

NO: FJOS1609098

**F13008ME02**

CUSTOMER \_\_\_\_\_

**SPECIFICATION FOR APPROVAL**

**MJSW1200500DU**

MEGA PART NO \_\_\_\_\_

FJ SW7281200500DU(728 UL)

MEGA Serial NO \_\_\_\_\_

**12V 500mA**

DESCRIPTION \_\_\_\_\_

**2017-02-25**

DATE \_\_\_\_\_



MANUFACTURE			CUSTOMER APPROVAL
DESIGN	CHECKED	APPROVED	

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**Revision: 01**



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## 1 概述 /SCOPE

本规格书适合于 [MJSW1200500DU](#) 认证型号的开关电源。

The purpose of the document is to specify the functional requirements of [MJSW1200500DU](#) switching power supply.

## 2. 输入特性/ INPUT CHARACTERISTICS:

### 2.1 输入电压/ Input Voltage

额定输入电压/ Rated Input Voltage: 100-240Vac

可变输入电压/Variable input voltage : 90V—264Vac

### 2.2 输入电流/Input Current:

当输入额定电压 带额定负载时，最大的输入交流电流 [0.35A](#)  
[0.35A](#) max when input rated voltage and output rated load.

### 2.3 输入频率/ Input Frequency

额定频率/Rate Frequency:50/60Hz

调整频率/ Variation Frequency: 47-63Hz

### 2.4 浪涌电流/In-rush Current:

当输出为额定负载，环境温度为 25℃,输入 240Vac 冷启动时的最大浪涌电流为 60A。  
60 A mps 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，最大的漏电流为 0.25mA  
0.25mA Max .At 240Vac input

## 3. 输出特性/OUTPUT CHARACTERISTICS:

### 3.1 额定输出功率/Rated Output Power [6W](#)

### 3.2 负载特性/调整率 (Combined Load/line Regulation)

电压	最小负载	最大负载	负载调整	空载输出电压
Voltage	Min. Load	Max Load	Load Regulation	Unload output voltage
<a href="#">+12V</a>	<a href="#">0A</a>	<a href="#">0.5A</a>	<a href="#">11.4V-12.6V</a>	<a href="#">11.9V-12.6V</a>

### 3.3 效率/Efficiency:

VI 级平均工作效率  $\geq 78.88\%$

当输入 115VAC 时, 平均效率  $\geq 78.88\%$ 。是输出额定负载的 25%,50%,75%,100% 4 种情况下平均效率,

115VAC input, the average efficiency  $\geq 78.88\%$ 。 output rated load is 25%,50%,75%,100% 4 situations of average efficiency

当输入 230VAC 时, 平均效率  $\geq 78.88\%$ 。是输出额定负载的 25%,50%,75%,100% 4 种情况下平均效率,

230VAC input, the average efficiency  $\geq 78.88\%$ 。 output rated load is 25%,50%,75%,100% 4 situations of average efficiency

### 3.4 空载待机功率/Unload standby Power: **0.1W** Max

### 3.5 纹波和噪音/ Ripple And Noise

纹波与噪声: 测量时示波器选用 20MHz 带宽限制, 输出端要并联一颗 0.1uF 的陶瓷电容和一颗 47uF 的电解电容. (在额定输入及输出的条件下检测)

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor. (test under the condition of rated input and rated output)

电压	电流	最大纹波最大噪音
Voltage	current	Ripple And Noise(Max)
<b>+12V</b>	<b>500mA</b>	120m Vp-p

### 3.6 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 3S  
3 second Max .At 100Vac input and output Max. Load

### 3.7 上升时间/ Rise Time:

当输入 100Vac 和输出最大负载时最大时间为 100ms  
100ms Max. At 100Vac input and output Max. Load

### 3.8 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 5ms  
5ms Min.at100Vac input and output Max .Load.

### 3.9 过充/ Overshoot:

在电源开启或关闭的时候, 最大 10%  
10% Max. When power supply on or turn off.

## 4. 保护功能/ PROTECTION FUNCTION:

### 4.1 短路电路保护/Short circuit protection:

电源供给器在短路解除后能正常恢复工作。

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，电源将自动回复正常工作。

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

#### 4.3 过压保护/ Over Voltage Protection:

当输出电压超过额定电压的 120%-150%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 the voltage over 120%-150% rate voltage.

## 5. 环境要求/ENVIRONMENTAL REQUIREMENTS

### 5.1 工作温度/Operating Temperature

0°C -- +40°C,满载，正常工作。

0°C to +40°C ,Full Load, Normal Operation.

