desk-top)/桌面型适配器
 Open Frame/开放式结构 Others/其他

2. Input Characteristics/输入特性

2.1. Input Voltage & Frequency/输入电压与频率

| | Minimum/最小 | Rating/额定值 | Maximum/最大 |
|----------------------|--------------|----------------------|---------------|
| Input Voltage/输入电压 | 90Vac | 100Vac~240Vac | 264Vac |
| Input Frequency/输入频率 | 47Hz | 60Hz/50Hz | 63Hz |

2.2. Inrush Current (cold start)/浪涌电流(冷启动 @ 230V AC)

No damage for 220V/50Hz at cold start (25°C). 在冷开机条件下,最大浪涌电流对机型不损坏

2.3. Average Efficiency /平均效率

While input 115Vac and 230Vac, the average efficiency is more than **81.5%**. The test point is at 25%, 50%, 75% and 100% of max load respectively.

在输入 115Vac 和 230Vac 条件下,平均效率不小于 **81.5%**。测试点分别是最大载的 25%, 50%, 75% 和 100%。

2.4. Standby power / 空载功耗

Standby power **<0.3W** @ 230VAC/50Hz. 在输入 230Vac, 空载功耗小于 **0.3W**.

3. Output Characteristics/输出特性

| RATED OUTPUT / 额定输出 | Rated Load/额定负载 | | Remark 备注 |
|------------------------------------|-----------------|-----------------|--------------|
| | Min. | Max. | |
| Output Voltage(unload) / 空载输出电压 | 4.2V | 5.8V | |
| Output Voltage(Full load) / 负载输出电压 | 4.2V | 5.8V | |
| Output Current / 输出电流规格 | 0A | 3A | |
| Turn - on Delay Time/开机延迟时间 | | 3S | |
| Hold-up Time/关机维持时间 | 5mS | | |
| Ripple & Nosisc / 纹波与噪声 | | 140mVp-p | |
| OCP / 过电流保护 | | | |
| power Wp-p / 峰值功率 | | | |

Ripple & Noise: Tested by a oscilloscope using 20MHz bandwidth and the output is paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor.

纹波与噪声: 量测时示波器选用 20MHz 带宽限制,输出端要并联一颗 0.1uF 的陶瓷电容和一颗 47uF 的电解电容

4. Protection Requirements/保护要求

4.1. Over Current Protection/过流保护

OCP Point Limited: 120%-300% auto restart 保护点限制: 120%-300%自动保护

The output shall hiccup when the over current applied to the output , and shall be self-recovery when the fault condition is removed

当过电流时,输出将进入打嗝模式,当过流情况解除后,产品将会自动恢复正常

4.2. Short Circuit Protection/短路保护

The input power shall decrease when the output is short to GND, the power supply shall not damage, and shall be self-recovery when the fault condition is removed

当输出对地短路时,产品输入功率降低且不会损伤,当短路情况解除后,产品将会自动恢复正常

5. Environment Requirements/环境要求

5.1. Operating Temperature and Relative Humidity/操作温度和湿度要求

0°C to +40°C 20%RH to 80%RH @ Sea level shall below or no more than 10,000 feet
在海拔小于或等于 10,000 英尺的条件下,低温工作下限为 0°C,高温工作上限为 +40°C,相对湿度为 20%RH to 80%RH。

5.2. Storage Temperature and Relative Humidity/存储温度和湿度要求

-30°C to +70°C 10%RH to 90%RH (non-condensing) @ Sea level shall below 30,000 feet
在海拔低于 30,000 英尺的条件下,低温存储下限为-30°C (无结冰环境);高温存储上限为+70°C,相对湿度为 10%RH to 90%RH。

5.3. Vibration/振动

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z

扫描频率: 10 to 300Hz, 加速度: 1.0G(位移: 3.5mm), X, Y, Z 三垂直坐标轴向各振动 1 小时

6. EMC Standards & Safety Standards / EMC 标准与安规标准

6.1. EMC Standards/EMC 标准

| | | | |
|--------------|--------------|--------------|---------------|
| GB9254 | GB17625.1 | GB13837 | FCC- Part15 |
| EN 55022 | EN55024 | CISPR 22 | EN 61000-4-4 |
| EN 61000-3-2 | EN 61000-3-3 | EN 61000-4-2 | EN 61000-4-3 |
| EN 61000-4-5 | EN 61000-4-6 | EN 61000-4-8 | EN 61000-4-11 |

6.2. Safety Standards / 安规标准

| Type | Country | Standard | Type | Country | Standard |
|--------|---------|-----------|--------|-----------|-----------|
| CCC | China | GB4943 | CE | Europe | EN60950-1 |
| CCC | China | GB8898 | CB | CB | IEC60950 |
| UL/CUL | USA | UL60950-1 | C-TICK | Australia | CISPR22 |
| KC | Korea | KC60950 | GS/TUV | German | EN6095-01 |

6.3. ielectric Strength(Hi-pot)/介电耐压强度(高压)

Primary to Secondary: 3000Vac / 10mA / 60 seconds (3 seconds for production)

初级对次级: 3000Vac / 10mA / 60 秒(生产时高压测试时间: 3 秒)

6.4. Leakage Current/漏电流

0.25mA max. at 240Vac / 50Hz input/在输入 240Vac/50Hz 的条件下最大 0.25mA

6.5. Insulation Resistance/绝缘阻抗

100MΩ min. @ primary to secondary add a 500Vdc test voltage

在初级与次级间加 500Vdc 进行测试,最小 100MΩ

7. Testing Equipment / 测试设备

| | Testing Equipment / 测试设备 | Model/型号 | Validity/有效期 | Remark/备注 |
|----|--------------------------------------|----------------|--------------|-----------|
| 1 | AC Source / 交流输入电源 | 华仪 6205-300W | 2014-12-7 | |
| 2 | Power Meter / 电源功率计 | Protronix-1201 | 2014-12-7 | |
| 3 | Electronic Load / 电子负载 | Chroma-63030C | 2014-12-7 | |
| 4 | Oscilloscopes / 示波器 | 泰克 3012 | 2014-12-7 | |
| 5 | Digital Multimeter / 数字万用表 | VC9807A | 2014-12-7 | |
| 6 | DC Power / 直流输入电源 | KXN-3030D | 2014-12-7 | |
| 7 | HI-POT Tester / 耐压测试仪 | 华仪 7410 | 2014-12-7 | |
| 8 | Hybrid Recorder / 混合记录仪 | YOKOGAWA DR130 | 2014-12-7 | |
| 9 | Cons. T/H Simulator / 恒温恒湿仪 | TH-A4H 1-150 | 2014-12-7 | |
| 10 | Insulation Resistance Tester / 绝缘电阻表 | 华仪 7410 | 2014-12-7 | |

8. Product drawing / 产品图



输出线：线长 1500mm 带磁环

输出头：5.5*2.1*10mm