



承 认 书

SPECIFICATION FOR APPROVAL

客 户 :

CUSTOMER: 优 特 普

客户型号 :

CUSTOMER P/N: _____

公司型号 :

OUR MODEL NO: TDX-5401110 DC 头: 5.5*2.5*12mm

制定日期:

Date: 2016-01-07

客户签章栏:

编 制 (PREPARED)	审 核 (CHECKED)	批 准 (APPROVAL)

腾达兴签章栏:

批 准 (APPROVAL)	审 核 (CHECKED)	编 制 (PREPARED)
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1、SCOPE

The document detail the electrical, mechanical and environmental specifications of a adaptor, the power supply provide 60W continuous output power.

资料详细描述了一款 60W(连续输出功率)适配器电源的电气性, 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)/插墙式适配器 SMPS Adaptor (Desk-top)/桌面型适配器
 Open Frame/开放式结构 SMPS Unit (With Case)/带铁壳型
 Others/其他

2、Input Characteristics/输入特性

2.1 Input Voltage & Frequency/输入电压与频率

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

输入电压范围: 从 100Vac 到 240Vac, 单相输入.

	Minimum/最小	Normal/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 Input AC Current/AC 输入电流

2Arms. @ 90Vac 60Hz input voltage and full load.

2.3 Inrush Current (Cold Start)/浪涌电流(冷启动)

100Amax. @ 264Vac 50Hz input at 25°C/在 25°C 输入电压为 264V 时浪涌电流 100Amax s 最大

2.4 Unload Standby Power/空载待机功耗

0.5W MAX

2.5 Efficiency/效率 (EFFICIENCY LEVEL:V)

87% min. @ at input 230Vac & Full load/在 230Vac 输入&满载时效率最小为 87%

3、Output Characteristics/输出特性

3.1 Static Output Characteristics <Vo & R+N >/静态输出特性

Output	Rated Load/额定负载		Output Range 输出电压范围	R+N 纹波+噪声 Max	Remark 备注
Rate	Min. Load	Max. Load	53V~55V	540mVp-p	
+54.0V	0.0A	1.11A			

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

纹波与噪声:量测时示波器选用 20 MHz 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)

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3.2. Line/Load Regulation/线性/负载调整率

Output	Load Condition/负载条件		Line Regulation 线性调整率	Load Regulation 负载调整率	Remark 备注
	Min. Load	Max. Load	±2%	±2%	
+54.0V	0.0A	1.11A			

3.3. Turn - on Delay Time/开机延迟时间

2S max @220Vac 60Hz input & Full load/在 220Vac 60Hz 输入&满载时开机延迟时间 2S MAX

3.4. Hold up Time/关机维持时间

7mS min @220Vac 60Hz input & Full load/在 220Vac 60Hz 输入&满载时关机维持时间 7mS Min

3.5. Rise Time/上升时间

20mS max @220Vac 60Hz input & Full load/在 220Vac 60Hz 输入&满载时开机上升时间 20mS MAX

3.6 Output Overshoot/Undershoot/输出过冲/欠冲

7% max. When the power on or off/当电源开/关机时

3.7 Dynamic Load/动态负载测试

Normal input for load step from 25% to 75%, R/S:1A/uS, Frequency:100Hz, Vpp<10%
输入额定电压, 负载变化:从 25%到 75%, 斜率:1A/Us, 频率:100Hz, Vpp 小于 10%

3.8 Brownout & Brownout Recovery/电压跌落与恢复

The input voltage decreases from 240Vac/50Hz to zero, or the input voltage increases from zero to 240Vac/50Hz, power no damage
输入电压从 240V 变化到 0V 或从 0V 变化到 240V, 电源不会损坏

4. Protection Requirements/保护要求

4.1 Over Current Protection/过流保护 OCP<2. 22A

the output shall hiccup when the over currents applied to the output rail, and shall be self-recovery when the fault condition is removed.

当输出电流超过 2.22A 时,产品进入打嗝状态,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 short, the power supply shall no damage, 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.

