

1. SAFETY Measures

1. CX1 capacitor 2. Toroidal Cores L1,L2

2. INPUT FEATURE:

- 2.1 INPUT RANGE VOLTAGE: universal range, 90Vac to 264Vac.
2.2 RATED INPUT FREQUENCY: 50/60Hz.
2.3 EFFICIENCY: Higher than 90% at full load ($V_{in} = 185-220Vac$, $V_{out}=79.2V$, $I_{out} = 220mA$)

3.OUTPUT FEATURE:

RATED OUTPUT	SPEC.LIMIT		REMARK
	Min. value	Max. value	
CV MODE output Current	200mA	230mA	CV=71-87V Input: 220V
(Ripple and Noise)		$\leq 200mVp-p$	20MHz Bandwidth 10Uf Ele. Cap.& 0.1uF Cer.Cap.

Note: This module is non-isolation architecture, can't be tested under NO LOAD mode.

注：因产品是非隔离式，测试时请带负载测试，不能测空载。

4. PROTECTION FEATURE:

- 4.1 INPUT PROTECTION: The power supply has a 2.0 Ampere 250VAC current fuse to protect itself.
4.2 SHORT-CIRCUIT PROTECTION: The power supply shall be hiccupped and no damage shall occur when any output operating in a short circuit condition under any line condition for an in-definite period of time. The power supply be self-recovery when the fault condition is removed.
在任何时候，任何输入条件下，当输出操作有短路情况时，**输出自动保护，输出电压为零**，当短路故障消失后，电源自动恢复正常。

5. SIZE .

The Size of the power supply shall be about L228mm*W18mm*H11 mm.

6. ENVIRONMENTAL CONDITIONS

5.1 OPERATIONG: The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

5.1.1 Operating Temperature: $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$

5.1.2 Relative Humidity : 10%~90%

5.2 NON-OPERATIONG: The power supply shall be capable of withstanding the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies。

