

承认书

SPECIFICATION FOR APPROVAL

开关电源/Switching Power Supply

CUSTOMER/客户: _____

DESCRIPTION/产品描述: Input:100~240VAC 50/60Hz

Output:20W max

OUR MODEL NO/机种型号: YS20USB-A-C

SAMPLE COLOR/产品颜色: Black () White()

SAMPLE DATE/产品日期: 2023-08-01

业务/SALES:

核准/APPROVED BY:

设计/DESIGNED BY: FangGuangHua

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1、描述/SCOPE:

本规格书适应 YS20USB-A-C 型号的开关电源。

The purpose of the document is to specify the functional requirements of a 20.0W switching power supply.

2、输入特性/INPUT CHARACTERISTICS:

2.1 输入电压/Input Voltage:

额定电压/Rated Voltage:100~240Vac

调整范围/Variation Range:90-264Vac

2.2 输入频率/Input Frequency:

额定频率/ Rated Frequency: 50/60Hz.

调整频率/Variation Frequency:47-63Hz

2.3 输入电流/Input Current:

当输入交流电压为额定值的下限电压负载满载时,最大输入交流电流 0.6A.

0.6Amps max At any input voltage and rated, DC output rated load.

2.4 AC 漏电流/Ac Leakage Current:

当输入电压 264Vac 时,最大漏电流为 0.25mA

0.25mA Max.At264Vac input

2.5 浪涌电流/Inrush Current:

当输出为额定负载,环境温度为 25°C,输入 240Vac 冷态起机时的最大浪涌电流小于为 20A

20Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.

3、输出特性/OUTPUT CHARACTERISTICS:

3.1 输出功率/Power output

电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	峰值功率 Peak Load	输出功率 Output power	输出电压范围 Output Voltage Regulation
5.0Vdc	0.00A	3.0A	3.05-4A	15.0W	4.75-5.25V
9.0Vdc	0.00A	2.22A	2.22-3.22A	20.0W	8.55-9.45V
12.0Vdc	0.00A	1.67A	1.67-2.67A	20.0W	11.4-12.6V

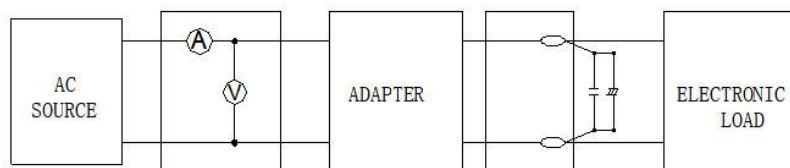
3.2 负载特性,调整率/Combined Load/Line Regulation

Dynamic Load (动态负载)	DC Voltage Regulation(电压调整率)
10%~100%~10%	±10%
10%~50%~10%	±5%
0%~100%~50%	±5%

3.3 输入电压精度 Voltage accuracy : ±5%

3.4 纹波和噪音 Ripple and Noise:

Output Ripple voltage is 200mV peak to peak or less.(100Vac 60Hz/240Vac 50Hz)



Measured methods:

*The ripple is measured from peak to peak with band width limit of 20MHz C1:0.1uF Ceramics capacitor C2:47uF/50Vluminum capacitor under DC output full load,AC nominal input 25°C ambient temperature).

3.5 启动延迟时间/Turn on delay time:

当输入 100Vac 和输出最大负载时,最大启动时间为 3.5S.

3.5 Second Max.at 100Vac input and output Max. load.

3.6 上升时间/Rise time:

当输入 100Vac 和输出最大负载时最大时间为 20 mS.

20 mS Max.at 100Vac input and output Max load.

3.7 保持时间/Hold up time:

当输入 100Vac 和输出最大负载时,最小保持时间为 10mS.
10mS min. at 100Vac input and output max. load.

3.8 效率/Efficiency:

When 100-240Vac line input voltage, the efficiency shall be 85% or better under maximum load.

3.9 待机功耗 Standby Power:

额定电压 Rated Voltage:100~240Vac 0.1W max

4、保护功能/PROTECTION FUNCTION:

4.1 短路电路保护/Short circuit protection:

该电源供给器在短路解除时能正常工作恢复.

