

KYSAN ELECTRONICS

APPROVAL SHEET

Customer : B010

Part No. : 4050089

Design No. : GQ090655

Model No. : GPU410601000WD00

Safety : UL/CUL

Rev : A

Date : October 30, 2009

客戶承認合格章
APPROVED BY CUSTOMER

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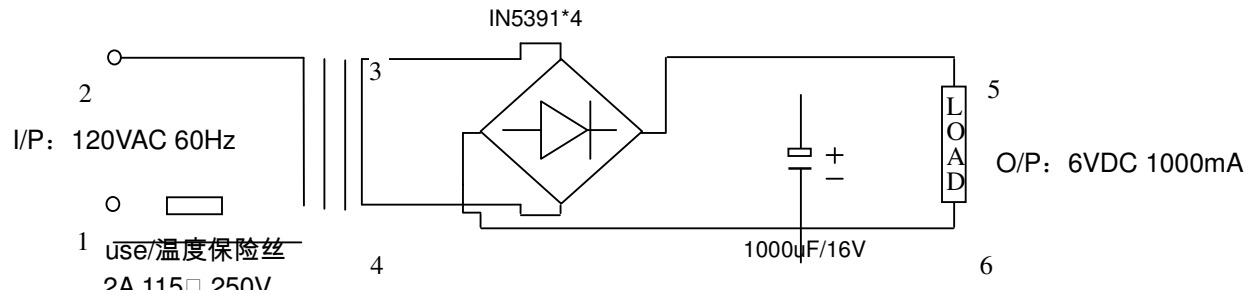
ENGINEERING CHANGE REQUEST					
ORIGINAL/修改前			REVISION/修改后		
REV	DATE	DESCRIPTION	REVISION OF CAUSES/修改原因：		
DRAWER/制定		CHECKED/审核	APPROVED/核准	CUSTOMER/客户	
				MODEL NO/型号	GPU410601000WDOO
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1.ELECTRICAL PERFORMANCE/电气特性：

1-1.Primary rated voltage and frequency: 120VAC 60Hz.

初级额定电压及频率：120VAC 60Hz.

1-2.ELECTRICAL CHARACTERISTICS/电气原理图：



1-3.Secondary rated voltage and current/次级额定电压及电流:

TEST POINT /测试点	FULL LOAD RATED VOLTAGE /负载额定电压	RATED CURRENT /额定电流	VOLTAGE REGULATION /电压调整率	NO LOAD VOLTAGE /空载电压
5~6	6VDC±5%	1000mA		11.5VDC±5%

1-4.Primary exciting current(Io): 60 mA rms max, at input 120VAC 60Hz

初级空载电流(Io)：有效值最大 60mA 输入 120VAC 60Hz

Loading(IL): 180 mA rms max.

初级负载电流(IL)：有效值 180 mA 最大

1-5.D.C.Resistance: Primary: 1Ω±15%,measured at 25°C

初级直流电阻：1Ω±15%,环境温度 25°C

1-6.Empty loss max: 1.5 watts max, at input 120VAC 60Hz

最大空损：1.5 watts,输入 120VAC 60Hz

1-7.Temperature rise: 85°C max on primary coil by the resistance method, and 45°C max on the surface of the case by the thermometer method at 25°C ambient, rated load condition.

额定负载下电阻法线圈最大温升 85°C.热偶法外壳表面最大温升 45°C,环境温度 25°C.

1-8.Insulation resistance: 500VDC supplied,100M ohms minimum between winding & core.

绝缘电阻：线圈与铁芯间加 500VDC,绝缘电阻不小于 100MΩ.

1-9.HI-pot test: 1250VAC 50Hz for 60Seconds (leakage current 1mA) primary to secondary & core Potential 20% higher may be applied for one second..

耐压强度测试：初级-次级、初级-铁芯压 1250VAC 60Hz 60 秒钟 (漏电流 1 毫安) 无击穿、无拉弧. 或者提高 20%电压 1 秒.

500VAC 50Hz for 60Seconds (leakage current 1mA) secondary to core. Potential 20% higher may be applied for one second.