4.3 Over Voltage Protection/过压保护

Open the sub photocoupler, The power shall have protection ,And the outputs shall not rush over the maximum output voltage

在光电耦合器开路情况下,电源能保护,即输出电压平均值不超过最大输出电压

5. Environment Requirements/环境要求

5.1 Operating Temperature and Relative Humidity/操作温/湿度要求

-10°C to +55°C

10%RH to 90%RH

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5.2 Storage Temperature and Relative Humidity/存储温/湿度要求

-40°C to +85°C

5%RH to 85%RH non-condensing @ Sea level shall be low 10000 feet/低于 10000 英尺

6、Reliability Requirements/可靠性要求

6.1 Burn-in/煲机

The power supply shall be burn-in for 4 Hours under normal input and full load at 55°C ±5°C.

产品至少要在 55°C ±5°C 的环境及额定输入与满载条件下煲机 4 小时.

6.2 MTBF Qualification/平均间隔故障时间估算

The MTBF shall be at least 40,000 hours at 25°C, Full load and normal input condition.

平均间隔故障时间:至少 40,000 小时, 25°C 环境及额定输入与满载条件下

6.3 Drop Test/跌落测试

0.9M , 20mm board Six Side , Power No Damage

0.9 米高度, 20mm 厚木板地 共两次, 无损伤, 电性能正常

6.4 Vibration/振动

10 to 300Hz sweep at a constant acceleration of 1.0G (Breadth:3.5mm) for 1 Hour for Each of the perpendicular axes X, Y, Z, The product has to restore to its original situation after power off/on

扫描频率:10 到 300Hz, 加速度:1.0G (位移:3.5mm), X, Y, Z 三垂直坐标轴各振动 1 小时, 在电源重新开关机后能正常工作.

7、EMI/EMS Standards/EMI/EMS 标准

7.1 EMC 标准(EMC Standard):

FCC PART 15 SUBPART B CLASS B, EN55022,EN55013,EN6100-6-1,EN6100-3-2, EN55014-1, EN55014-2,GB13837-2003,GB17625-2003 的 EMC 标准要求.

7.2 EMS Standards/EMS 标准

Standard	Test Items
EN61000-3-2	Harmonic current emissions
EN61000-3-3	Voltage fluctuations & flicker
EN61000-4-2	Electrostatic discharge(ESD):8kV air discharge,4kV contact discharge
EN61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
EN61000-4-5	Surge Immunity Test: AC Power Line: line to line 1kV,line to earth 2kV
EN61000-4-8	Power Frequency Magnetic Field Test
EN61000-4-11	Voltage Dips
EN61000-6-1	Electromagnetic compatibility (EMC)-Part 6-1:Generic standards-immunity for residential, commercial and light-industrial environments
EN61000-6-3	Electromagnetic compatibility (EMC)-Part 6-3:Generic standards-Emission standard for residential, commercial and light-industrial environments

8、 Safety Standards/安规标准

8.1 .Dielectric Strength(Hi-pot)/介电耐压强度(高压)

Primary to Secondary: 1500Vac 10mA Max / 60 seconds(3 seconds for production)

初级对次级: 1500Vac 10mA Max / 60 秒(生产时高压测试时间: 3 秒)

