

部门/ Departments	版本/ Version	描述/Description	日期/Date
研发部	150W-V7.0		2017年4月7日

产 品 规 格 书

Technical Specification

样品名称/Sample Name: AC-DC 电源充电器

产品型号/Product Type: GM-C546200-G01B

输出规格/Rated output: 54.6V/2A

DC 头规格/Tip Size: 卡龙头

客户核对 CHECKED BY	客户承认 APPROVED BY

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1、描述/ DESCRIPTION:

本规格书适应于 GM-C546200-G01B 型号的开关电源.

The purpose of the document is to specify the functional requirements of a 120W 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 2.5A.

2.5Amps max At any input voltage and rated, DC output rated load.

2.4 浪涌电流/Inrush Current:

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

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

2.5 AC 漏电流/Ac Leakage Current:

当输入电压 240Vac 时,最大漏电流为 0.25mA.

0.25mA Max.At240Vac input.

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3、输出特性/OUTPUT CHARACTERISTICS:

3.1 输出功率/Power output 及 PF

空载电压 Voltage	最小负载 Min. Load	额定负载 Rated. Load	满载电压 Full load Voltage	输出功率 Output power
52.9-56.2V	0.01A	2A	52.9-56.2V	109W
PF	/	>0.50		

3.2 纹波和噪音 Ripple and Noise:

测试条件:在额定电压及额定负载条件下,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 47uF 的电解电容和一个 0.1uF 的瓷片电容.

Under nominal voltage and nominal load,the ripple and noise are as follows when measure with Max.Bandwidth of 20MHz and Parallel 47uF/0.1uF,crossed connected at testing point.

电压 Voltage	最大纹波/最大噪音 Ripple and Noise(Max.)
+54.6Vdc	200mV p-p

3.4 启动延迟时间/Turn on delay time:

当输入 115Vac 和输出最大负载时,最大启动时间为 3S.

5Second Max.at 115Vac input and output Max.load.

3.5 上升时间/Rise time:

当输入 115Vac 和输出最大负载时最大时间为 80 mS.

80 mS Max.at 115Vac input and output Max load.

3.6 保持时间/Hold up time:

当输入 115Vac 和输出最大负载时,最小保持时间为 5 mS .

5 mS Min.at 115Vac input and output Max.Load.

3.7 效率/Efficiency:

当输入 115Vac 和输出最大负载时,最小 88%.

88% Min. at 115Vac input and output Max.Load.

当输入 230Vac 和输出最大负载时,最小 88%.

88% Min. at 230Vac input and output Max.Load.

3.8 过冲/Overshoot:

在电源开启或关闭的时候,最大 15%.

15% Max.When power supply at turn or turn off.

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4、保护功能/PROTECTION FUNCTION:**4.1 短路测试/Short circuit test:**

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 2A Max 故障排除后,电源将自动恢复正常工作.

The power supply will be auto recovered when over current 5A Max faults remove.

4.3 过压保护/Over Voltage Protection:

当输出电压超过额定电压的 150%~180%时,电源将保护,故障排除后能恢复正常工作.

The power supply will auto recovered when faults remove 150%~180%.

5、环境要求/ENVIRONMENTAL REQUIREMET:**5.1 工作温度/Operating Temperature:**

0°C-10°C,满载,正常工作.

0°C to 40°C,Full load, Normal operation.

5.2 储藏温度/Storage Temperature:-20°C to 80°C

带外壳/With package

5.3 海拔高度

工作: 10000ft

存储: 20000ft

5.4 工作湿度/Relative Humidity:

5%(0°C)~90%(40°C),72 小时,满载,正常工作.

5%(0°C)~90%(40°C)RH,72Hrs,Full load, Normal operating.

5.5 振动/Vibration:

1. 测试标准:国际电工电子委员会

Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm

加速度(9~200Hz,Acceleration 5m/S²)

2. 运输/Transportation:

IEC 721-3-2 2M2

5-9Hz,A=3.5mm

9~200Hz,加速度 Acceleration=5m/S²

200~500Hz,加速度 Acceleration=15m/S²

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3. 轴向振动/Axes,10 cycles per axis.

在测试过程中不能出现永久性的损坏.

No permanent damage may occur during testing.

在电源开启和关闭后,样机能够恢复到最初条件.

The SAMPLE has to restore to its original situation after power off/on..

5.6 跌落试验/Dropping Packed:

插墙式跌落高度为 1200mm、桌面式跌落高度为 1000mm;

1.2M for wall mount type and 1000mm for desktop type as above described;

测试台面是厚 13mm 的夹木板, 离地面高 19-20mm

The horizontal surface consists of hardwood at least 13mm thick, mounted on two layers of plywood each 19mm to 20mm thick,all supported on a concrete or equivalent non-resilient floor.

