

## 产品规格承认书 SPECIFICATION

文件编号 File No.: UME-EG-SP24012501/A1

|                |                                |                 |     |
|----------------|--------------------------------|-----------------|-----|
| 客户<br>Customer | AKON                           | 核准<br>Approval  | ZL  |
| 品名<br>Product  | 开关电源<br>Switching power supply | 品管确认<br>QC      | LTF |
| 型号<br>Model    | AD-AKB120P500                  | 审核<br>Check     | ZL  |
| 日期<br>Date     | 2024-01-22                     | 拟制<br>Execution | BMD |

| 客户承认意见<br>Confirmation by Customer                      | 客户签署<br>Stamp & Signature |
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| <input type="checkbox"/> 合格<br>Accept                   |                           |
| <input type="checkbox"/> 不合格<br>Reject                  |                           |
| <input type="checkbox"/> 条件合格<br>Conditional Acceptance |                           |
|   |                           |

确认签署后，请回传一份。有任何问题，请尽快告知我们。

Please return one copy to us with your signature and feel free to contact us for any questions.

厦门友盟电子有限公司

XIAMEN UME ELECTRONICS CO., LTD.

电话 Tel:0592-2611448

地址：厦门市翔安区莲亭路火炬八方工业园10号楼882-7号8楼

Add: 8th Floor, No. 882-7, Lianting Road, Xiamen Torch Hi-Tech Zone (Xiangan) Industrial Zone

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| 品名<br>Product                          | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

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**\* The products limited warranty period is 18 months.  
(From date code of product.)**

**● The products meet RoHS requirements.**

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1 变更履历 Revision History

| 版本<br>REV | 变更日期<br>Date | 变更内容<br>Content of Change | 制表<br>Execution | 审核<br>Check | 批准<br>Approval |
|-----------|--------------|---------------------------|-----------------|-------------|----------------|
| V1.0      | 2024-01-25   | 1. First Issue            | BMD             | ZL          | ZL             |
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## 2 概述 Summary

2.1 本文件包含一般的客户要求及电气、机构和安全性能等方面的描述。

This document contains general customer requirements and those of specific electrical, mechanical and safety for this product.

## 3 技术要求 Technical requirements

### 3.1 安全标准 Safety Standards

Japan: 電安法别表第八【JET6108-61010-1009】

### 3.2 Input

|                            |   |
|----------------------------|---|
| Rated Input Voltage        | 100-240Vac  |
| Operating Range            | 90-264Vac   |
| Rated Input Frequency      | 50~60Hz   |
| Rated Input Current        | 1.2A  |
| Maximum Input Power        | 75W   |
| Input Power (No Load)      | 0.21W Max   |
| Primary Current Protection | Current fuse  |
| AC Blade                   | PSE type AC Blade   |
| AC Cable                   | <PS>E 2*0.75mm <sup>2</sup> VCTFK<br>L = 1800mm, Black, Lead-free soldering |

### 3.3 Output

|                         |   |
|-------------------------|---|
| Rated output voltage    | 12V ± 5%  |
| Rated Load Current      | 5000mA  |
| Over Current Protection | 6.0A Min @Vin=100Vac/240Vac   |
| Line Regulation         | The line regulation is less than ±2% while measuring at rated load and +/-5% of input voltage changing. |
| Ripple                  | ≅ 200mVp-p  |
| Switching Efficiency    | 88% minimum @ input 115AC/230VAC to meet DOE6   |
| DC Plug                 | Φ2.5*5.5*9.5(EIAJ)  |
| DC Cord                 | 18AWG UL2464 L = 1500mm, Black Lead-free soldering  |

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**3.4 可靠性及质量控制 Reliability and Quality Control**
**【Electrical Test Items】**

| Item                    | Conditions   | Criteria  |
|-------------------------|--|---|
| 1                       | Leakage Current<br>Measure the leakage current between Primary and Secondary when adding rated input.<br>AC input = Rating voltage (100/240V)  | Less than 250 $\mu$ A   |
| 2                       | ESD Test<br>1. Test is conducted at room temperature/humidity.(25°C, RH 50-60%)<br>2. Test set is 150pF/150 $\Omega$ .<br>3.(1) $\pm$ 4KV:Contact discharge test. +phase: 3times, -phase: 3times, total: 6times. (2) $\pm$ 8KV:Air discharge test. +phase : 3times, -phase: 3times, total: 6times.<br>(Note) After each ESD test, it should be discharged.           | No malfunction (must be in spec after test).  |
|                         | 1. Test is conducted at room temperature/humidity.(25°C, RH 50-60%)<br>2. Test set is 150pF/150 $\Omega$ .<br>3.(1) $\pm$ 6KV:Contact discharge test. + phase: 3times, -phase: 3times total: 6times. (2) $\pm$ 10KV:Air discharge test. + phase: 3times, -phase: 3times, total: 6times.<br>(Note)After each ESD test, it should be discharged.                       | No destruction  |
| ESD Test (Ability test) | 1. Test is conducted at room temperature/humidity.(25°C, RH 50-60%)<br>2. Test condition: 150pF/150 $\Omega$ .<br>3, Contact discharge / Air discharge<br>4, Load: 1)no load 2)rated load<br>5. Impressing 10 times continuously to plus and minus each.<br>6, Discharging once after impressing 10 times (To confirm the capacity of unit up to the unit destroyed) | It confirms at which voltage value the adapter breaks.(Note: Not part of qualification) |
| 3                       | Hi-POT test<br>Condition=AC3000V, 1min.<br>Test place=Between AC blade and DC plug<br>Sensitivity current=10mA   | No malfunction. (damage, arc, breakdown etc)  |
| 4                       | Insulation resistance<br>DC500V, 1min. Between AC blade and DC plug  | More than 100M $\Omega$   |
| 5                       | Temperature Rise Test<br>1. Apply rating input voltage(100/240V),<br>2. Load: Charge actual Cellular phone<br>3. Measure the surface temperature of the adaptor<br>4. T ambient = The room temperature<br>5. Condition: Until it carries out temperature saturation (the definition of temperature than 1°C in 1 hour).<br>1. Apply rating input voltage(100/240V),  | Housing surface<br>Temperature rise is less than 45K.                                   |
|                         |  | Housing surface<br>Temperature rise is less than 15K.                                   |