The power supply will be auto recovered when short circuit faults remove.

4.2 过流保护/Over current Protection:

过流故障排除后,电源将恢复正常工作.

The power supply will be auto recovered when over current faults remove.

5、环境要求/ENVIRONMENTAL REQUIREMET:

5.1 工作温度/Operating Temperature:

0°C- 45°C,满载,正常工作.

0°C to 45°C,Full load.

5.2 储藏温度/Storage Temperature:-30°C to 85°C

带外壳/With package

5.3 工作湿度/Relative Humidity:

10%(0°C)~90%(40°C),72 小时,满载,正常工作.

10%(0°C)~90%(40°C)RH,72Hrs,Full load, Normal operating.

5.4 工作高度 Operating altitude -50 TO 4500m AMSL

6、安全及 EMI 要求/SAFETY AND EMI REQUIREMENT:

6.1 安规标准/Regulatory Standards

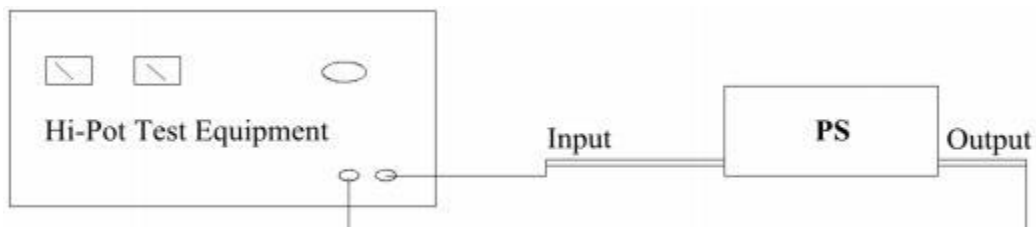
Type	Country	Standard	Type	Country	Standard
UL/FCC	USA	UL60601-1	PSB/CB	SINGAPORE	IEC62368-1
TUV GS	EUROPE	EN62368-1	PSE	JAPAN	J62368-1
CCC	CHINA	GB4943	CSA	CANADIAN	CAS C22.2
✓ CE	EUROPE	EN62368-1	KC	KORE	K62368-1
RCM	AUSTRALI A	AS/NZ62368- 1	UKCA	UNITED KIN DOM	BS62368-1

6.2 绝缘阻抗: 输入 500VDC 初级到次级最小阻抗 100MΩ

Insulation Resistance: 500VDC primary to the secondary input impedance of 100MΩ(Min)

6.3 高压/DIELECTRIC WITHSTAND Hi-Pot:

HI-POT-- primary to secondary3000Vac 5mA 1min



6.4 EMI 标准/EMI STANDARD

测试符合/Meets the Limits of
EN 55032:2015+A11:2020+A1:2020
EN 55035:2017+A11:2020
EN IEC 61000-3-2:2019+A1:2021
EN 61000-3-3:2013+A1:2019

7.可靠性要求/Reliability Requirements

7.1 振动/Vibration

5 to 500Hz sweep at a shift gears for 20 minute for each of the perpendicular axes X,Y,Z
Thereinto:acceleration frequency for 10 m2/s3 at 5~10Hz;acceleration frequency for 3 m2/s3 At
10~200Hz; acceleration frequency for 1 m2/s3 at 200~500Hz

扫描频率: 5 to 500Hz 随机振动, X,Y,Z 三垂直坐标轴向各振动 20 分钟, 其中: 5~10Hz 频率范围的加速度频率为 10 m2/s3 , 10~200HZ 频率范围的加速度频率为 3 m2/s3, 200~500HZ 频率范围的加速度频率为 1 m2/s3

7.2 跌落/Drop in

Random surface in all twice,Height: 1.0m,on the cement plane
任意面共两次, 跌落高度: 1.0 米, 跌落到水泥面上

7.3 钢球冲击/STEEL BALL IMPACT

Ball weight: 500g±25g, diameter: 50mm

钢球规格: 球重 500g±25g, 直径: 50mm

Top surface&back surface in all once,steel ball @Height:1.3m free faller,on the cement
Plane,the case can not crack