### 5.2 储存温度/Storage temperature

带外壳 :-10°C -- +55°C

With enclosure:-10°C to+55°C

### 5.3 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) 72h Full Load , Normal operating.

### 5.4 振动/ Vibration:

#### 5.4.1 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/s）

#### 5.4.2. 运输（Transportation）：

IEC 721-3-2 2M2

5~9Hz, A=3.5mm

9~200Hz ,加速度 Acceleration=5 m/s<sup>2</sup>

200~500Hz ,加速度 acceleration=15 m/s<sup>2</sup>

#### 5.4.3. 轴向振动/ Axes,10 cycles per axis :

在测试过程中不能出现永久性损坏。

No permanent damage occur during testing.

在电源开启和关闭后，样机能够恢复到最初条件。

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

## 6 . 机械特性/ MECHANICAL CHARACTERISTICS

### 6.1 跌落实验/ Dropping Testing

产品从一米高处跌落到木板上无损伤。

The product to be dropped from 1 meter height to a wood floor no breakage.

## 6.2 摇摆实验/Cable Flexing Testing

DC 引线吊重 200 克， 摇摆角 60 度， 最少能承受 2000 次， 弯曲速度每分 40 次， 不会出现损伤。

The DC cord shall with weight of 200g,it swings at angle 60 deg ,2000cycle  
Time min Bending speed: 40cycle per minute shall to be no breakage to the code

## 7. 安全标准 SAFETY STANDARD

7.1 安全:符合标准 IEC60950, EN60950, UL60950, GB4943。

Safety Accord with IEC60950, EN60950, UL60950, GB4943。

注：相应的 AC 插脚对应相应国家的标准，如 CE 即对应为 EN60950；3000Vac

Note: AC pins corresponding corresponding corresponding to national standards,  
such as the CE that corresponds to EN60950; 3000Vac。

7.2 高压/ DIELECTRIC STRENGTH Hi-Pot

初级对次级/ Primary to secondary, 3000Vac/5mA/5s.

7.3 绝缘阻抗/ Insulation resistance:

初级对次级/ Primary to secondary :10M  $\Omega$  Min at 500V DC

## 8. EMC 标准/EMC STANDARD

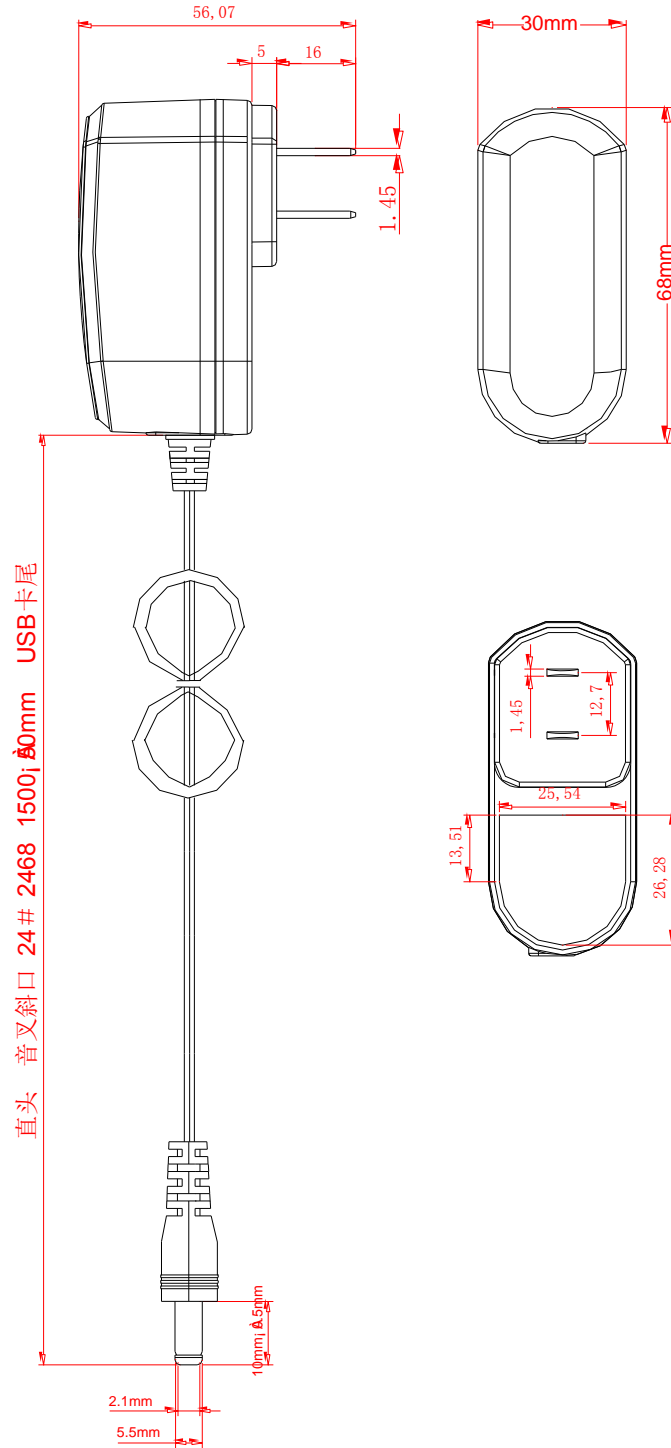
EMC---EN55022/EN55024/GB9254 (CISPR 22)