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|   |                        |   |  |
|---|------------------------|---|--|
|   |                        | 2.No Load<br>3.Measure the surface temperature of the adaptor   |  |
| 6 | Input over / under     | Apply voltage=(rating input voltage)x(1±30%)<br>Impressed time : 24h  | No destruction                                       |
| 7 | EMI/Conducted Emission | Telephone stand by mode with rapid-charge condition   | Conform to:<br>FCC 47CFR Part 15 Class B<br>J55014-1 |
| 8 | Surge                  | IEC61000-4-5<br>1.2×50µs 1.0KV Positive and negative all three times, Current limiting impedance 100 Ω, Time interval 30 seconds min. | No destruction.                                      |

**【Environmental Test Items】**

| Item | Conditions   | Criteria   |
|------|--|--|
| 1    | Temperature range<br>Electrical performance guarantees temperature range:<br>0°C to 40°C<br>Electrical performance not guarantees working temperature range: -20°C to 50°C<br>Storage temperature range: -30°C to 80°C | No abnormal appearance, mechanic performance or electric performance |
| 2    | High Temperature Leave<br>1. Temperature 80°C for 96 hours.<br>2. After that test, test set is left in normal temperature, humidity condition for more than 1hour, then evaluate.                                      | No abnormal appearance, mechanic performance or electric performance |
| 3    | Low Temperature Leave<br>1. Temperature -30°C for 96 hours.<br>2. After that test, test set is left in normal temperature, humidity condition more than 1(hour), then evaluate.  |  |
| 4    | High Temperature Humidity<br>1. Temperature 50°C, air moisture 90-95% RH for 96 hours.<br>2. After that test, test set is left in normal temperature, humidity condition more than 30min, then evaluate.               |  |
| 5    | Temperature Humidity test<br>1. Temperature 40°C, air moisture 90-95% RH for 96 hours.<br>2. After that test, test set is left in normal temperature, humidity condition more than 30min, then evaluate.               |  |
| 6    | Heat Shock Test<br>1. Condition: -30°C/ 1 hour to +80°C/ 1 hour, 60 cycles<br>2. After that test, test set is left in normal temperature, humidity condition more than 1 hour, then evaluate.                          |  |
| 7    | Heat/humidity Cycle Test<br>A, C, D : RH=90 ± 10%<br>B : RH= 90 ± 5%<br>E : No limit<br>After 5cycles, put EUT at room temperature/humidity condition  |  |

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| 8 | Humidity | Operation is 10~85%.<br>Storages is 5~95% | Non-condensing |

**【Mechanical Test Items】**

| Item | Conditions   | Criteria  |
|------|--|---|
| 1    | Drop Test  | No parts remove, no abnormal mechanic performance, (outside scratches are acceptable) |
| 2    | Package Drop Test  |   |
| 3    | Unit Vibration Test                                      |   |
| 4    | Package Vibration  |   |
| 5    | AC Plug in/out Test (AC Blade part)                      |   |
| 6    | Exfoliate with cellophane tape and examine it            | A character do not disappear. Don't take the label off the main body                  |
| 7    | The reliability to face each other to come off the label |   |
| 8    | No tally part step                                       | less than 0.25mm after an environmental examination                                   |

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**【DC cord Test Items】**

| Item |   | Conditions   | Criteria  |
|------|---|--|---|
| 1    | DC Cord strength<br>(adaptor side /<br>plug side)     | 1. Test part: Between adaptor and DC cord<br>2. Pull a cord with 98N(10Kgf) force<br>3. Time: 1min.  | No abnormality such as wire cut, bushing come off |
| 2    | DC Cord Bending Test<br>(adaptor side /<br>plug side) | Weight = 4.9N(500g)<br>Angle = +/-90°<br>Cycles in every minute = 40times/min.<br>Test cycles = 1000times<br>Note: contrarotate 90°, and then rotate it clockwise with 180°(+90° ~-90°) , and at last return to origin.<br>( 1 Cycle : 0° =>-90° =>0° =>+90° =>0°) | Operate properly.                                 |

**【Safety Test Items】**

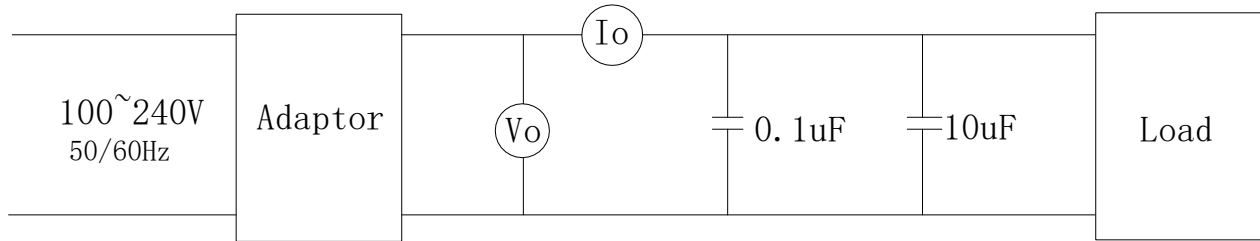
|   |                    |  |   |
|---|--------------------|--|---|
| 1 | MTBF               | Make a measurement condition, a calculation standard clear   | More than 50,000 hours                              |
| 2 | Part materials     | It is maintenance or the incombustibility of contact / part materials approaching it in an outer fence, the charge department of the electric part | same as UL94V-0; more than it                       |
| 3 | print board        | Incombustibility   | same as UL94V-0; more than it                       |
| 4 | No tally part step | Difference of the pitch by height differences of the tally part between casts  | less than 0.25mm after an environmental examination |