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

6.1 安全: 符合标准 GB4943-2001.

Safety:accord with GB4943-2001.

6.2 高压/DIELECTRIC STRENGTH Hi-Pot:

初级对次级/Primary to secondary:3000VaC/5mA/60S for type test.

6.3 绝缘抗阻/Insulation resistance:

初级对次级/Primary to secondary:10MΩ min at 500V DC.

6.4 爬电距离≥6.mm

6.5 EMI 标准/EMI STANDARD

Meets the Limits of/测试符合

<1>.FCC part15 class B rules

<2>.EN60950 class B rules

<3>.GB9254-1998,GB17625.1-2003

<4>.GB9706.1-2007, (参考标准)

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7、产品尺寸/Product

7.1 外壳/Enclosure:

外壳尺寸: L171.4*W72*H31.7mm

The power supply size: L171.4x W72 x H31.7mm;

7.2 输入插脚/Input pin:

3 Pin 国标插脚/Three Pin CN. regulatory pin



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8、测试报告/ELECTRICAL TEST REPORT:

No 序号	Test item 测试项目	Test condition 测试条件	Standard spec 标准规格	Test data 测试数据					Unit 单位	Judge 判定
				1	2	3	4	5		Pass/ Fail
1	Output Voltage 输出电压	Vin100Vac 60Hz Io=0 输入 100Vac 空载	52.9-56.2V	54..65					V	PASS
2	Output Voltage 输出电压	Vin100Vac 60Hz Io=Rated Current 输入 100Vac 60Hz 额定电流	52.9-56.2V	54.6					V	PASS
3	Efficiency(Full load) 效率满载	Vin 115Vac 60Hz 输入 115Vac 60Hz	≥88%	88.15					%	PASS
4	Ripple&Noise mVp-p 纹波&杂讯	Vin100Vac 60Hz Full load 输入 100Vac 60Hz 满载	200mVp-p Max	120mV					mVp-p	PASS
5	Line Regulation 线性调整率	Vin=100V~240V Io=Rated Current 额定电流	±2%	/						PASS
6	Standby Power 待机功耗	Vin 115Vac 60Hz Io=0 输入 115Vac 60Hz	2W max	0.35					W	PASS
7	Short circuit test 短路测试	Vin100Vac 60Hz 输入 100Vac 空载	No odor smoke fire plastic deformation and excessive heat happen. 无冒烟,起火,外壳变形及 过热现象	Ok						PASS
8	OCP 过电流保护	Vin100Vac 60Hz 输入 100Vac 空载	2.0A Max	Ok					A	PASS
9	Output Voltage 输出电压	Vin240Vac 50Hz Io=0 输入 240Vac 空载	52.9-56.2V	54.65					V	PASS
10	Output Voltage 输出电压	Vin240Vac 50Hz Io=Rated Current 输入 240Vac 60Hz 额定电流	52.9-56.2V	54.65					V	PASS
11	Efficiency(Full Load) 效率满载	Vin230Vac 50Hz 输入 230Vac 50Hz	≥88%	88.26					%	PASS
12	Ripple & Noise mVp-p 纹波&杂讯	Vin240Vac 50Hz Full load 输入 240Vac 50Hz 额定电流	200mVp-p Max	100					mVp-p	PASS
13	Line Regulation 线性调整率	Vin=100V~240V Io=Rated Current 输入 100V~240V	±2%	/						PASS
14	Standby Power 待机功耗	Vin230Vac 50Hz Io=0 输入 230V 50Hz	2W max	0.65					W	PASS
15	Short circuit test 短路测试	Vin240Vac 50Hz 输入 240Vac 50Hz	No odor smoke fire plastic deformation and excessive heat happen. 无冒烟,起火,外壳变形及 过热现象	Ok						PASS
16	OCP 过电流保护	Vin230Vac 50Hz 输入 230Vac 50Hz	2A Max	Ok						PASS
17	Hi-pot test 高压测试	高压/DIELECTRIC STRENGTH Hi-Pot:初级对次级/Primary to secondary:3000Vac/5mA/60S for type test		Ok						PASS
18	Burn in 老化	Input:220Vac/50Hz Full Load 4hrs 输入 220Vac/50Hz 满载 4 小时		Ok						PASS
19	Drop test 跌落	Heigh:1m Three*faces(onceon each plane) 高 1 米,6 个面,每面 1 次.		Ok						PASS

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