

产 品 承 认 书

Sample Approval sheet

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1.0 SCOPE 适用范围

This document details the electrical, mechanical and environmental specifications of a 100VAC~240VAC input, one output, voltage D12V, 18Watts switching power supply, model number CZH024120150USWH.

此承认书适用于 18W 开关电源适配器: CZH024120150USWH 输入为 100VAC~240VAC, 一组输出, 输出直流电压为 12V 的电气, 机械特性以及外部环境要求等各方面的规格.

2.0 INPUT REQUIREMENTS 输入要求

2.1 VOLTAGE 电压

The range of input voltage is from 100Vac to 240Vac.

输入电压的范围是 100Vac 至 240Vac.

2.2 FREQUENCY 频率

The range of input frequency is from 50Hz to 60Hz.

输入频率的范围是 50Hz 至 60Hz.

2.3 CURRENT 电流

The maximum input current is 0.8A. 最大输入电流是 0.8A

2.4 INRUSH CURRENT 涌入电流

No damage shall be occurred and the input fuse shall not be blown up, at AC input voltage, for a cold start.

在正常输入电压范围内, 产品冷机开机, 产品不会破坏, 产品输入保险丝不会烧断。

2.5 INPUT POWER 输入功率

Input Consumption Power Max 0.1W at the no Load 输入空载功率最大 0.1W

3.0 OUTPUT REQUIREMENTS 输出要求

3.1 Static load: 静态负载

Output# 输出组数	Voltage 电压	Minimum load 最小负载	Maximum load 最大负载	Peak load 峰值负载
1	+12V	0A	1500mA	1800mA

Table 3.1.1 表格 3.1.1

3.2 Output voltage:输出电压

The output voltage shall be statically regulated for all combinations of load, line and environment including cross regulation as shown. 输出电压

Output# 输出组数	Voltage 电压	Range 范围	Tolerance 精度
1(空载)	+12V	11.4V-12.6V	±0.6V
2(负载)	+12V	11.4V-12.6V	±0.6V

Table 3.2.1 表格 3.2.1

3.3 Ripple and Noise 纹波和躁音

Output# 输出组数	Voltage 电压	Maximum peak to peak ripple Noise 最大的峰值纹波	Measuring is done by 20MHz
1	+12V	200mV p-p	

bandwidth oscilloscope and terminated each output

with a 10uF capacitor and a 0.1uF capacitor, temperature at 25°C and normal input voltage

测试条件:任何负载正常工作下,使用示波器带宽为 20MHz,连接到充电器的输出端,同时输出端并联一个 0.1uF 瓷片电容和一个 10uF 的电解电容,在 25°C 环境,正常输入电压下测试。

3.4 Temperature coefficient 温漂:

$\pm 0.05\%/^{\circ}\text{C}$ typical on all output. 正常输入电压在额定负载工作温漂系数:
 $\pm 0.05\%/^{\circ}\text{C}$.

3.5 Turn on delay 开机延迟时间:

During turn on and turn off, no voltage shall exceed its nominal voltage by more than 10% and no output will change its polarity with respect to its return line. All output shall reach their steady state values within 3 seconds of turn on. 在正常输入电压下输出电压达到正常输出电压所需时间不超过 3 秒.

3.6 Hold – up time 保持时间:

10 milliseconds minimum from loss of nominal AC input at full load condition, 115VAC/50Hz input, out put will remain within regulation. 在额定负载下当输入电压关闭后输出电压保持在正常输出电压范围最小时间不低于 10 毫秒.

3.7 Efficiency:效率

The average active mode efficiency shall be higher than 85%. 平均效率大于 85%.

Meet International Efficiency Level VI. 能效等级 六级.

※ (Remark) 备注 (Unless otherwise specification output load must set at CR mode) 此产品所有输出特性必须建立在 CR 模式进行测试

3.8 Transient Response and Deviation 瞬态响应特性:

The power supply will meet all specifications and maintain output voltage regulation within 5% of steady state with up to a current change of 50% of maximum current in load for the output #1 no output exceed the maximum rating set in table 3.2.1 在正常工作条件下当负载变动时输出电压变化在正常范围如表 3.2.1

4.0 PROTECTION REQUIREMENT:保护要求

4.1 Over – current protection:过流保护

No damage to the power supply shall be sustained when operating any output under any line condition, into an over load condition for an indefinite period of time. The power supply shall be self – recovering when fault condition remove.

在任何条件下不定时内操作产品并将其进入过载的状态，此开关电源不会受任何损坏并且会自动恢复。

4.2 Short circuit protection:短路保护

No damage to the power supply shall be sustained when operating any output under any line condition, into a short circuit condition for an indefinite period of time. The power supply shall be self – recovering when fault condition remove.