次级-铁芯 500VAC 50Hz 60 秒钟 (漏电流 1 毫安) 无击穿、无拉弧. 或者提高 20%电压 1 秒.

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1-10.Induce voltage: All secondary opened, primary should withstand 240V 360Hz for 60second without breakdown.

倍频倍压测试：所有次级开路,初级需承受电压 240V 360Hz 60 秒而无击穿.

1-11.Life test: In an ambient temperature of 25°C , 90-95% R.H., applying a power source of 120VAC 60Hz to primary, with full load 1000mA for 24hours continuously, unit output normally and meet the requirements of item 1-8、1-9.

老化测试：环境温度 25°C ,相对湿度 90-95%,输入电压 120VAC 60Hz 时,带额定负载 1000mA 连续工作 24 小时,产品输出正常且满足 1-8、1-9 项特性要求.

1-12.Humidity test: In an ambient temperature of $25\pm 2^{\circ}\text{C}$ and 90-95% R.H.. for 48 hours after 10 minutes out of the oven, the unit should meet item 1-9 requirements, and insulation Resistance shall be 10M ohms minimum.

耐湿测试：在环境温度 $25\pm 2^{\circ}\text{C}$,相对湿度 90-95%条件下放置 48 小时,取出 10 分钟后,产品需满足第 1-9 项要求,且绝缘电阻不小于 10MΩ

2.MECHANICAL CHARACTERISTICS/机械特性:

2-1. Drop test: Dropped freely from 3 feet height onto a concrete floor covered with 1/8 inch vinyl tile 3 times from 3 different surface, the unit should meet the item 1-9

落地测试：从 3 英尺高自由落下到表面铺有 1/8 英寸厚聚乙稀垫的水泥地板上,三个不同面各一次,产品需符合 1-9 项特性要求.

2-2.Strain relief test: At normal position, 20 lbs to output cord for 60 seconds each, there shall be no breakage displacement.

S/R 吊重试验：在正常位置,输出线需吊重 20 英磅,持续 60 秒钟不可断裂.S/R 不可有移位现象.

2-3.Bending test: The plug and S/R should withstand weight of 200 gram, swinging from left to right at an angle of 120 degree for 1000 cycles, and 15-20cycles per minute. The cord shall be conductible.

摇摆测试：输出线吊重 200 克,摆动角度 120 度,每分钟 15-20 来回,1000 个来回后仍需导通.

3.SAFETY STANDARD/安规标准:

☐Meet/符合

☐Approved/认可

☐UL/CUL

☐CSA

☐TUV/CE

☐BSI/CE

☐PSE

☐CQC

☐CCC

4.INSULATION SYSTEM/绝缘系统：

☐CLASS A (105°C)

☐CLASS E (120°C)

☐CLASS B (130°C)

☐CLASS F (155°C)

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5. MECHANICAL REQUIRMENTS/外观要求：

5-1. Appearance: Damage and rusting are not permitted.

外观：无损伤无锈迹

6. ENVIROMENTAL CONDITION/外部条件：

6-1. Operating temperature range: -10□---+40□

正常工作温度：-10□---+40□

6-2. Storage temperature range: -20□---+80□

存贮温度：-20□---+80□

6-3. Operation humidity range: 30---85% R.H

正常工作湿度：30---85% R.H

7. INSPECTION ON LINE/线上检测：

7-1. The test items for each produce/全检项目

- ◆ Primary exciting current/初级激磁电流
- Core loss/铁芯损耗
- ◆ Output voltage/输出电压
- Input current and power at rated load/输入电流及功率
- ◆ Foreign mass by shock/敲击听异物
- ◆ Polarity of output plug/输出极性
- Hi-pot test/耐压测试
- ◆ Appearance/外观检查

