



地址：深圳市龙岗区坂田上雪科技园西区三号二栋三楼

电话：0755-88869678

传真：0755- 88869678

邮编：518000

客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER/客户：

CUSTOMER P.N./客户物料号：

MODEL NO./产品型号： XED-2012S

PRODUCT NO./产品编号：

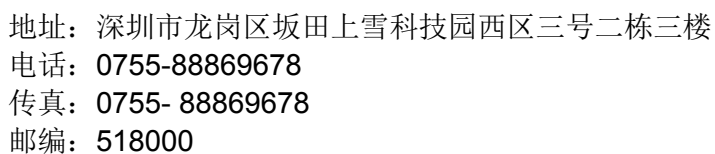
SAMPLE DATE/送样日期： 2020-06-16

CUSTOMER AUTHORIZED SIGNATURE/客户承认签核

--	--	--

**Please return to us one copy of “SPECIFICATION FOR APPROVAL”
with you approved signature./客户确认签字，盖章后请回传一份承认书给我司**

拟 制：	项 目 工 程 师：	安 规 工 程 师：	批 准：
杨登发	孟宪富		孟宪富



E.C. LIST/变更履历表

[illegible]



地址：深圳市龙岗区坂田上雪科技园西区三号二栋三楼
电话：0755-88869678
传真：0755- 88869678
邮编：518000

**

Table of Contents/内容

**

1	SCOPE/简述	4
2	INPUT CHARACTERISTICS/输入特性	4
	① Input Voltage & Frequency/输入电压&频率	4
	② Input AC Current/AC 输入电流	4
	③ Inrush Current (Cold Start)/浪涌电流(冷启动)	4
	④ Efficiency(Normal)/效率	4
3	OUTPUT CHARACTERISTICS/输出特性	5
	① Static Output Characteristics <Vo & R+N>/静态输出特性	5
	② Line/Load Regulation/线性/负载调整率	5
	③ Turn on Delay Time/开机延迟时间	5
	④ Hold up Time/ 关机维持时间	5
	⑤ Rise Time/上升时间	5
4	PROTECTION REQUIREMENTS/保护特性	5
	① Over Current Protection/过流保护	5
	② Short Circuit Protection/短路保护	6
5	ENVIRONMENT REQUIREMENTS/环境要求	6
	① Operating Temperature and Humidity/操作温/湿度温度	6
	② Sea level /海拔	6
	③ Storage Temperature and Humidity/存储温/湿度要求	7
6	RELIABILITY REQUIREMENTS/可靠性要求	6
	① Burn-in/煲机	6
	② MTBF /平均间隔故障时间估算	6
	③ Safety test: (安全测试)	6
	④ Dielectric Strength(Hi-pot)介电耐压强度(高压)	6
	⑤ Leakage Current/漏电流	6
7	OUTLINE DRAWING/外观示意图	7
8	I/O Marking Drawing/铭牌示意图	8
9	PACKAGING (包装)	9



MODEL No.:XED-2012S

PART No.:A1

ISSUE DATE.:2020-06-16

1. SCOPE/简述

The document detail the electrical, mechanical and environmental specifications of a SMPS, the power supply provide 24W continuous output power.

资料详细描述了一款 24W (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 requirement.

此款电源符合 RoHS 要求.

1.1. Description

- ☐ SMPS Adaptor(Wall mount/Side)/插墙式侧插适配器
- ☐ SMPS Adaptor(Wall mount/Ahead)/插墙式前插适配器
- ☐ SMPS Adaptor(Wall mount /Bottom)/插墙式底插适配器
- ☒ SMPS Adaptor(Desk TOP)桌面型适配器
- ☐ Open Frame/开放式结构
- ☐ Others/其它

2. INPUT CHARACTERISTICS/输入特征

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

The range of input voltage is from 100Vac to 264Vac single phase.

输入电压范围:从 100Vac 到 264Vac ,单相输入.

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

2.2. Input AC Current/ AC 输入电流

0.6 A max. @ 100-240Vac input & Full load/满载

2.3. Inrush Current(cold start)/浪涌电流(冷启动)

30A max. @ 240Vac input

2.4. Efficiency(Normal)/效率(额定输入)

83% min. @ Normal input & Full load/额定输入&满载

2.5. Energy Consumption/空载功耗

在额定输入 100-240Vac 时,空载功耗 $\leq 0.5W$

3. OUTPUT CHARACTERISTICS/输出特征

3.1. Static Output Characteristics<Vo & R +N>/静电输出特征

Output	Rated Load/额定负载		Output Range	R+N	Remark
Rail	Min. Load	Max. Load	输出电压范围	纹波与噪声	备 注
+12Vdc	0.0A	2A	11.4-12.6Vdc	120mVp-p	

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolytic capacitor. (test under the condition of rated input and rated output)

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 10uF 的电解电容.(在额定输入及输出的条件下检测)

3.2. Line/Load Regulation/线性/负载调整率

Output	Load Condition/负载条件		Line Regulation	Load Regulation	Remark
Rail	Min. Load	Max. Load	线性调整率	负载调整率	备 注
+12Vdc	0.0A	2A	±1%	±5%	

3.3. Turn- on Delay Time/开机延迟时间

3S max. @180Vac to 240Vac input turn & Full load/满载

3.4. Hold-up Time/关机维持时间

5mS min. @ Full load & 230Vac/50Hz input turn off at worst case/在在最差情下关机

3.5. Rise Time/上升时间

10 ms max. @ Rated load/额定负载

4. PROTECTION REQUIREMENTS/保护要求

4.1. Over Current Protection/过流保护

OCP Point Limited min2.5-4A/保护点限制:最小2.5-4A;