本产品具有短路保护功能当输出端出现短路现象时不会造成危险,当短路现象解除后本产品恢复正常工作.

5.0 ENVIRONMENTAL CONDITIONS 环境条件

5.1 Operating 工作状态

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions. 此电源在以下任何条件下都将可以持续正常工作

5.1.1 Ambient Temperature（环境温度）：0℃ ～40℃

5.1.2 Relative Humidity（湿度）：10% ～ 80%rh

5.1.3 Altitude（高度）：Sea level to 10,000 feet.海拔为 10,000 英尺

5.1.4Vibration（振动）：1.0mm, 10 –25Hz, 15 minutes per cycle for

each axis (X, Y, Z)

频率为 10-25Hz，振幅为 1.0mm，每个方向（X，Y，Z）扫频循环次数为 15 次。

5.2 Non - operating: 非工作状态

The power supply shall be capable of standing the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies: 此电源能够在下列环境条件范围内不会导电及受到任何损坏。

5.2.1 Ambient Temperature(周围环境温度): -20℃ ~ 65℃

5.2.2 Relative Humidity(湿度): 10% ~ 80%

5.2.3 Sea level to 10,000 feet 海拔标准

5.2.4 Vibration and Shock 震动:

The power supply shall be designed to with stand normal transportation vibration per MIL–STD-810D, method 514 and procedures X, as it is mounted in the chassis assembly and packed for shipping. 此开关电源设计符合 MIL–STD-810D 的产品运输振动标准要求。

6.0 INTERNATIONAL STANDARDS 国际标准

6.1 EMI standards EMI 标准

The power supply meets the radiated and conducted emission requirements for FCC Part 15 Subpart B,2016.此开关电源符合传导辐射 FCC Part 15 Subpart B,2016的标准.

7.0 RELIABILITY AND QUALITY CONTROL 可靠性和质量的控制

7.1 MTBF 平均故障间隔时间

When the supply is operation within any of the limits of this specification the

MTBF shall be at least 35,000 hours at 25°C (MIL-HDBK-217F). 当开关电源在环境温度 25°C 在规格限值内工作其平均故障间隔时间（参考 MIL-HDBK-217F ）： 35,000 小时。

7.2 Burn-In 老化测试

The power supply will be performed a minimum for 4 hours Burn-In at 40°C $\pm$ 5°C under full load. 此开关电源在 40°C $\pm$ 5°C 满载的情况下可以最小老化 4 小时。

7.3 Component dating

Semiconductor junction temperatures shall not exceed the manufactures maximum thermal rating. 产品的半导体元器件结温度不超过其规格限值。

8.0 MECHANICAL 结构特性

8.1 Introduction 介绍

The power supply will provide input connectors as in table 8.1

此开关电源的输入连接器将同表格 8.1

PIN#	Input Voltage 输入电压
1	L
2	N

Table 8.1 Top view of AC input Pin assignment 交流输入 PIN 的正面接线图

The power supply will provide output connectors as in table 8.2

此开关电源的输出连接器将同表格 8.2

PIN#	Output Voltage 输出电压
内正	+12V
外负	-GND

8.2 Physical Dimensions:尺寸

The dimensions of the power supply please see attached page. 此开关电源的尺寸请参照附页.

8.3 Label:铭板

The label of the power supply, please see attached page.此开关电源的铭板请见附页

8.4 Weight:重量

The weigh of the power supply is about80g.此开关电源的重量约为80g.

8.5 Connector 接头

AC INPUT 交流输入	2 PIN UL Plug
DC OUTPUT 直流输出	2468/22AWG/1.5M 黑色 5.5*2.1*10 MM/直头音叉沟槽

9.0 SAFETY 安全

9.1 Safety 安全

The power supply must be certified under following international standards:

此开关电源必须由以下国际标准所承认.