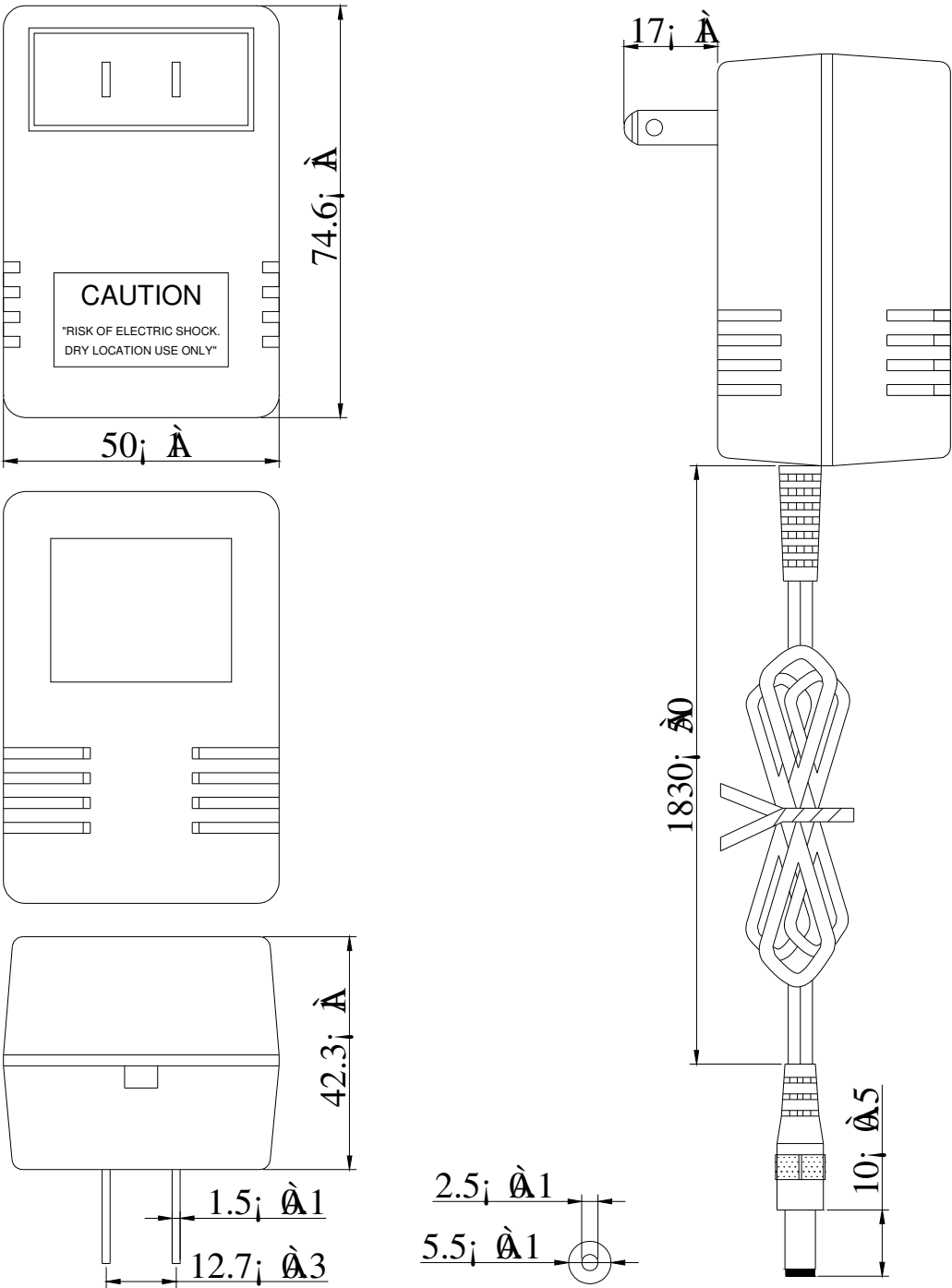
7-2. The test item for part of products/抽测项目：

- Hum operating at rated load/额定负载时哼声
- D.C. Resistance/直流电阻
- Insulation test/绝缘测试

8. NET WEIGHT/单体净重/g

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9.APPEARANCE DIMENSION/外观尺寸图 : (UNIT/单位 : mm)