8.2. Insulation Resistance/绝缘阻抗

100MΩ min. at primary to secondary add 500Vdc Test voltage

在初级与次级间加 500VDC 进行测试

8.3. Regulatory Standards/安规标准

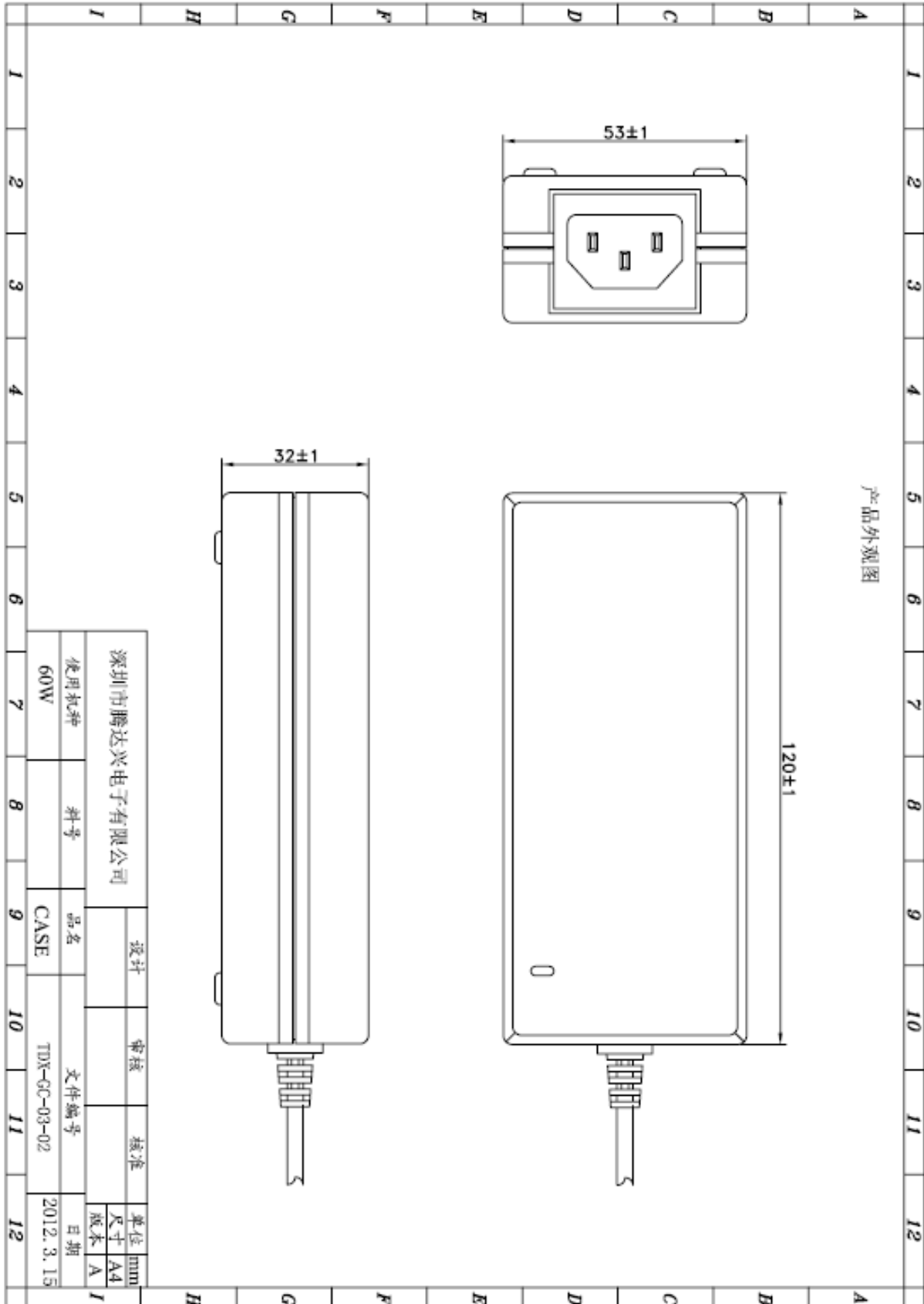
Type/安规	Country/国家	Standard/标准	State/状况	

9、 Product Net Weight(Without Packing)/产品净重

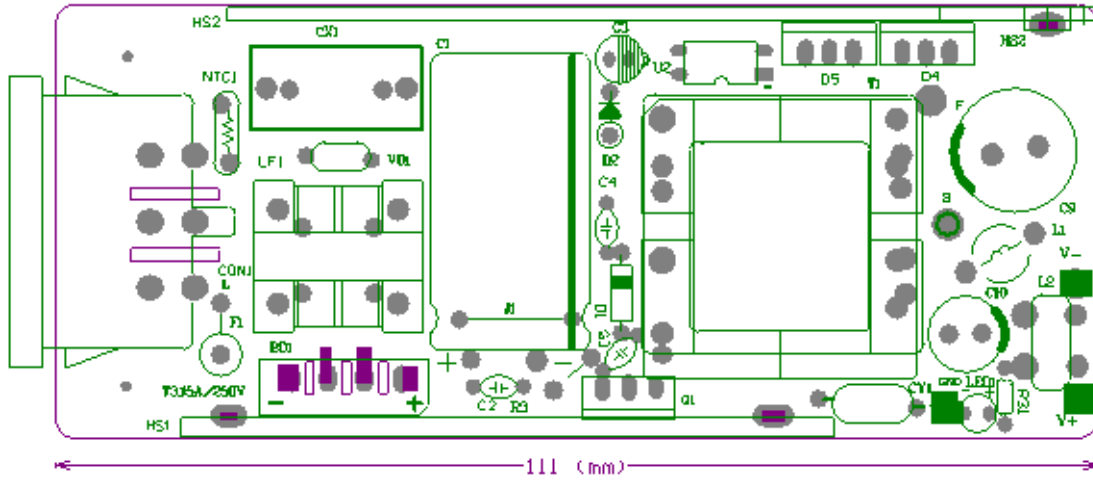
About 400g Max Per Unit.

每个低于 400g.