	Certified	Standard 标准
ETL/CETL	MEET	UL60950

9.2 Insulation resistance 绝缘阻抗

9.2.1 Input to output: 50M OHM at 500 VDC.

输入至输出: 500 VDC 绝缘阻抗 50M OHM 最小。

9.3 Dielectric Strength (Hi-Pot) 耐压强度

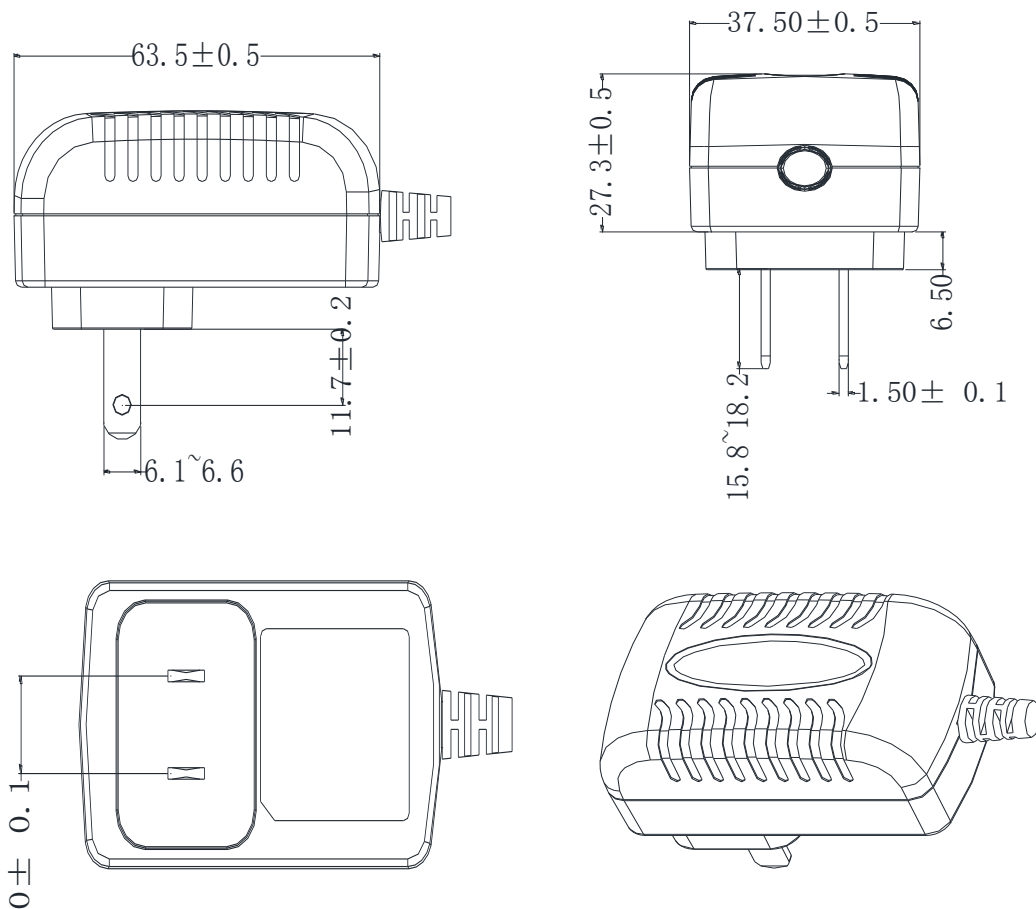
9.3.1 Primary input AC short to Secondary output DC short:

AC3000V,10mA, for 60 sec. AC 初级输入至次级 DC 输出: AC3000V,
10mA, 60 秒.

10,Case Specification 外壳规格

NOTE:1. Case color 外壳颜色 : BLACK 黑色.