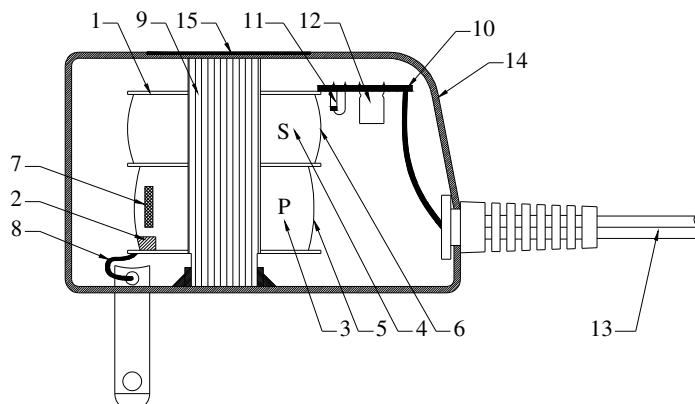
OUTPUT CORD/输出线 : 2468#22AWG 线长 1.83m

PLUG/DC 头 : 5.5^{±0.1mm}*2.5^{±0.1}*10^{±0.5mm}

中心为：“+”极

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10.MATERIAL LIST /材料明细:



ITEM 序号	PARTS NAME 材料名称	MATERIAL&SPEC 材质	MANUFATURER 供应商		
1.	BOBBIN/线架	PA66 THICK0.71mm MIN	E I DUPONT DE NEMOURS&CO INC.E41938		
2.	Primary Crossover Insulation/初级直立绝缘	ACETATE CLOTH TAPE CLASS B/醋酸胶带 AT18	SUZHOU JINGYI SPECIAL ADHESIVE TAPE CO.,LTD. E188295		
3.	PRI.WINDING 初级线圈	2UEW MAGNET WIRE CLASS B 2UEW 漆包线	PACIFIC ELECTRIC WIRE & CABLE CO., LTD E201757 JUNG SHING WIRE CO., LTD.E174837		
4.	SEC.WINDING 次级线圈	2UEW MAGNET WIRE CLASS B 2UEW 漆包线			
5.	PRI.OUTER Insulation 初级绝缘	MYLAR TAPE 0.025mm 玛拉胶带 0.025mm CLASS B	JING JIANG PRESSURE SENSITIVE GLUE FTY. E165111		
6.	SEC.OUTER Insulation 次级绝缘	MYLAR TAPE 0.025mm 玛拉胶带 0.025mm CLASS B	SUZHOU JINGYI SPECIAL ADHESIVE TAPE CO.,LTD.E188295		
7.	PROTECTION 保护器	THERMAL CUTOFF 温度保险 115□2A 250V	JOINT FORCE METAL RESEARCH & CO LTD. E142267		
8.	LEAD WIRE/引线	UL1015# AWG22	SHENZHEN DONGJU WIRE&CABLE CO.,LTD. E189674		
9.	CORE 铁芯	E-I LAMINATED SILICON STEEL E-I 硅钢片	BEST LEGEND HUI DINGS LTD.		
10.	RECTIFIER BOARD 电路板	P.C.BOARD(94-V0) CLASS B 阻燃等级 94-V0 1.60mm THICK	KINGBOARD LAMINATES(MACAO COMMERCIAL OFFSHORE) LTD.E123995		