顶面和底面各冲击一次, 钢球冲 1.3m 处自由下落, 在水泥地面上进行, 外壳不能开裂

7.4 平均间隔故障时间估算/Qualification

The MTBF shall be at least 50000hours at 25°C, Full load and input 230Vac

平均间隔故障时间: 至少 50000 小时, 25°C环境及 230Vac 输入与满载条件下

7.5 电解电容寿命/The lifetime electrolyte capacitor

The lifetime of electrolyte capacitor shall be at least 17520 hours at 25°C, 80% load and Rated input condition

电解电容寿命至少 17520 小时, 25°C环境及额定输入与 80%负载条件下.

7.6 外壳描述及阻燃等级/Case description and flame retardant grade

The case is BLACK.the material is ABS+PC,and the flame retardant grade is UL94V-0

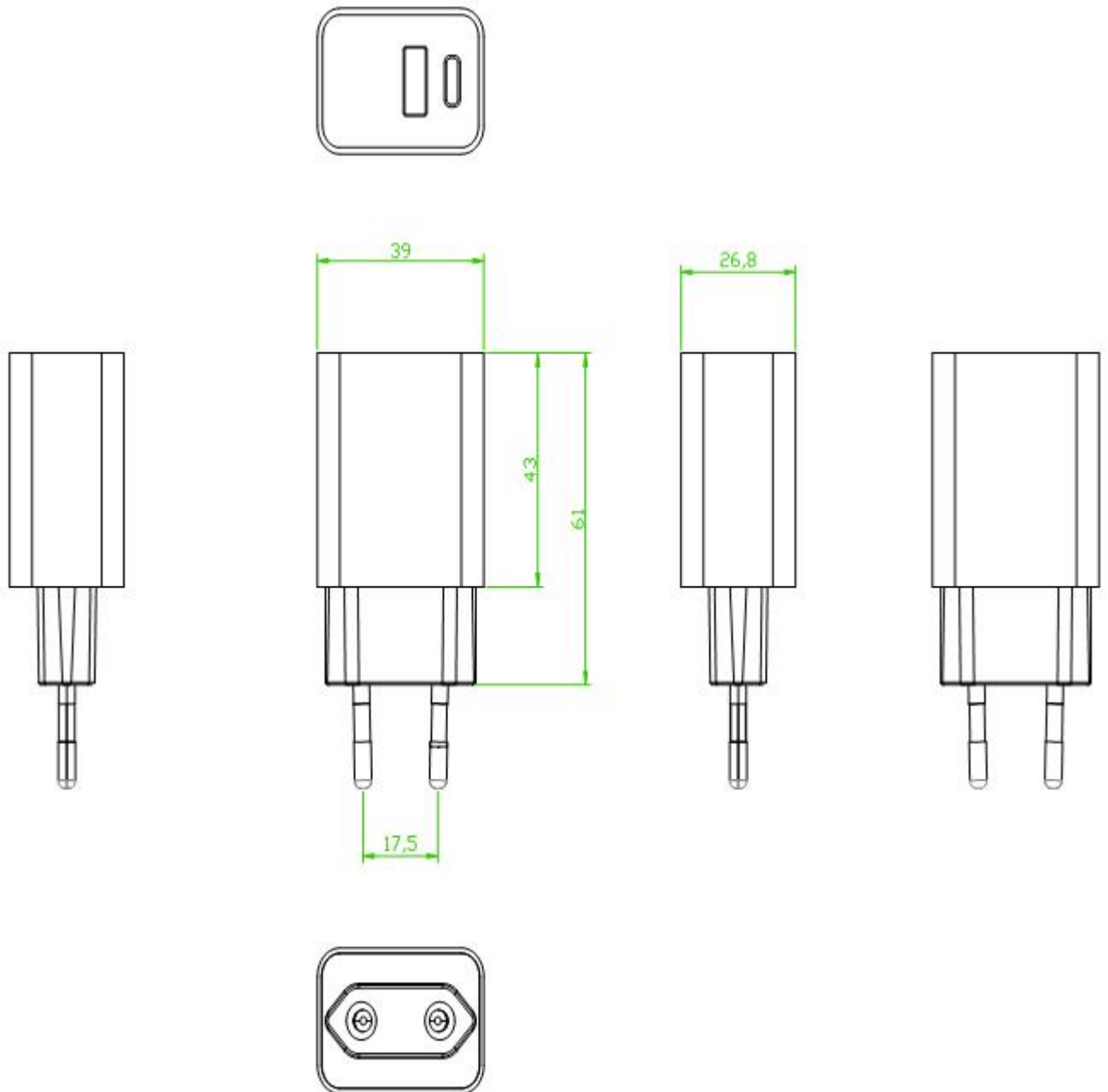
外壳为黑色, 材质为 ABS+PC 料, 阻燃等级为 UL94V-0

7.7 外壳表面温升/Temperature delta of the case surface