## 9. 体积/VOLUME: L×W×H

长 68mm ×宽 30mm×高 35.07mm

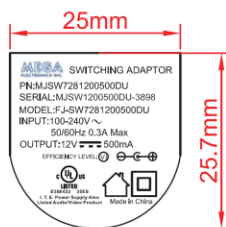
## 10. 重量/ Weight: 76g ±5g

11 外观图/OUTLOOK DRAWING (公差/Common difference: +/-20mm)

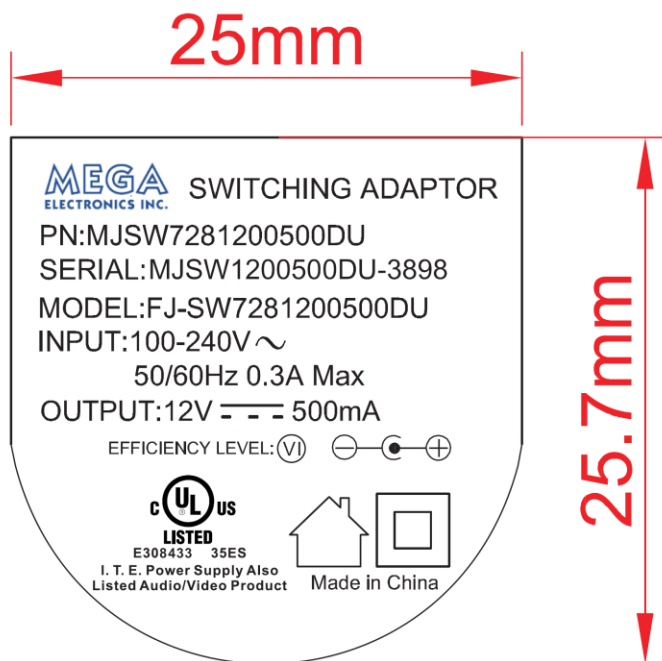




12. 铭牌/LABEL:



比例/Scale: 1:1



比例/Scale: 3:1

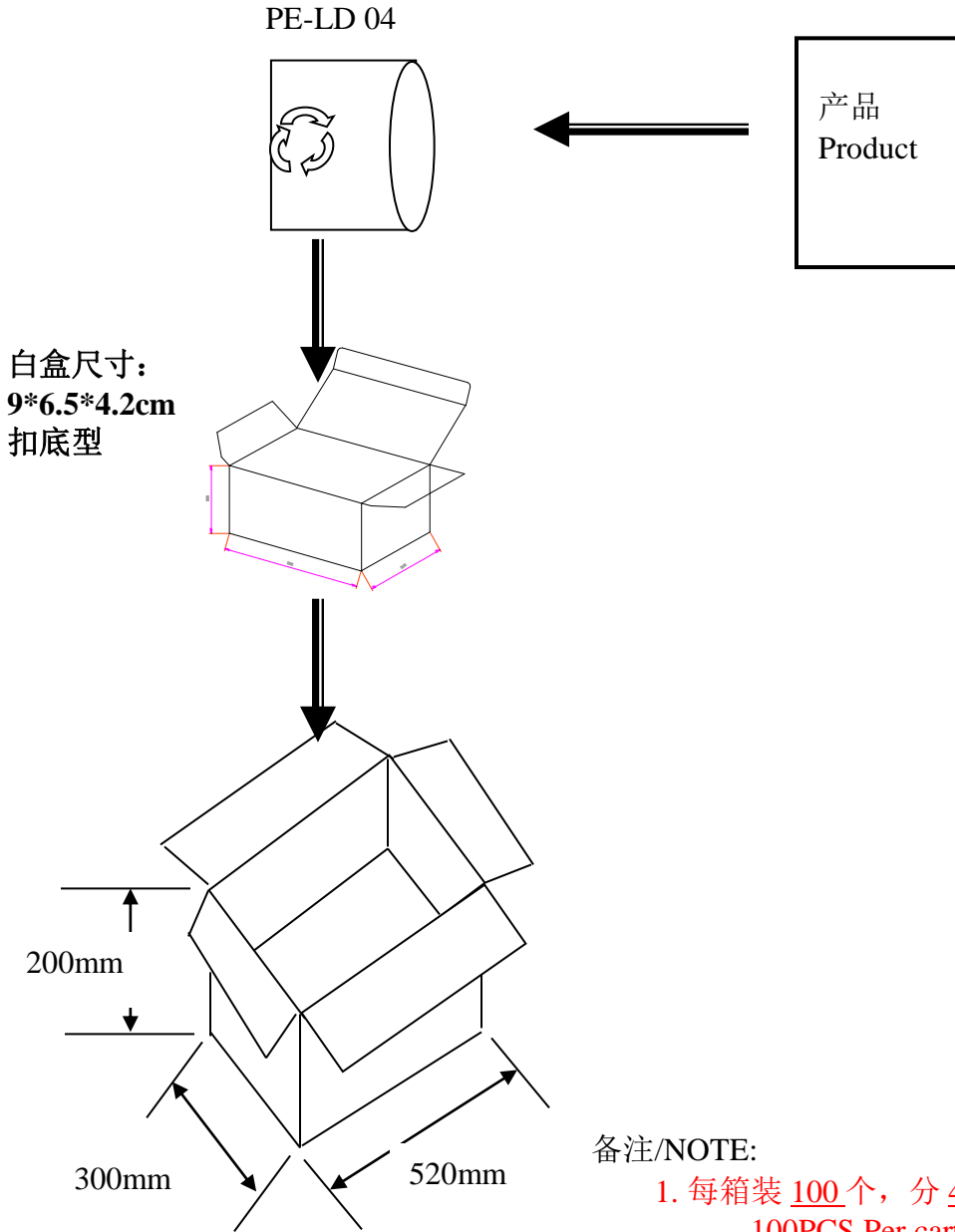
注：

1. 以上"回"标志，外边长度为内边长度的2倍  
(请按比例缩放)

备注/Note:

1. 材料/Material : PVC 环保/ ROHS.
2. 印刷/Printing : 白底黑字/White ground black character
3. 尺寸/Size:(W)25+/-0.2mm(H)25.7+/-0.2mm
4. 厚度/Thickness:0.15mm

13 包装图示 PACKING



备注/NOTE:

1. 每箱装 100 个, 分 4 层, 材质 K=K  
100PCS Per carton, Divided into 4 floor.  
Material K=K
2. PE 袋尺寸: 130X170MM 带环保标志。  
PE bag size: 130X170MM , With the  
environmental protection symbol.

14 样品测试报告SAMPLES TEST REPORT										
客户 Customer	F13008ME02		客户编号 Customer No	FJOS1609098		室温 Ambient temp	25℃			
产品型号 Model NO	728		产品编号 Part No			日期 Date	9月21日			
输入电压/频率 Input volt/Freq	100-240Vac 50/60HZ		输出电压/电流 Output volt/Amp	12V 0.5A						
测试内容 Test content			1#样品/Sample NO:		2#样品/Sample NO:			判定 judge PASS or NG		
NO	测试项目 Test Item	测试标准 spec	100Vac	240Vac	100Vac	240Vac				
1	空载电压 Unload voltage	11.9V-12.6V								
2	空载纹波与噪声 Unload ripple&noise	≤120mV P-P								
3	满载电压 Rated Load output Voltage	11.4V-12.6V								
4	满载纹波与噪声 Rated load ripple&noise	≤120mV P-P								
5	额定输入电流 Rated input current	≤350mA								
6	短路保护 Shortcircuit protection	No damage and auto recovered OK/NG								
7	介电强度测试 Hi-Pot test	AC3.0KV 5S	<5mA	泄漏电流/Leakage current ( mA ) ; 绝缘击穿/insulation breakdown: ■OK □NG						
8	绝缘阻抗测试 Insulation resistance	DC500V 5S	>10MΩ	绝缘阻抗/insulation resistance ( MΩ ) ; 绝缘击穿/insulation breakdown: ■OK □NG						
9	输入/Input		输出/Output				能源之星/Energy star			
	电压 Voltage	功率 Pin (W)	负载% Load%	电压 Vout (V)	电流 Iout (A)	功率 Watt (W)	效率 EFF (%)	平均效率 average Eff (%)	能效标准V SPEC	空载功耗 Standby Power (W)
	115Vac		100%						平均效率 AVG EFF ≥78.88%	空载功耗 Standby Power <0.1W
			75%							
			50%							
			25%							
	230Vac		100%							
		75%								
		50%								
		25%								
10	100V/240V输入时满载开关机测试 Turn on/off test when rated load and input 100V/240Vac		10 times							
11	115-240V 满载老化/Rated load burn-in test at 115V-240Vac		≥4 hours							
测试/TESTED BY										
核准/CHECKED BY			批准/APPROVAL BY							