11.	DIODE 二极管	SILICON RECTIFIERS 硅二极管 IN5391*4	DONGGUAN DE HUI ELECTRONIC CO.,LTD.		
12.	CAPACITOR 电容	ELECTROLYTI/电解电容 C1:1000uF 16V	DONGGUAN DE HUI ELECTRONIC CO.,LTD. YUH YIN ELECTRONIC(SHEN ZHEN)CO.,LTD.		
13.	OUTPUT CORD/输出线	2468#22AWG	XIN LONG ENTERPRISE CO.E207567 DESAY WIRE CO.,LTD.E252840/E214500		
14.	ENCLOSURE/外壳	41#UL 插 SE-100	SABIC INNOVATIVE PLASTICS JAPAN LLC.E45587		
15.	NAMEPLATE 铭牌	PET(UL/CSA)OR ALUMINUM PET(UL/CSA 认可)或铝质	JING XING PRINTING FACTORY MH45133 GUANG NING YOU TONG.MH27610		
NOTE	Varnish 凡立水	V821A	QUALIPOLY CHEMICAL CORP.E213437		
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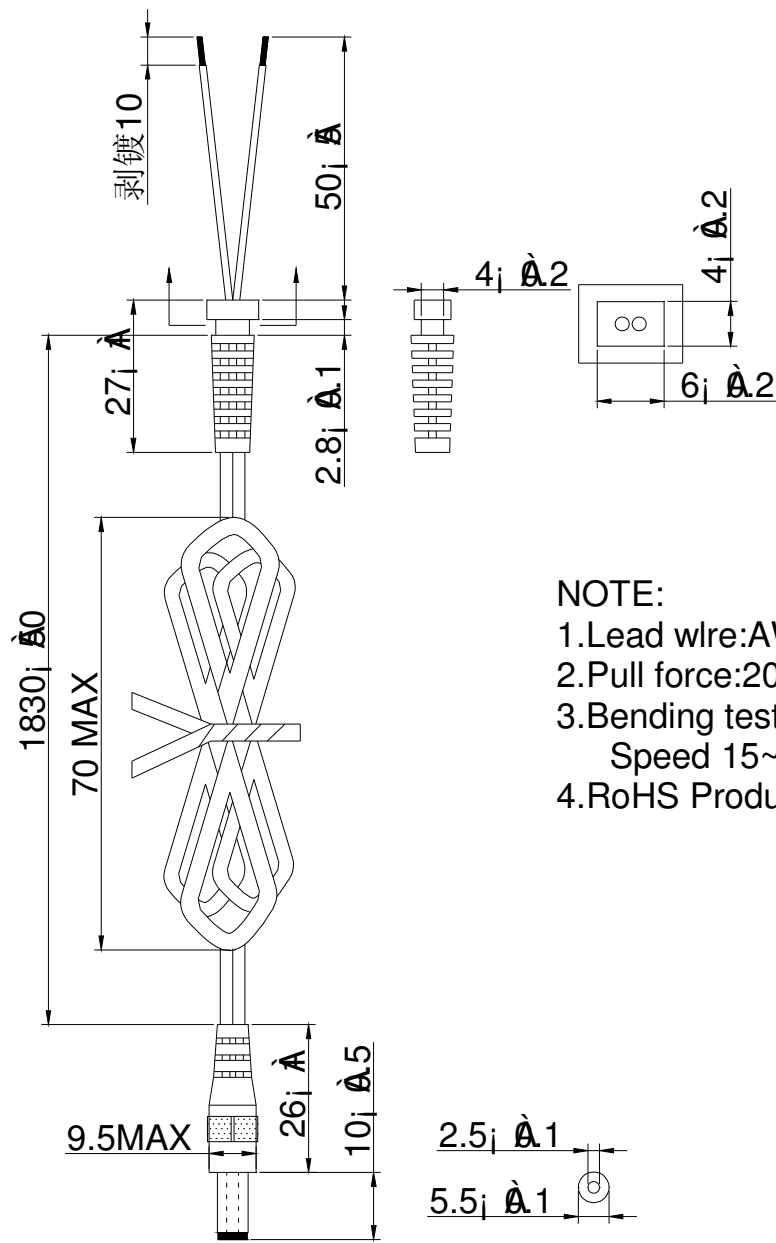
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11.SAMPLE TEST DATA/样品测试报告：								
ITEM/项目			SPEC/范围	SAMPLE/样品编号				
				#1	#2	#3	#4	#5
PRIMARY EXCITING CURRENT 初级空载电流(I0) I/P：120VAC 60Hz			60mA MAX	21				
PRIMARY EXCITING CURRENT 次级负载电流(IL) I/P：120VAC 60Hz			180mA MAX	120				
SECONDARY VOLTAGE 次级电压 NO LOAD/空载(VO)			11.5VDC±5%	11.5				
SECONDARY VOLTAGE 次级电压(VL) LOAD/负载：DC 1000mA			6VDC±5%	6.05				
Hi-pot test 耐压	PRI.TO SEC-CORE 初级-次级-铁芯	AC 1250V/1mA/50Hz/60second 交流 1250V/1mA/50Hz/60 秒钟	OK					
	SEC.TO CORE 次级-铁芯	AC 500V/1mA/50Hz/60second 交流 500V/1mA/50Hz/60 秒钟	OK					
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12. DC CORD DRAWING/DC 线图案：