5.2.1 Storage Temperature: $-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$

5.2.2 Relative Humidity:10%~90%

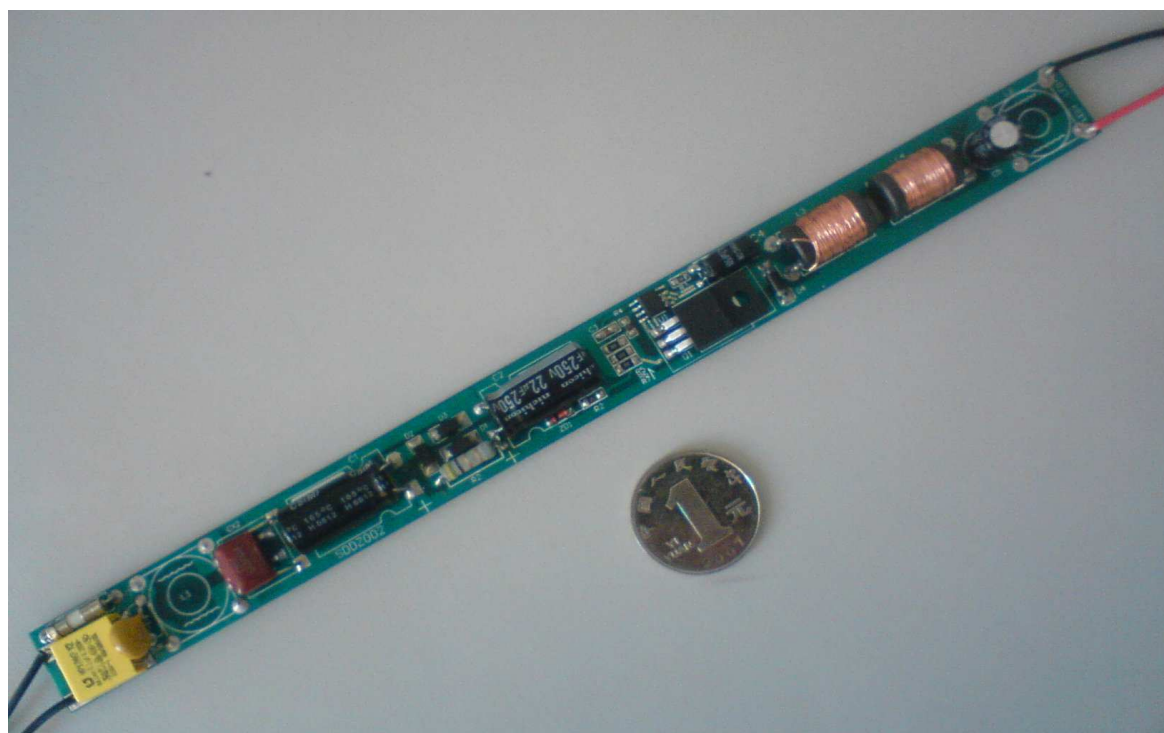
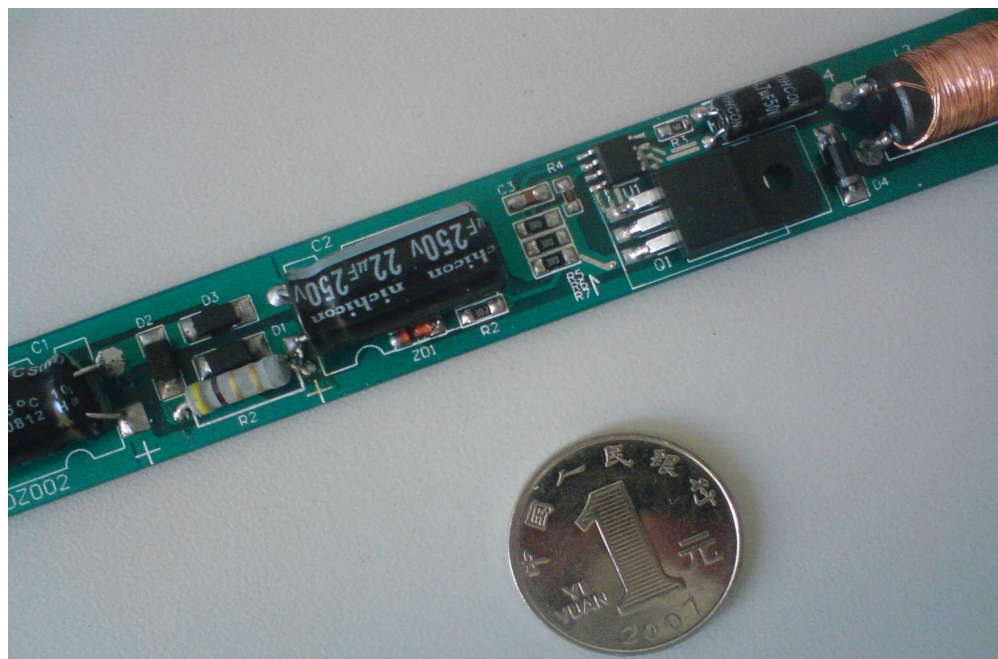
7. RELIABILITY AND QUALITY CONTROL

6.1 BURN-IN The power supply shall still work under minimum of 4 hours Burn-In test under full load at $40^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and 220Vac input voltage.

8. MAJOR MEASURE EQUIPMENT

- A. AC SOURCE :AFC 500W POWER SOURCE
- B. ELECTRONIC LOAD: Chroma 63030
- C. OSCILLOSCOPE: TDS3014B
- D. DIGITAL MULTIMETER : FLUKE 17B
- E. DC POWER: ABM8603D