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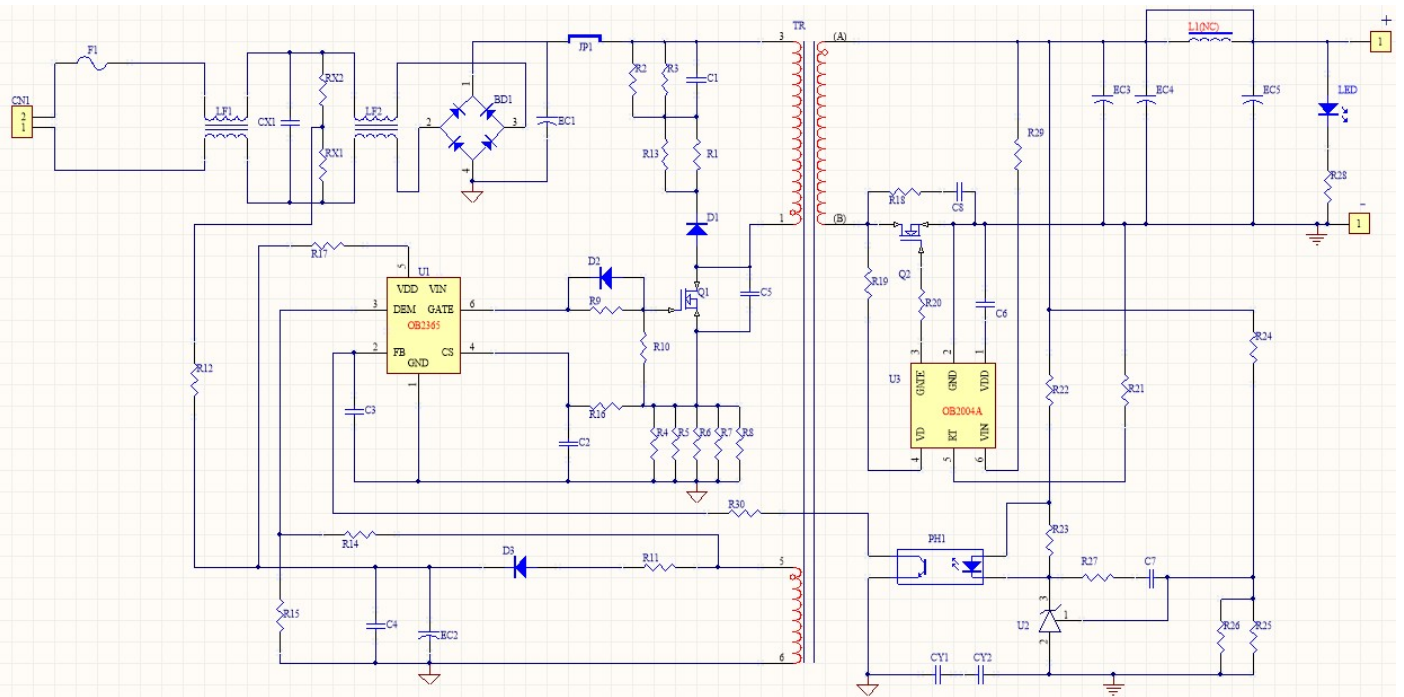


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### 3.5 测试线路图 Test Circuit



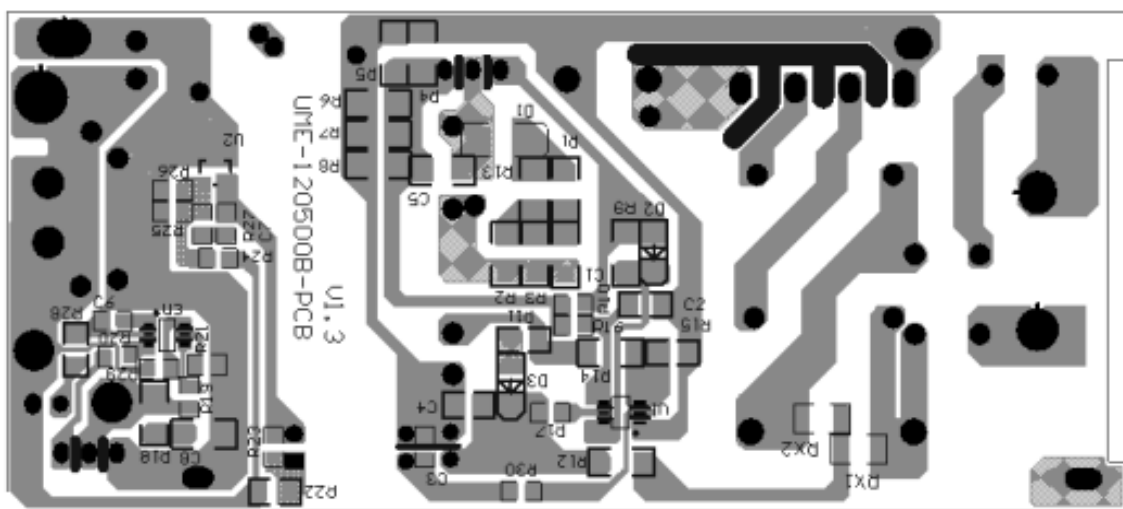
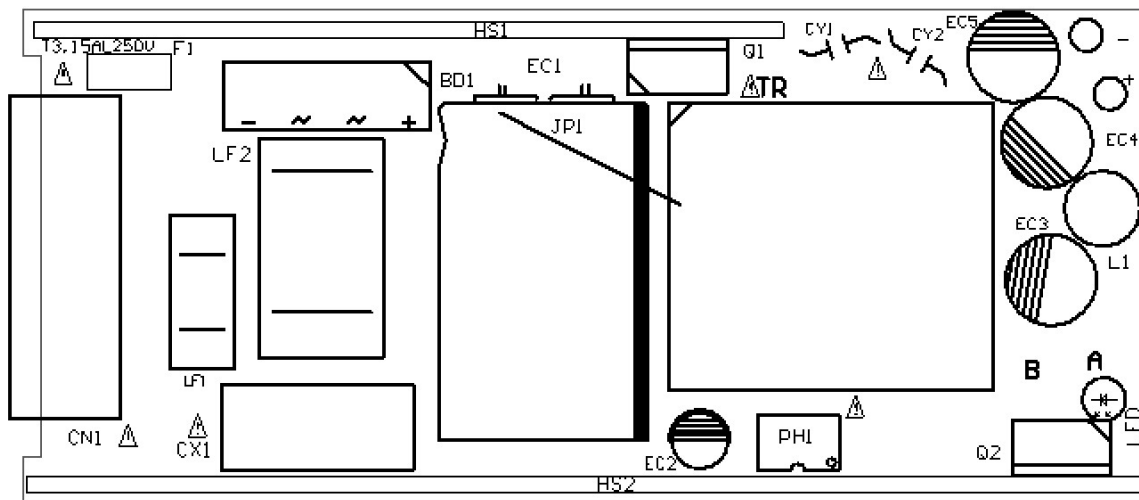
### 4 线路图 Schematic Diagram