Unit : mm
单位：(mm)



- NOTE:
- 1.Lead wire:AWG22#
 - 2.Pull force:20LB/1Minute of S/R
 - 3.Bending test:Weight 200g, Angle 120°
Speed 15~20Bends/min≥1000Time
 - 4.RoHS Product

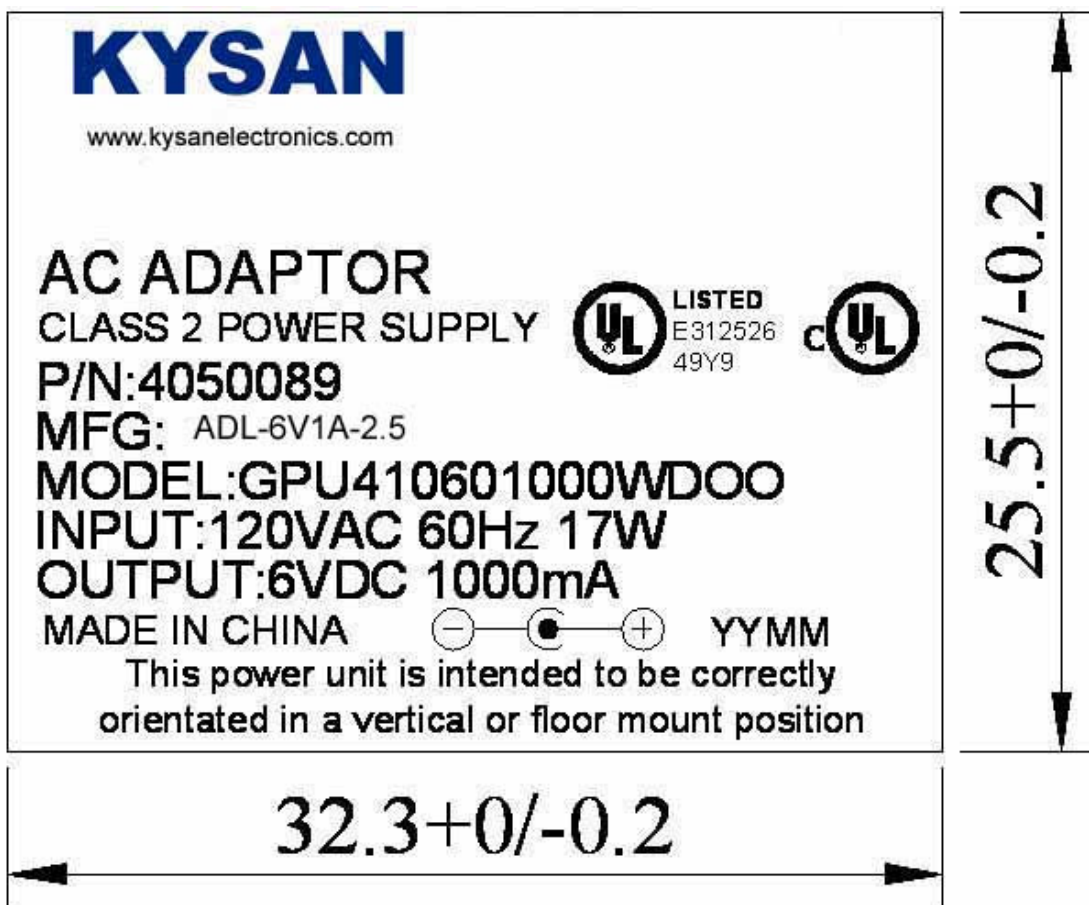
DRAWER/制定	CHECKED/审核	APPROVED/核准	CUSTOMER/客户	
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13.NAMEPLATE DRAWING/铭牌图案：