9. SAMPLE VIEW

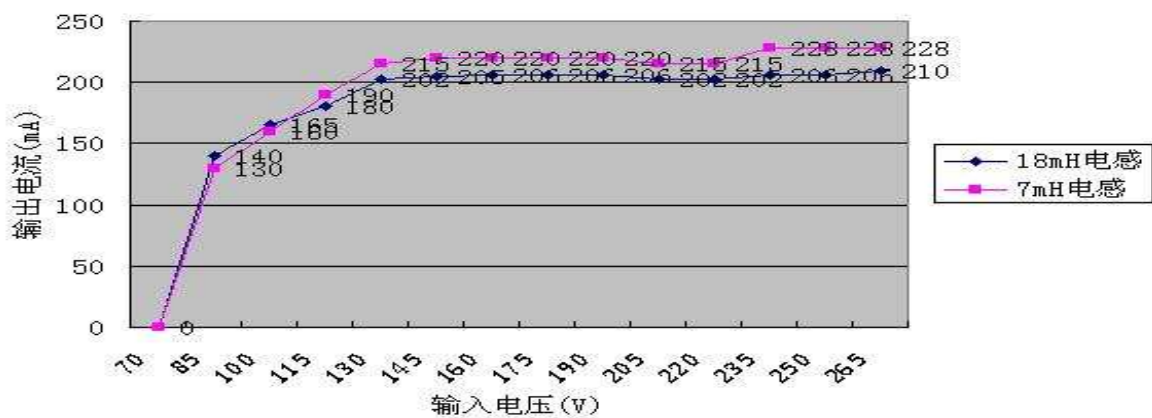


10. SAMPLE PRELIMINARY TEST REPORT

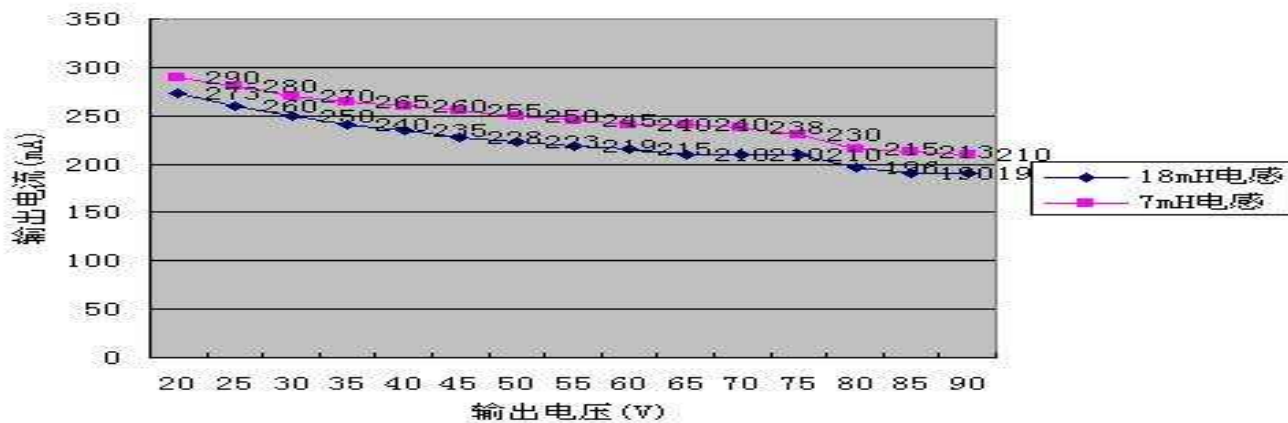
Test Items	Test Condition	Test Results						Unit	PASS /FAIL
		#1	#2						
CV mode output current (CV71-87V)0.20-0.23A	185Vac	0.210	0.210					A	PASS
	240Vac	0.215	0.215					A	PASS
Output ripple & noise voltage ≤200mV	185Vac	65	58					mV	PASS
	240Vac	62	56					mV	PASS
Efficiency (Full load) ≥90%	185Vac	93.25	94.36					%	PASS
	240Vac	92.6	93.18					%	PASS
Shout-circuit protection test	185Vac	OK	OK					/	PASS
	240Vac	OK	OK					/	PASS
Appearance	No defective shown	OK	OK					/	PASS