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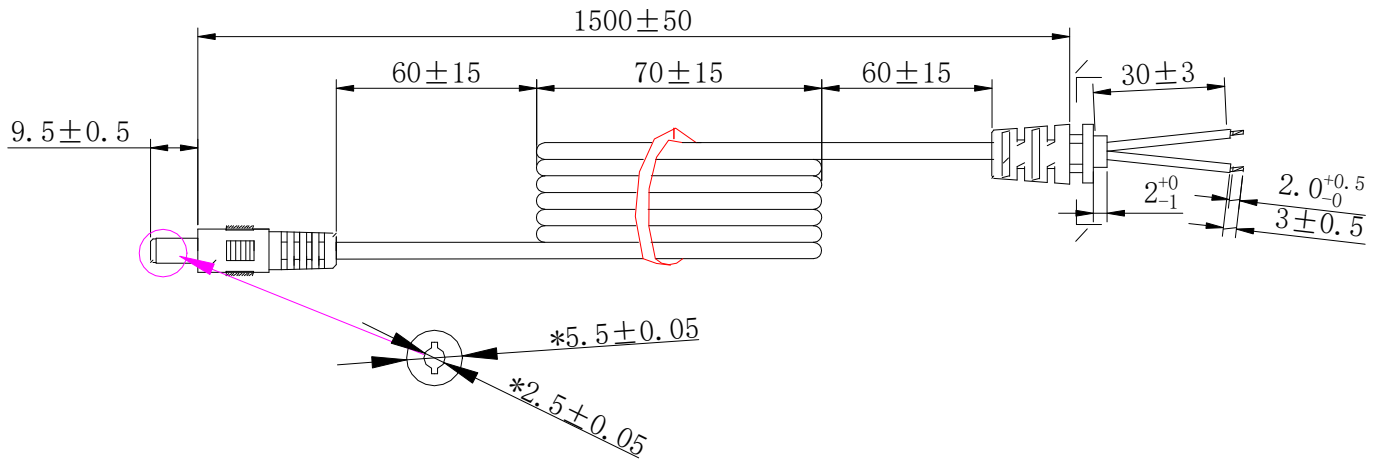
5 电路板图 P.C.B



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6 CORD 图 (单位 unit: mm 颜色 color: Black)



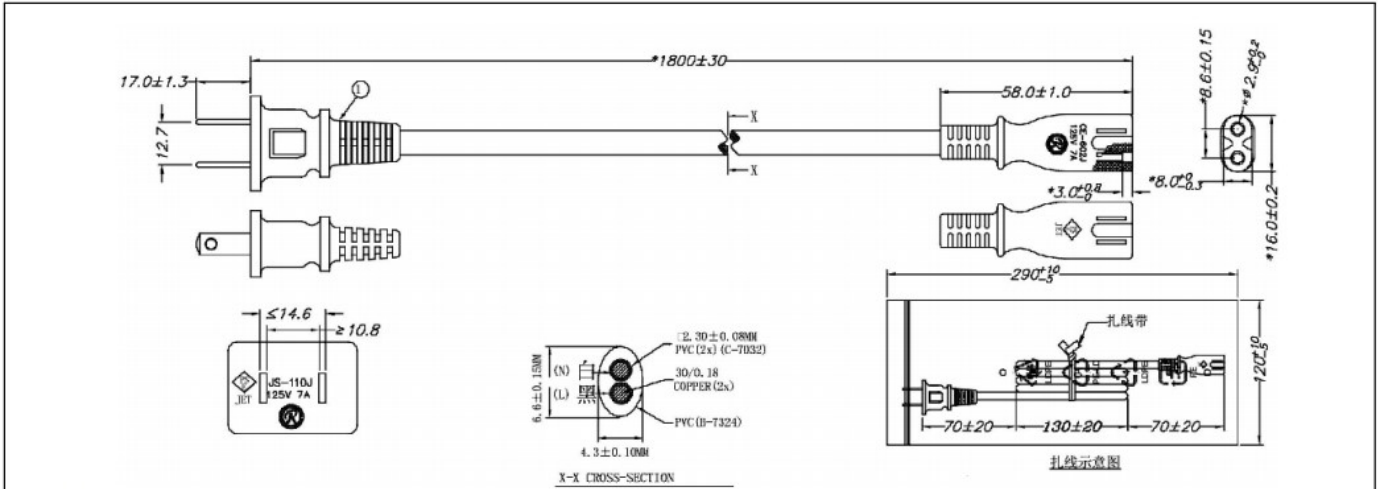
备注:

1. 导线规格: 18AWG 2464 音叉型 黑色, 芯线颜色: 红色+黑色, 导线总长 1500mm; 材质符合RoHS要求。导线按图示尺寸捆扎、测试, 导线间应开路, 对应线头线尾应短路导通, 极性连接正确;
2. 两头剥线焊锡, 剥线长度 $3\text{mm}+1/-0$ 。剥线要求如图所示, 剥丝线焊锡的直径为 $1.5\text{mm MAX}$ 。接线方式: 红色芯线接PIN中心, 黑色芯线接外侧, PG头成型, SR-002成型; SR002尺寸为 $6.8*7.8\text{mm}$ 。
3. SR拉力测试: 吊重 $1\text{Kg}/10$ 分钟, 不可有位移, 吊重 $5\text{Kg}/1$ 分钟, 位移 $2\text{mm MAX}$
4. 插拔力测试: 插入力 $2\text{Kgf MAX}$ , 拔出力 $0.3\text{Kgf MIN}$ ; 插拔 $6000\text{MIN}$ 次不允许有电气和机械性能的损坏, 且满足拔出力 $0.1\text{Kg MIN}$ ;
5. 摇摆测试: 吊重 $500\text{g}$ , 以 $40$ 次/分作 $90^\circ$ 往返, 每一往返为一次, 至少 $1000$ 次;
6. PLUG绝缘阻抗测试:  $100\text{M}\Omega \text{ MIN}$ 在 $500\text{DC/分}$ ; PLUG接触阻抗测试:  $100\text{m}\Omega \text{ MAX}$ ;
7. 导线, SR, PLUG非移行性依据厂内一般进行; 禁止使用VDE所禁用的物质。
8. 打\*号尺寸, 为入料检查项目;

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**7 AC CORD 图**



备注:

- 1、线材规格: VCTFK 0.75/2C BLK L:1800mm
- 2、导线按图示尺寸捆扎、测试。导线间应开路, 对应线头线尾应短路导通。
- 3、摇摆测试: 吊重500g, 以40次/分作60°往返, 每一往返为一次, 至少2000次。
- 4、插头、线及接口符合PSE (日本)标准。
- 5、材质符合“RoHS”要求。
- 6、测试参数: 内高压3KV, 时间1S, 外高压4KV, 时间为2S, 绝缘 5MΩmin, 时间1S  
漏电流0.5mA。
- 7、头部: JS-110J 尾部: CE-602J
- 8、插拔力: 10N-50N
- 9、印字内容: R31945 RoHS <PS>E JET VCTFK 2\*0.75mm<sup>2</sup> (30/0.18mm) 300V  
FUND RESOURCES ELECTRIC INDUSTRY CO., LTD SHANGHANG YEAR

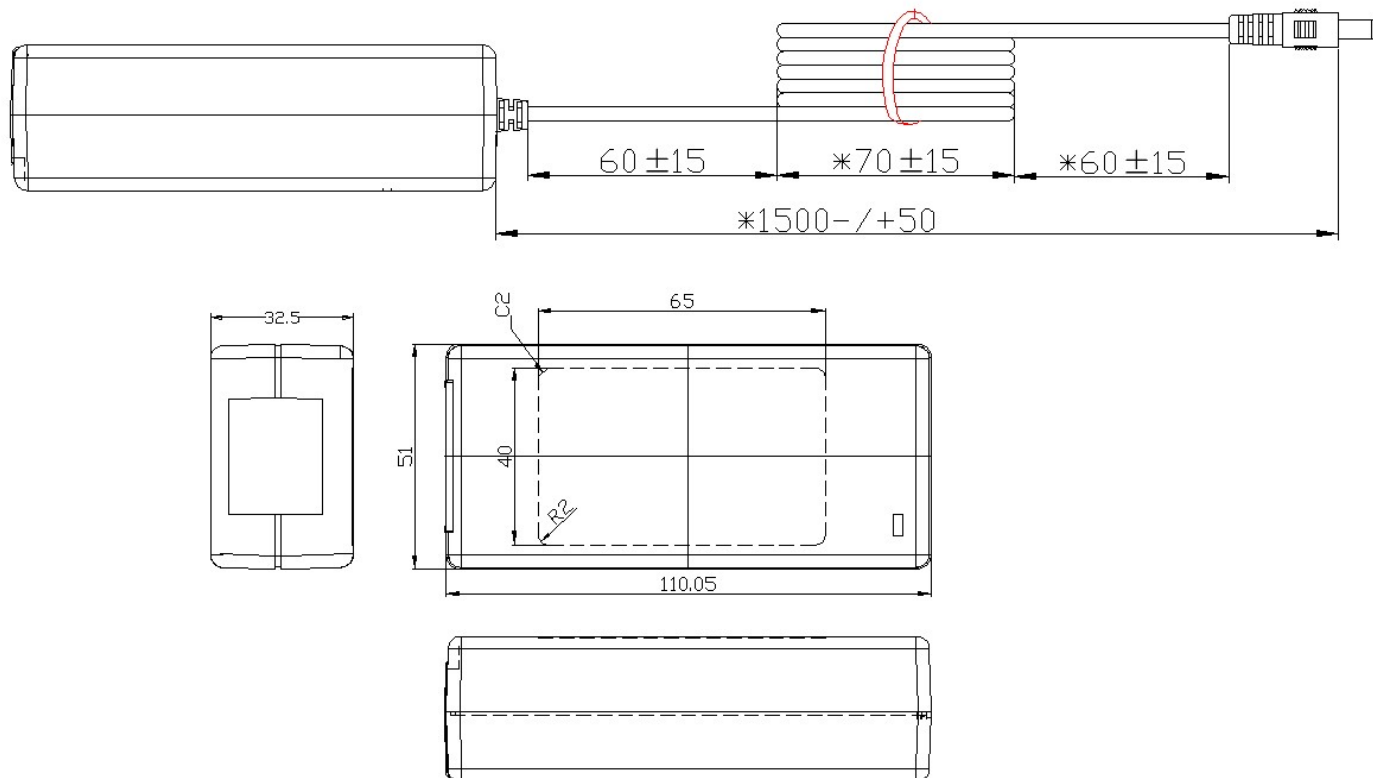
厦 门 友 盟 电 子 有 限 公 司

| 版次 | 变更内容 | 制图  | 审核 | 批准          | 单位          | mm        | 图 称 | 输入电源线        |    |
|----|------|-----|----|-------------|-------------|-----------|-----|--------------|----|
|    |      | 白美端 |    |             | 比例          | 2021-9-25 | 图 号 | CORD-120500M | 版本 |
|    |      |     | 日期 | 产品型号        | LJDY0120017 |           | 1.0 |              |    |
|    |      |     |    | SW-120500T9 |             |           |     |              |    |