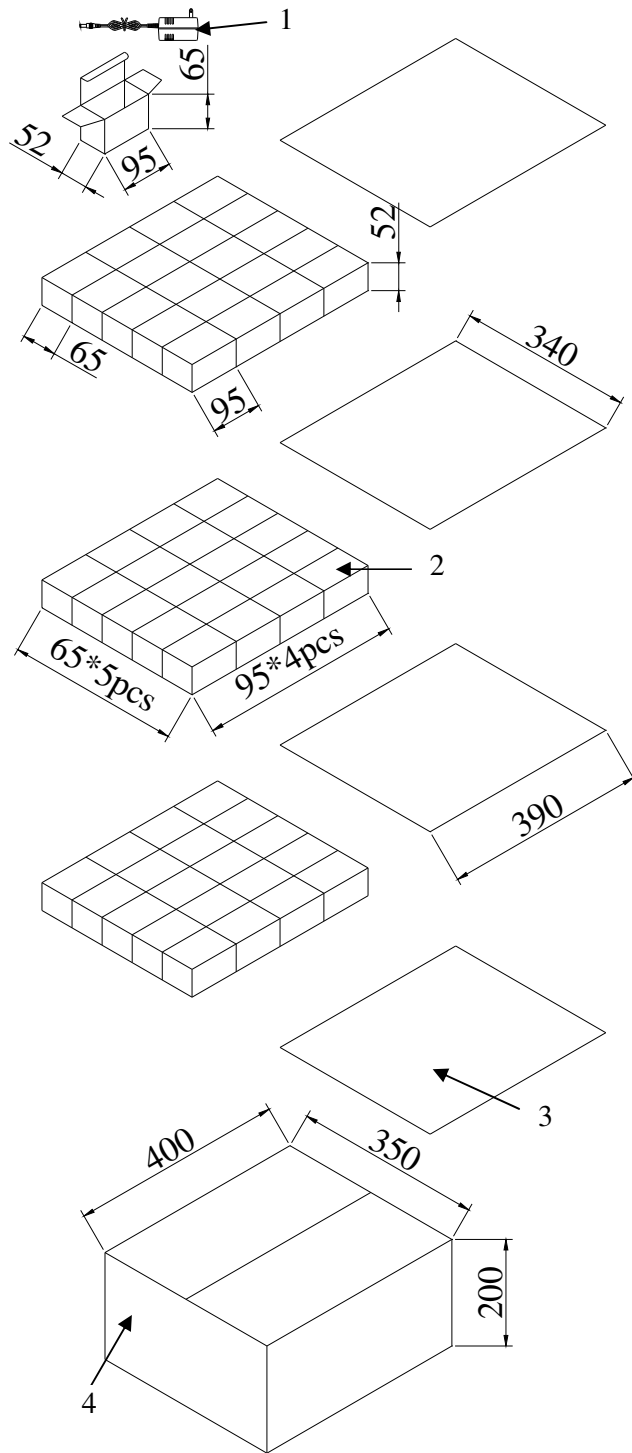
Unit : mm

单位 : (mm)



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14.PACKING/包装



装白盒

- 1、外径尺寸为 95*52*65mm ；
- 2、材质：450g 纸；
- 3、每个产品装 1PCS 白盒 。

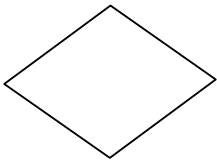
装纸箱

- 1、纸箱外径尺寸为 400*350*200mm ；
- 2、材质：A=A 纸；
- 3、每箱装白盒 60PCS。

侧 唛：

P/N:
Q'TY: 60 PCS
N.W.: KGS
G.W.: KGS
MEAS:400*350*200mm

正 唛：



C/NO.:
MADE IN CHINA

备注：

1：产品 2：白盒
3：纸箱 4：最终

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