11. Graph of Test

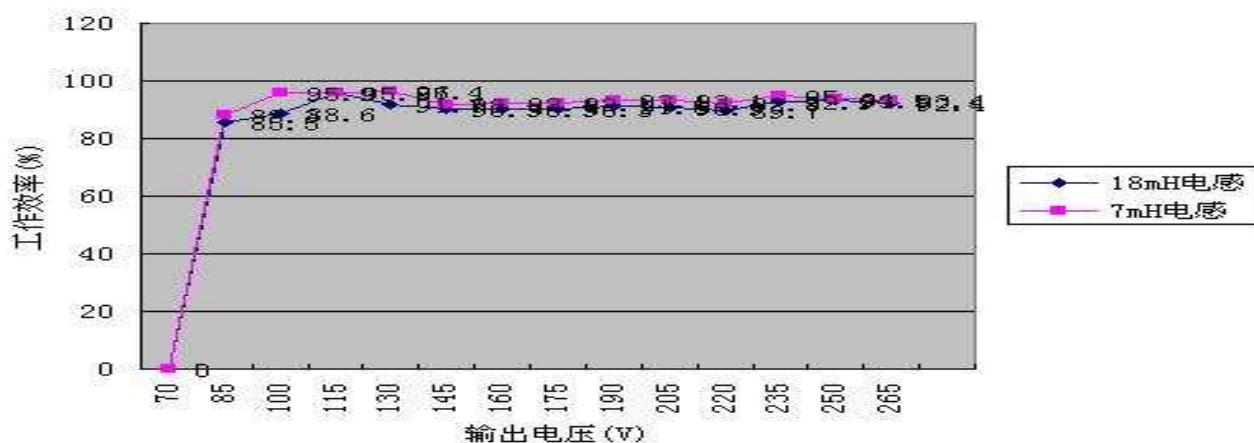
表一



表二 输入220V AC不变

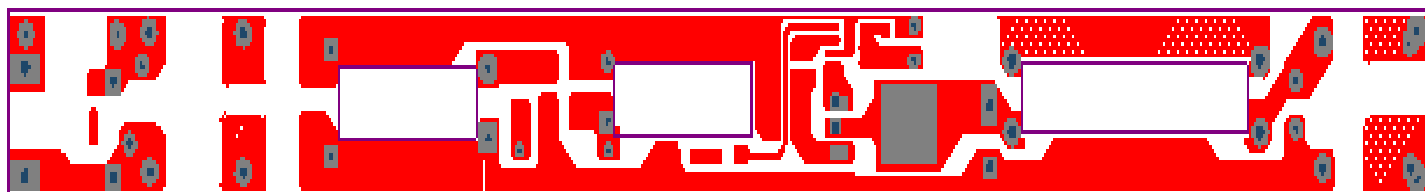


表三

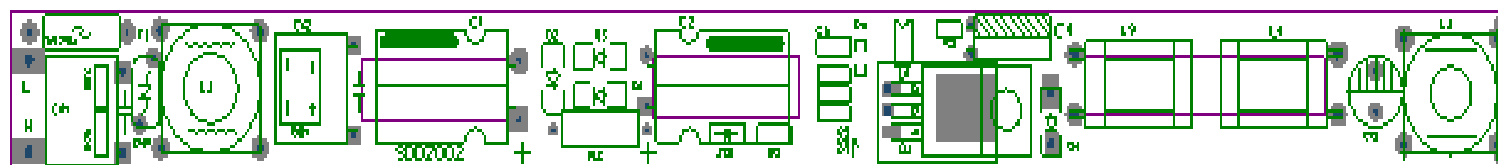


12. PCB LAYER/PCB 图

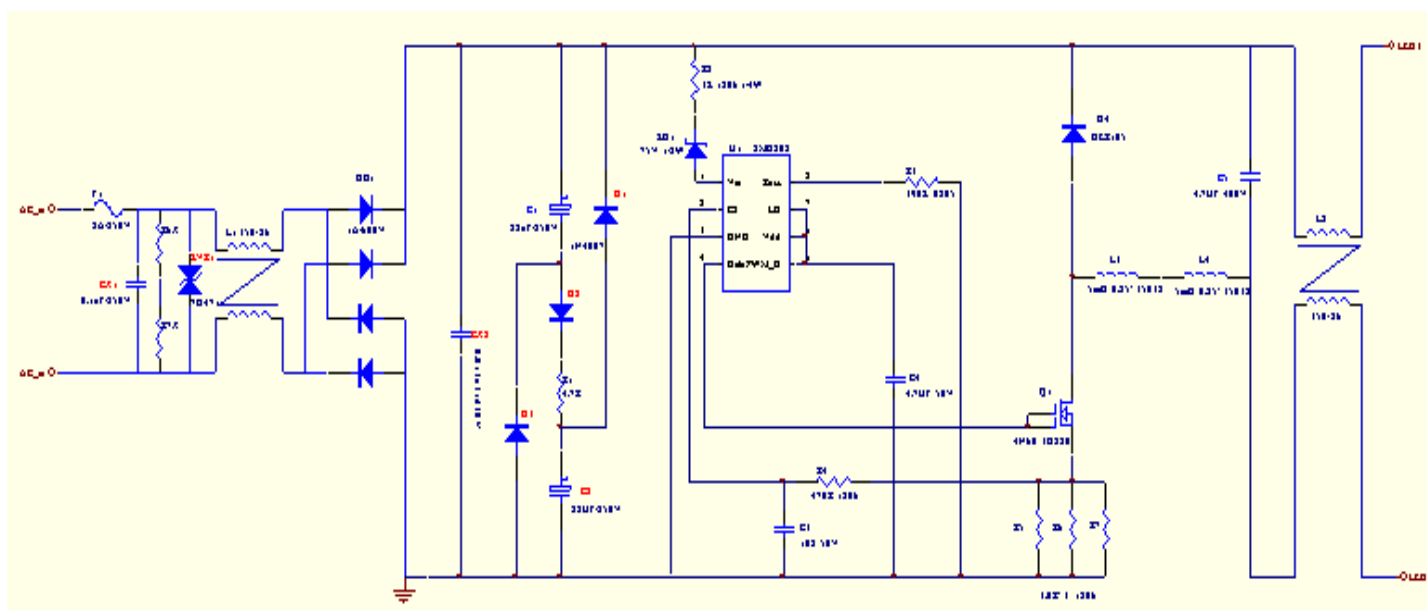
Top layer



Top Over layer



13 CIRCUIT DIAGRAM



14. BILL OF MATERIAL

Serial No.	Designator	Part Name	Description	Remark
1	PCB	PCB board	PCB: L228MM*W18MM*T1.2MM	1PCS
2	F1	Current Fuse	2A/250V 慢断 3.6*10mm DIP	1 PCS
3	CX1	CX1 capacitor	0.1uF 275V P=10*H15	1PCS
4	CX2	CBB capacitor	0.015uF 630V P=10	1PCS
5	ZVR1	Varistor	7D471 5mm	1PCS
6	L1.L2	Toroidal Cores	T50-26 5MH	2PCS
7	L3.L4	Coil Inductor	5mH 0.25*350TS 10*16	2 PCS
8	C1.C2	electrolytic capacitor	22UF/250V 10*20	2 PCS
9	C3	surface mount capacitor	1nF /50V X7R 1206	1PCS