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|--------------|----|-----------|----|---------------|-----|
| 批准 Approval: | ZL | 审核 Check: | ZL | 制表 Execution: | BMD |
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|---------------------------------|-------------|-------------|---------------|------------------|----------------------|
| <b>产品规格承认书</b><br>SPECIFICATION |             |             |               | 文件编号<br>File No. | UME-EG-SP24012501/A1 |
| 品名<br>Product                   | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

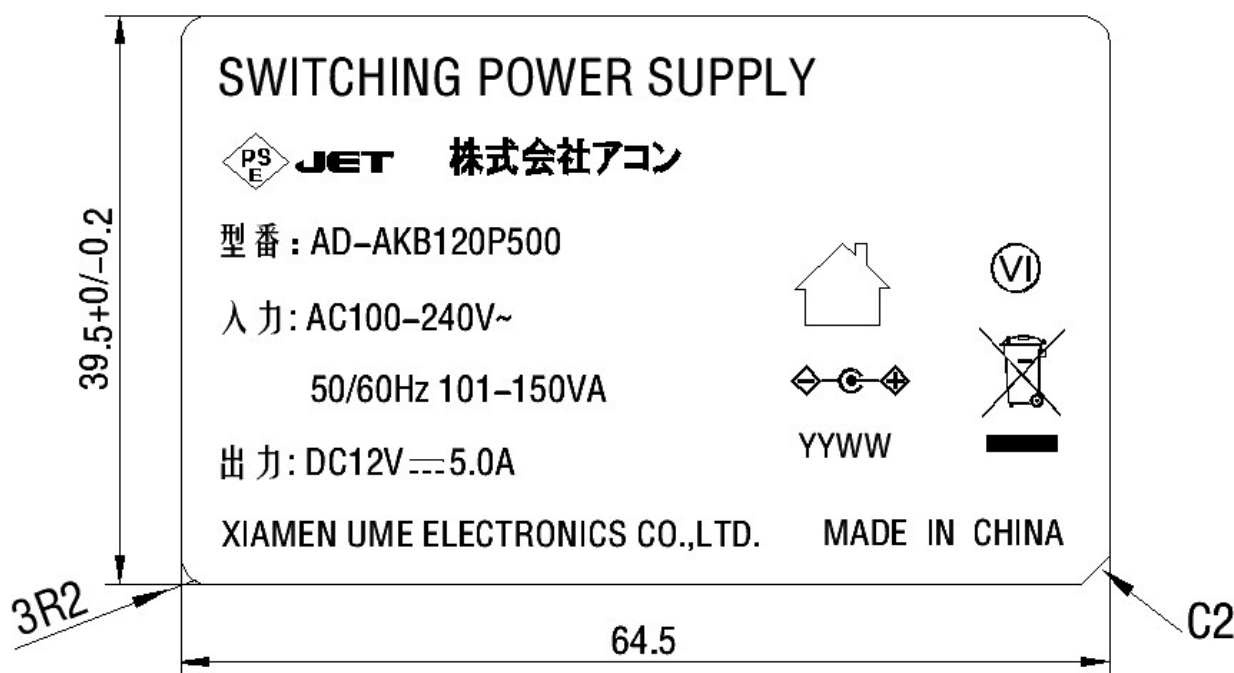
8 外观示意图 Cord and Mechanical Drawing (单位 unit: mm 颜色 color: Black)



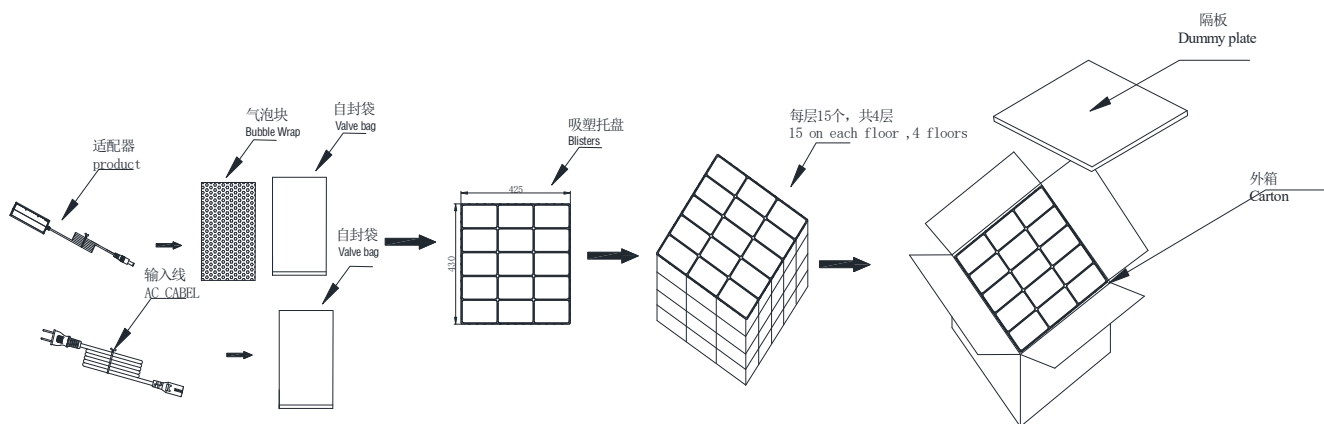
|              |    |           |    |               |     |
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| 批准 Approval: | ZL | 审核 Check: | ZL | 制表 Execution: | BMD |
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|--------------------------|-------------|-------------|---------------|------------------|----------------------|
| 产品规格承认书<br>SPECIFICATION |             |             |               | 文件编号<br>File No. | UME-EG-SP24012501/A1 |
| 品名<br>Product            | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