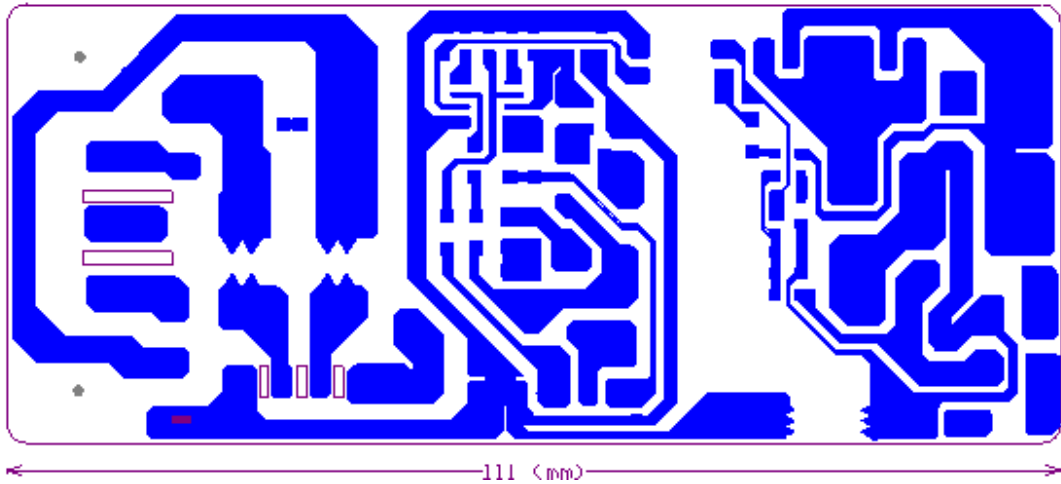
10、Mach. Outline Drawing/外观示意图



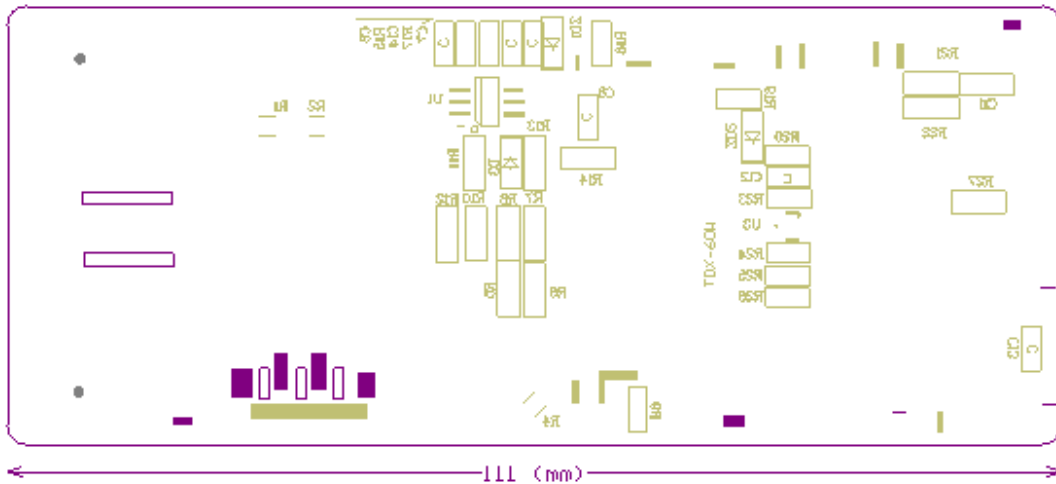
11 PCB



Top Overlay

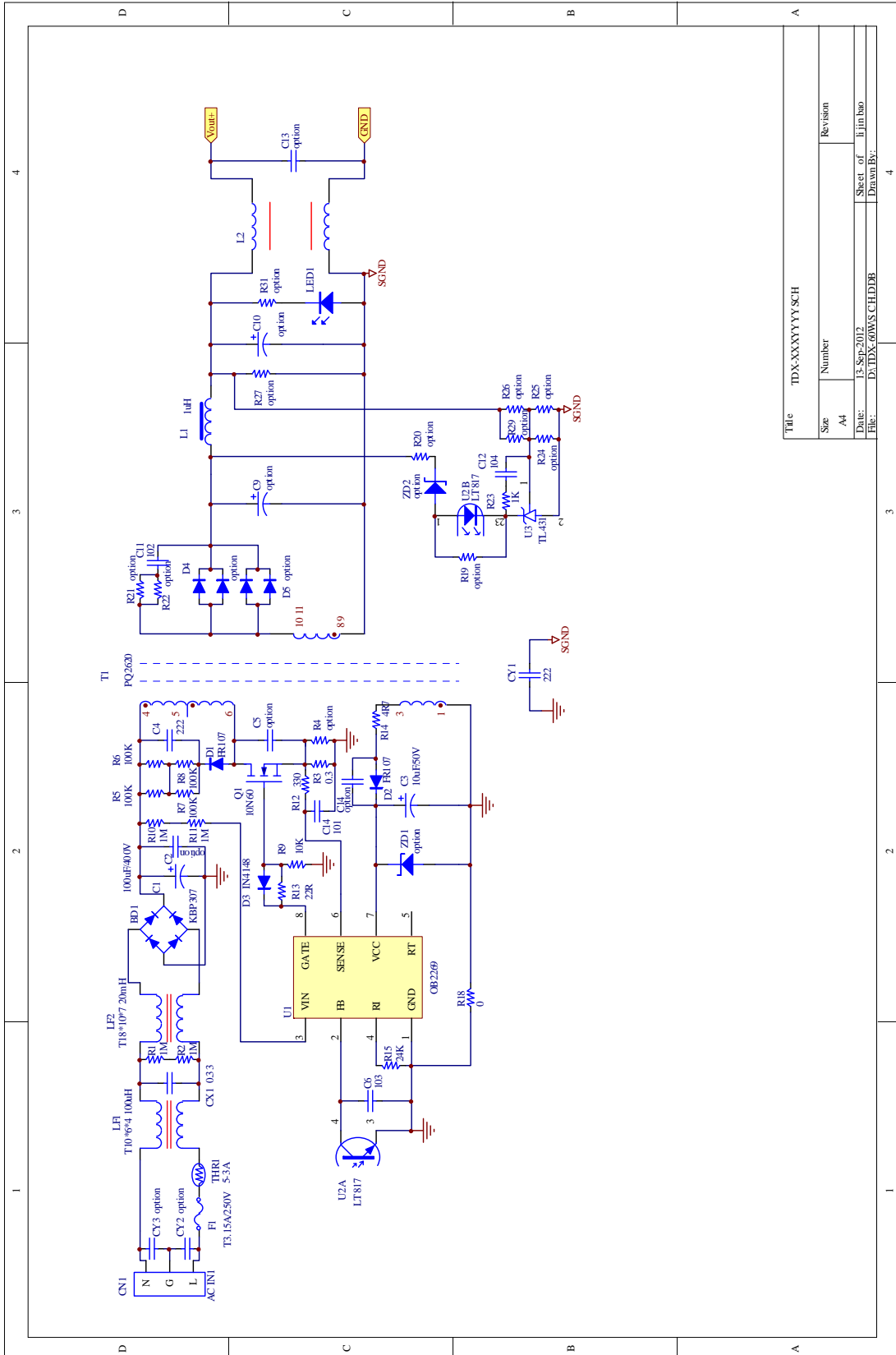