10	C4	electrolytic capacitor	4.7UF/50V	1 PCS
11	C5	electrolytic capacitor	4.7UF/400V	1 PCS
12	BD1	Rectifier Bridge	SMD DB106S 1A600V	1 PCS
13	D1-D3	surface mount diode	1N4007 1A/1KV	3 PCS
14	D4	surface mount diode	HER105 1A/400V	1 PCS
15	ZD1	surface mount Zener diode	SMD 75V ±5% 1/2W	1PCS
16	R2	carbon resistor	10R ±5% 1W	1PCS
17	R2	Surface mount resistor	3K ±5% 1206	1PCS
18	R3	Surface mount resistor	390K ±5% 0805	1PCS
19	R3	Surface mount resistor	330K ±5% 0805	1PCS
20	R4	Surface mount resistor	470R ±5% 0805	1PCS
21	R5	Surface mount resistor	1.2R ±1% 1206	1PCS
22	R6	Surface mount resistor	6.2R ±1% 1206	1PCS
23	U1	CMD802	CMD802 SO-8	1 PCS
24	Q1	MOSFET	4N60 TO-220 4A/600V	1 PCS
25	Wire	Wire, in black color	UL1007 22AWG 80mm	3 PCS
26	Wire	Wire, in red color	UL1007 22AWG 80mm	1PCS