## 9 铭板标识 Label



## 10 包装方式 Packaging



|              |    |           |    |               |     |
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| 批准 Approval: | ZL | 审核 Check: | ZL | 制表 Execution: | BMD |
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| <b>产品规格承认书</b><br><b>SPECIFICATION</b> |             |             |               | 文件编号<br>File No. | UME-EG-SP24012501/A1 |
| 品名<br>Product                          | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

**11 材料清单 BOM**

| NO | ITEM        | DESCRIPTION | SPECIFICATION                | QTY | MANUF ACTURER  |
|----|-------------|-------------|------------------------------|-----|----------------|
| 1  | PCB         | PCB         | UME-120500B-PCB              | 1   | TXS/JT/MW/HG   |
| 2  | RX1,RX2     | Chip R      | 680K $\Omega$ $\pm$ 5% 1206  | 2   | YAGEO/FengHua  |
| 3  | R1,R13      | Chip R      | 180 $\Omega$ $\pm$ 5% 1206   | 2   | YAGEO/FengHua  |
| 4  | R2,R3       | Chip R      | 510K $\Omega$ $\pm$ 5% 1206  | 2   | YAGEO/FengHua  |
| 5  | R4,R5,R6,R7 | Dip R       | 1.5 $\Omega$ $\pm$ 1% 1206   | 4   | YAGEO/FengHua  |
| 6  | R8          | Dip R       | 2.0 $\Omega$ $\pm$ 1% 1206   | 1   | YAGEO/FengHua  |
| 7  | R9          | Dip R       | 150 $\Omega$ $\pm$ 5% 1206   | 1   | YAGEO/FengHua  |
| 8  | R10,R28     | Chip R      | 10K $\Omega$ $\pm$ 5% 0805   | 2   | YAGEO/FengHua  |
| 9  | R11         | Chip R      | 6.8 $\Omega$ $\pm$ 5% 0805   | 1   | YAGEO/FengHua  |
| 10 | R12,R14     | Chip R      | 100K $\Omega$ $\pm$ 5% 1206  | 2   | YAGEO/FengHua  |
| 11 | R15         | Chip R      | 27K $\Omega$ $\pm$ 5% 0805   | 1   | YAGEO/FengHua  |
| 12 | R16         | Chip R      | 470 $\Omega$ $\pm$ 5% 0805   | 1   | YAGEO/FengHua  |
| 13 | R17,R20,R29 | Chip R      | 0 $\Omega$ $\pm$ 5% 0805     | 3   | YAGEO/FengHua  |
| 14 | R18         | Chip R      | 22 $\Omega$ $\pm$ 5% 1206    | 1   | YAGEO/FengHua  |
| 15 | R19         | Chip R      | 56 $\Omega$ $\pm$ 5% 1206    | 1   | YAGEO/FengHua  |
| 17 | R21         | Chip R      | 30K $\Omega$ $\pm$ 5% 0805   | 1   | YAGEO/FengHua  |
| 18 | R22,R23     | Chip R      | 1K $\Omega$ $\pm$ 5% 0805    | 2   | YAGEO/FengHua  |
| 19 | R24         | Chip R      | 20K $\Omega$ $\pm$ 1% 0805   | 1   | YAGEO/FengHua  |
| 20 | R25         | Chip R      | 10K $\Omega$ $\pm$ 1% 0805   | 1   | YAGEO/FengHua  |
| 21 | R26         | Chip C      | 10.5K $\Omega$ $\pm$ 1% 0805 | 1   | YAGEO/FENG HUA |
| 22 | R27         | Chip C      | 1K $\Omega$ $\pm$ 5% 0805    | 1   | YAGEO/FENG HUA |
| 23 | R30         | Chip C      | 47 $\Omega$ $\pm$ 5% 0805    | 1   | YAGEO/FENG HUA |
| 24 | C1,C8       | Chip C      | 102 500V $\pm$ 10% 1206 X7R  | 2   | YAGEO/FENG HUA |
| 25 |             | Chip C      | 102 630V $\pm$ 10% 1206 X7R  |     | YAGEO/FENG HUA |
| 26 | C2          | Chip C      | 471 50V $\pm$ 10% 0805 X7R   | 1   | YAGEO/FENG HUA |

|              |    |           |    |               |     |
|--------------|----|-----------|----|---------------|-----|
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|--------------|----|-----------|----|---------------|-----|

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|--|-------------|-------------|---------------|------------------|----------------------|
| <b>产品规格承认书</b><br><b>SPECIFICATION</b> |             |             |               | 文件编号<br>File No. | UME-EG-SP24012501/A1 |
| 品名<br>Product                          | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