BottomLayer



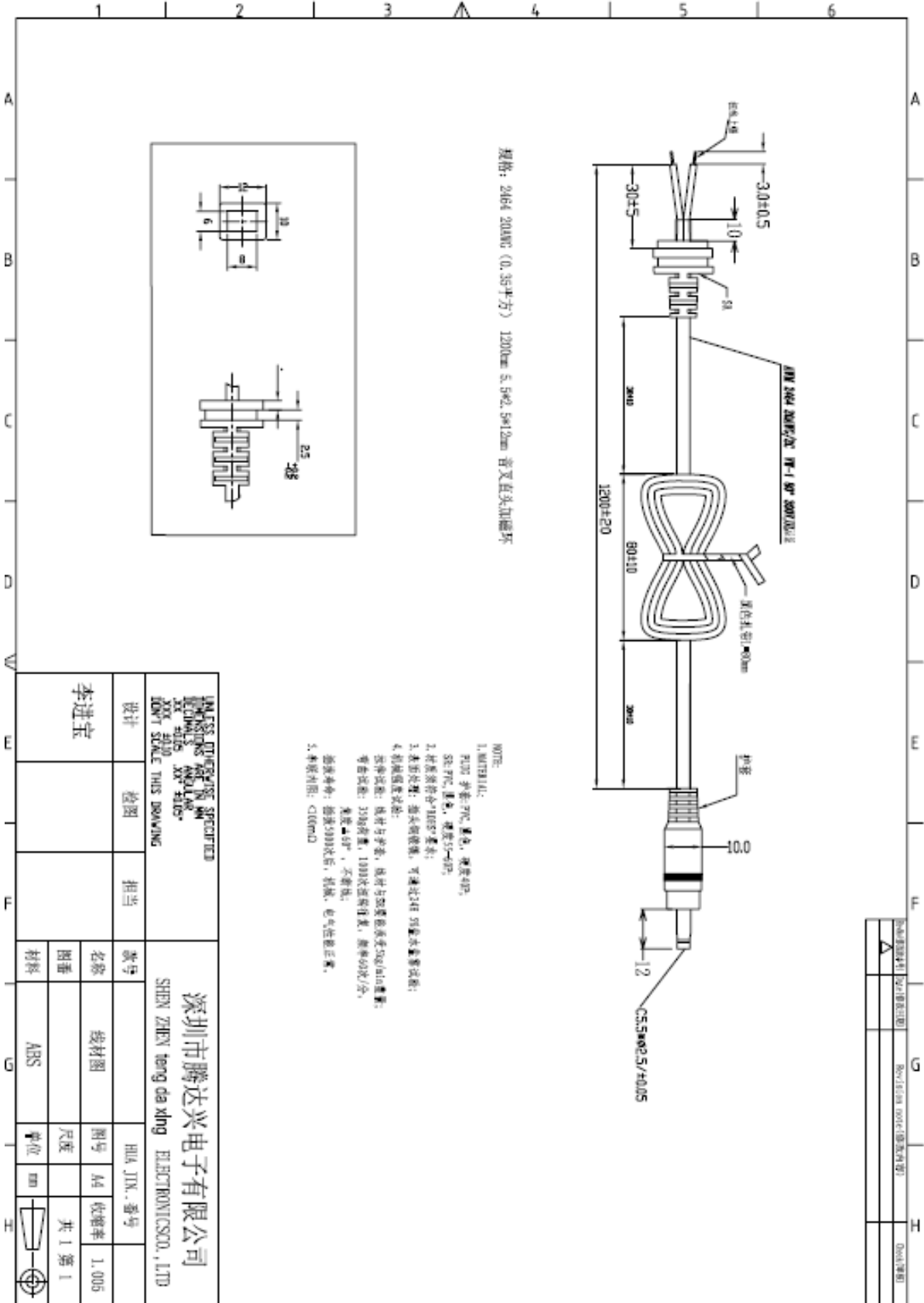
Bottom Overlay

12 SCH (仅供参考, 以实物为准)

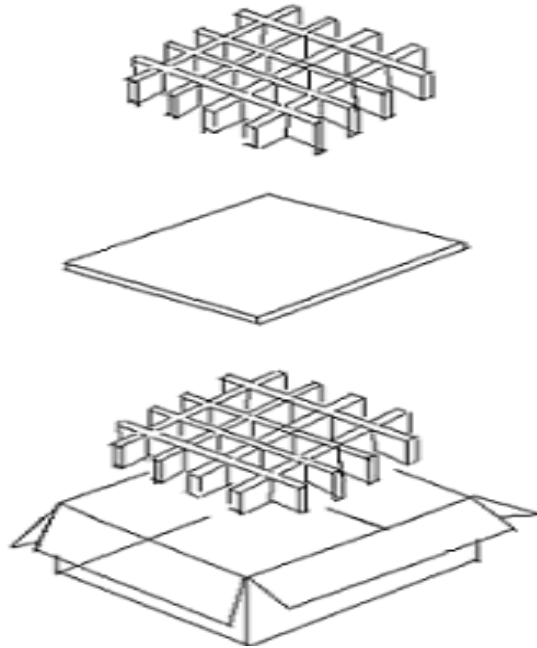