The output shall hiccup when the over current applied to the output rail, 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 rail is short; the power supply shall not

be damaged, and shall be self-recovery when the fault condition is removed

当输出短路时,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. Operation Temperature and Relative Humidity/操作温/湿度要求

-5°C to +40°C 10%RH to 96%RH

5. 2. Altitude 2,000 meter/海拔 2,000 米

5. 3. Storage Temperature and Relative Humidity/存储温/湿度要求

-40°C to +70°C 5%RH to 95%RH

6. RELIABILITY REQUIREMENTS/可靠性要求

6. 1. Burn-in/老化

The power supply shall be burn-in for 2 hours under normal input and 80%rated load at 40°C $\pm$ 5°C

产品至少要在 40°C $\pm$ 5°C的环境及 80%额定负载条件下煲机 2 小时

6. 2. MTBF Qualification/平均间隔故障时间估算

The MTBF shall be at least 20,000 hours at 25°C, Full load and nominal input condition

平均间隔故障时间: 至少 20,000 小时, 25°C环境及额定输入与满载条件下

6. 3. Safety test: (安全测试)

6. 4. Dielectric Strength(Hi-pot)介电耐压强度(高压)

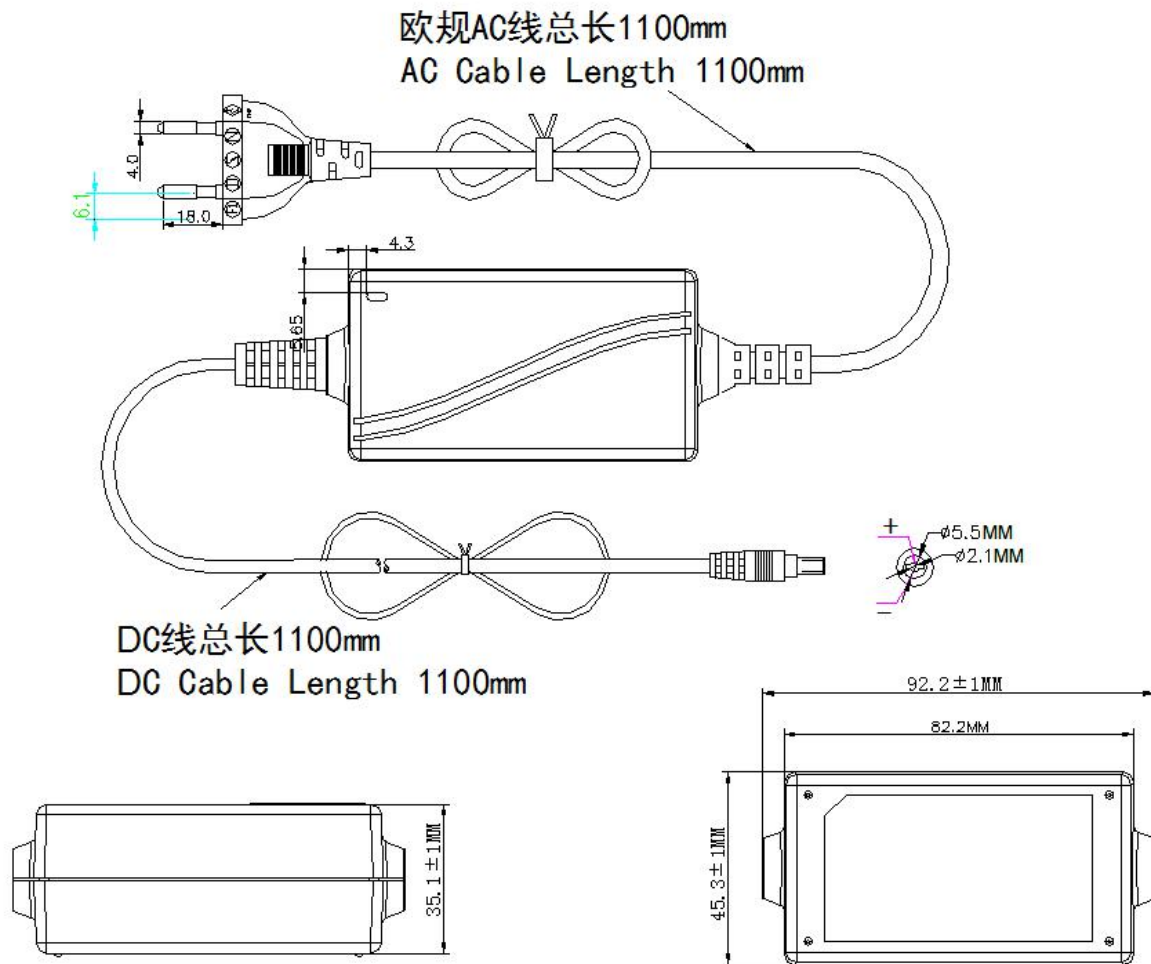
Primary to Secondary: 1KVac /10mA Max /60second (1KVac/3 second for Mass Production)

初级对次级: 1KVac / 10mA Max / 60 秒(生产时高压 1KV/AC 测试时间: 3 秒)

6. 5. Leakage Current/漏电流

0.25mA Max. at 264Vac / 50Hz

7. OUTLINE DRAWING/外观示意图



8 .I/O Marking Drawing/铭牌示意图



技术要求:

1. 材质: 铜版纸, T=0.15MM
2. 颜色: 黑底白字
3. 符合ROHS要求

9. PACKAGING (包装)