|    |         |                  |                           |   |                |
|----|---------|------------------|---------------------------|---|----------------|
| 27 | C3      | Chip C           | 222 50V±10% 0805 X7R      | 1 | YAGEO/FENG HUA |
| 28 | C4      | Chip C           | 104 50V±10% 0805 X7R      | 1 | YAGEO/FENG HUA |
| 29 | C6      | Chip C           | 105 16V±10% 0805 X7R      | 1 | YAGEO/FENG HUA |
| 30 | C7      | Chip C           | 684 50V±10% 0805 X7R      | 1 | YAGEO/FENG HUA |
| 31 | U1      | IC               | OB2365EMP SOP-23          | 1 | On Bright      |
| 32 | U2      | IC               | CJ431±0.5% SOT-23         | 1 | Changdian/UTC  |
| 33 | U3      | IC               | OB2004 DMP SOT-23         | 1 | On Bright      |
| 34 | D1      | Diode            | M7 SMA                    | 1 | JF/MIC/PANJIT  |
| 35 | D2      | Diode            | 1N4148W 75V 0.15A SOD-123 | 1 | JF/MIC/PANJIT  |
| 36 | D3      | Diode            | F7 1A/1000V/SOD-123FL     | 1 | JF/MIC/PANJIT  |
| 37 | Q2      | MOSFEET          | KS8203CA 93A 75V TO-220   | 1 | GUANYU         |
| 38 | BD2     | Rectifier Bridge | KBL406G 600V 4A P=5mm     | 1 | XH/JF/PANJIT   |
| 39 | LED     | LED              | 30 LED Green              | 1 | Hong Qi        |
| 40 | F1      | FUSE             | *T3.15A/250V              | 1 | XC             |
|    |         | FUSE             | *T3.15A/250V TSP          |   | FYS            |
| 41 | HS2     | Mike pull tape   | 150mm*73mm*0.05mm         | 1 | YAHUA          |
| 42 | HS1     | Heat Sink        | 70*20*2+33*30*2           | 1 | Weiersi/LILIFA |
| 43 | HS2     | Heat Sink        | 101*21*2                  | 1 | Weiersi/LILIFA |
| 44 | Q2      | Insulation sheet | BUSHING-TO-220            | 1 | GHT            |
| 45 | Q2      | Silicon Sheet    | 13*19*0.25 mm             | 1 | GHT            |
| 46 | Q1,Q2   | Screw            | Φ3*8                      | 2 | Yunzhan/jixin  |
| 47 | Q1,Q2   | Nut              | Φ3mm                      | 2 | Yunzhan/jixin  |
| 48 | CX1     | X Cap            | 0.33uF 250V±20% P=15      | 1 | STE            |
| 49 | LF1     | Inductance       | 0.6mH MIN 0.5 UEW+TLW     | 1 | VS/NH          |
| 50 | LF2     | Inductance       | 20mH MIN 0.5 UEW+TLW      | 1 | VS/NH          |
| 51 | CN1     | AC INLET         | ST-A03-005KT10(N)2.0      | 1 | Chenli/BEJ     |
| 52 | CY1,CY2 | Y cap            | Y2 472 250V±20% P=7.5     | 2 | STE/HJ         |

|              |    |           |    |               |     |
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| <b>产品规格承认书</b><br><b>SPECIFICATION</b> |             |             |               | 文件编号<br>File No. | UME-EG-SP24012501/A1 |
| 品名<br>Product                          | 开关电源<br>SPS | 型号<br>Model | AD-AKB120P500 | 日期<br>Date       | 2024-01-25           |

|    |         |              |   |         |                     |
|----|---------|--------------|---|---------|---------------------|
| 53 | TR      | TRANSFMOR    | TRPQ2620-120500B  | 1       | HXH/ ZY             |
| 54 | PH1     | Photo        | EL-817MB DIP-4 P=10.2   | 1       | Everlight           |
|    |         |              | BPC-817MB DIP-4 P=10.2  |         | Bright Led          |
| 55 | Q1      | MOSFEET      | MDF10N60TH 600V 10A TO-220F   | 1       | Magnachip/Toshiba   |
|    |         | MOSFEET      | HF10N65 650V 10A TO-220F  |         | HF/JF               |
| 56 | EC1     | E cap        | 120uF 400V±20% 105℃ Φ18*30mm(BXW)   | 1       | Rubycon             |
| 57 | EC2     | E cap        | 10uF 50V±20% 105℃ Φ5*11mm(YXF)  | 1       | Rubycon             |
| 58 | EC3,EC5 | E cap        | 560uF 16V±20% 105℃ Φ8*11mm(PZ)  | 2       | AISHI               |
| 59 | EC4     | E cap        | 1000uF 16V±20% 105℃ Φ8*20mm(ZLH)  | 1       | Rubycon             |
| 60 | JP1     | Jump line    | Φ0.5mm  | 25      | UME                 |
| 61 | CASE    | Thermal film | 70*45*2mm   | 1       | GAOKU               |
| 62 | TR      | Thermal film | 15*25*3mm   | 1       | GAOKU               |
| 63 |         | Light Pipe   | 4.52*2.01*2.5+Φ6*Φ4.52 d=9.04mm   | 1       | JinTonZhou          |
| 64 |         | DC Cable 1   | Φ2.5*5.5*9.5 18AWG 2464 L:1500mm BK                                       | 1       | DPK/GC              |
| 65 |         | AC Cable     | <PS>E 2*0.75 mm <sup>2</sup> VCTFK L=1800mm Black,<br>Lead-free soldering | 1       | KLG/JR              |
| 66 |         | Case         | UME 6005A BK  | 1       | JLF/YGE             |
| 67 |         | Case         | UME 6005B BK  | 1       | JLF/YGE             |
| 68 |         | Bubble Wrap  | 195*115   | 1       | Xincheng            |
| 69 |         | Valve bag    | 140*210*0.05mm  | 1       | Xincheng            |
| 70 |         | Valve bag    | 95*155*0.05mm   | 1       | Xincheng            |
| 71 |         | CARTON       | 470*380*255mm   | 0.01667 | XinRuicheng/ FuXing |
| 72 |         | LINER        | 465*365*3mm   | 0.01667 | XinRuicheng/ FuXing |
| 73 |         | Blisters     | 460*370*65mm  | 0.06667 | YUXIANG             |
| 74 |         | White glue   | AP-688  | 1.2     | JX                  |
| 75 |         | Solder Bar   | Pb free   | 0.4     | YUNNANXIYE          |
| 76 |         | Solder wire  | Pb free   | 0.2     | YUNNANXIYE          |

|              |    |           |    |               |     |
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