Title		TDX-XXXXYYY SCH	
Size	Number	Revision	
A4			
Date:	13-Sep-2012	Sheet of	li jin bao
File:	D:\TDX-XXXX\12 SCH.DDB	Drawn By:	

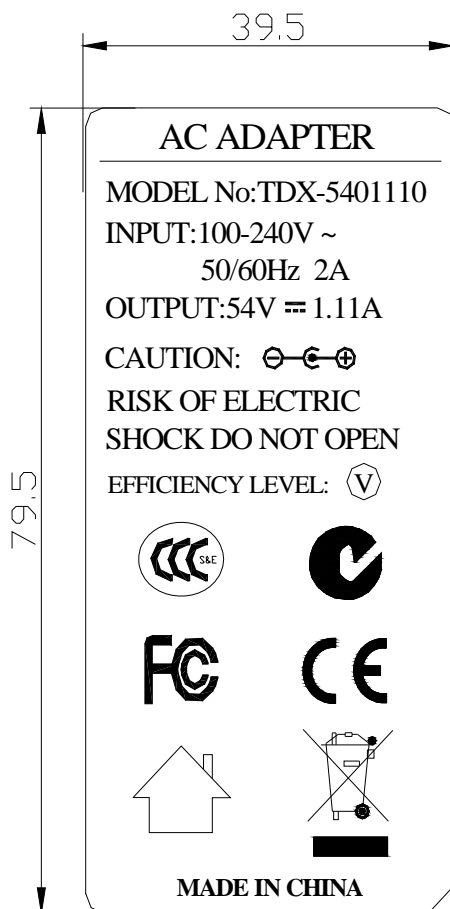
13、线材(CORD): 2464 20AWG (0.35平方) 1200mm 5.5*2.5*12mm 音叉直头加磁环
单位(Unit):m



14、Packing/产品包装:



15 标签图 黑底白字



备注:

- 1.黑底白字
- 2.材质: 亚银龙, 94-V0
- 3.处理: 永久背胶