Temperature delta of the case surface should not exceed 45°C

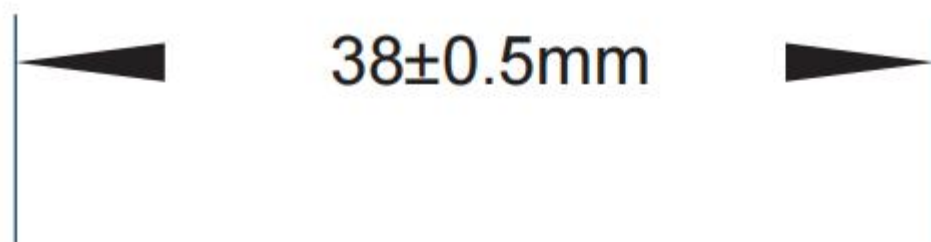
外壳表面温升不能超过 45°C


8、外形尺寸/OUTLINE DIMENSION:








9. 铭牌标签/LABEL:

标签材质: 镭射 Laser printing .



 YINGJIAO® PD CHARGER ADAPTER
MODEL:YS20USB-A-C
INPUT:100-240V~50/60Hz 0.6A MAX
SINGLE OUTPUT:
USB-C: 5.0V≐3.0A 15.0W | 9.0V≐2.22A 20.0W | 12.0V≐1.67A 20.0W
USB-A: 5.0V≐3.0A 15.0W | 9.0V≐2.0A 18.0W | 12.0V≐1.5A 18.0W
DOUBLE OUTPUT:
5.0V≐3.0A 15.0W
MADE IN CHINA

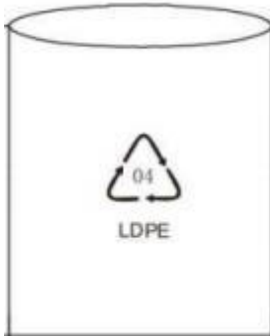
  



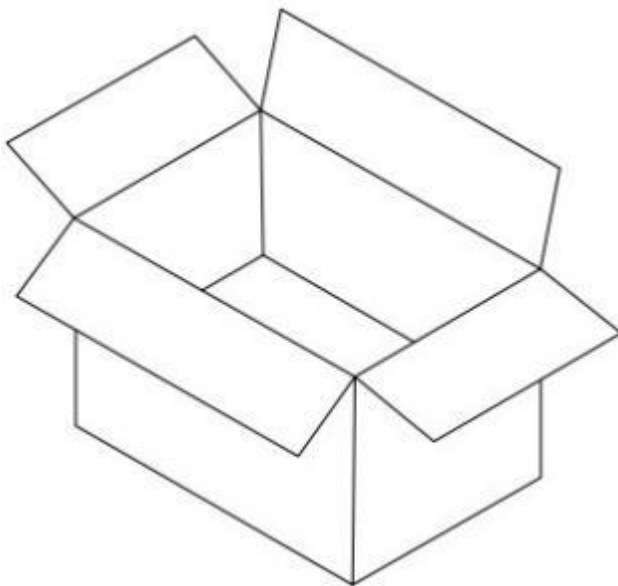
10、包装说明/PACKING STEP:



A :Product



B:PE Bag



Packing request:
Packaging
Outside box:480L*370W*240H
Quantity:200PCS/CTN