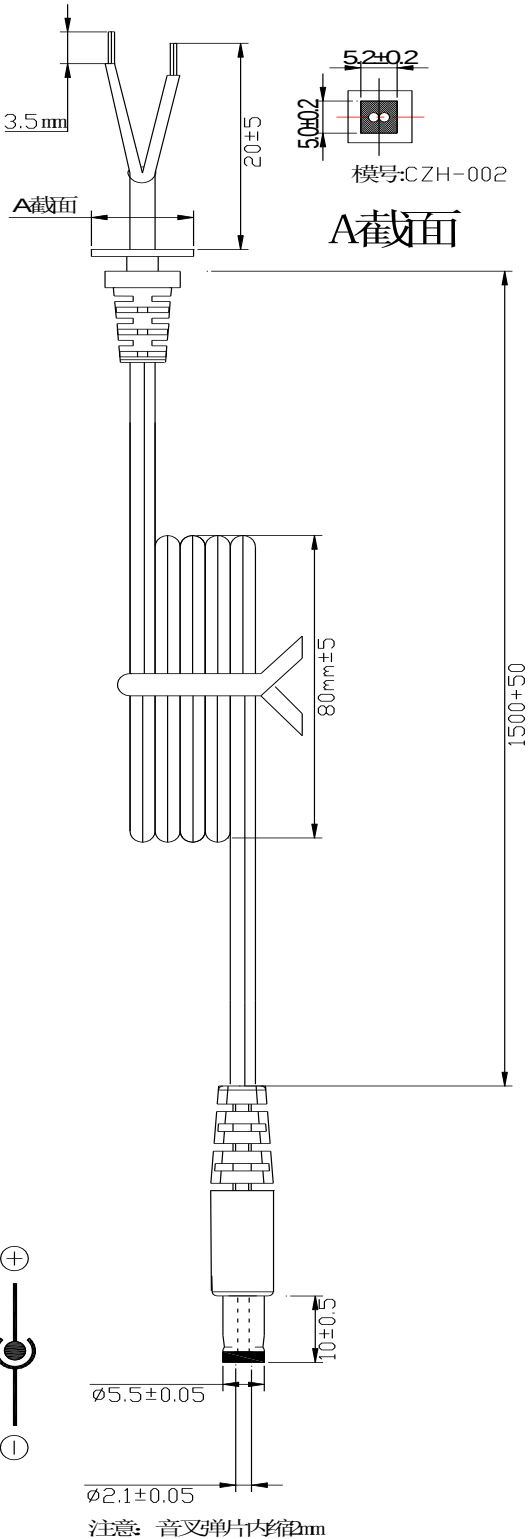
2.Unit 单位:mm



11,Cable Specification:线材规格

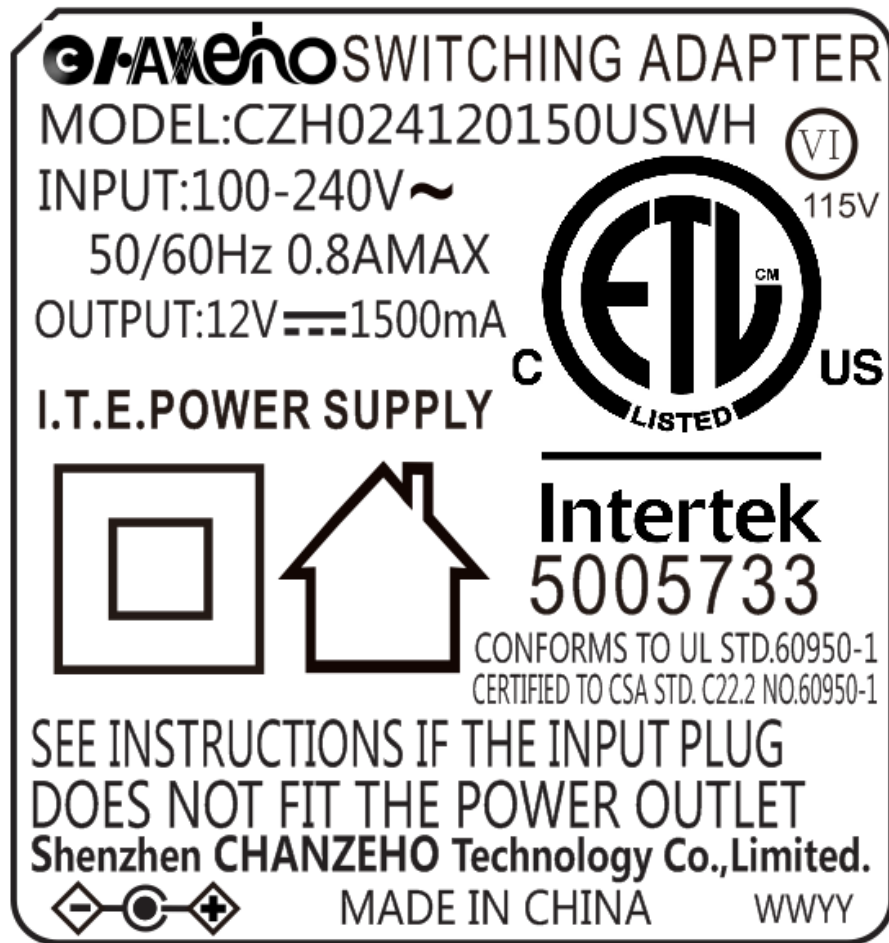
- 1. CORD MATERIAL: 2468 22AWG*2C (UL E468103). 扁线
- 2. DC PLUG TYPE: DC 5.5*2.1*10mm 直头 音叉 沟槽
- 3. OUT JACKET: PVC COLOR: (BLACK) 黑色
- 4. TEMPERATURE: 80℃
- 5. ROHS CABLE (线材为环保材质)
- 6. unit:mm
- 7. WIRE RUBBER HARNESS: 60P (FOR SR), 40P (FOR DC)

直头 音叉 沟槽



12,Label Specification:铭板规格

Unit: mm



WW:表示周期，YY：表示年份

大货为镭雕