

1.INPUT:

- | | |
|------------------------------|--|
| 1.1 Input voltage rating : | 100-240V AC |
| 1.2 Input voltage range: | 90-264V AC |
| 1.3 Input frequency rating : | 60/50Hz |
| 1.4 Input frequency range: | 63/47Hz |
| 1.5 AC input current: | 0.2A Max .@100V AC |
| 1.6 AC input power saving: | 0.3W Max .@230V AC at no load |
| 1.7 Inrush Current: | 30A Max .@100VAC cold start
60A Max .@230VAC cold start |
| 1.8 Leakage current: | 0.25mA Max |

Code : 33774402

2. Output characteristics

- | | |
|-----------------------------|-------------|
| 2.1 Output voltage: | 9V |
| 2.2 Max. load current | 0.5A |
| 2.3 Min. load current | 0A |
| 2.4 Output no-load voltage: | 9V $\pm$ 5% |
| 2.5 Output load voltage: | 9V $\pm$ 5% |
| 2.6 Output ripple & noise: | 300mV max. |

Measured by using a 12inch twisted pair terminated with a 10uF capacitor and 0.1uF ceramic in parallel

3. General characteristics

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|-------------------------------|--|
| 3.1 Total output power: | 4.5Watts |
| 3.2 Efficiency measurement : | 71%(Min.)@full load & input 230VAC, Output set to 9V/0.5A. |
| For production testing: | 71%(Min.)@full load & input 115VAC, Output set to 9V/0.5A. |
| Efficiency : | 71.68%(Min.) at 115Vac 60Hz and 230Vac 50Hz input,
and 25%, 50%, 75%, 100% of full load after 20minutes warm-up.
i.e. meet CEC level V and Erp 2 . |
| 3.3 Short circuit protection: | No damage when output is shorted to GND.
And after short circuit , auto restart . |
| 3.4 Overshoot / Undershoot: | 9V $\pm$ 10% |

4. Environment:

- 4.1 Operating temperature: 0~40°C
4.2 Storage temperature: -25°C to 85°C
4.3 Operating humidity: 8% to 90%
4.4 Storage humidity: 5% to 95%

5. Application safety standard : meet

- | | | | |
|-----------------------------------|-----------------------------------|--|---------------------------------|
| ☐ UL 60950 | ☐ EN 60950 | ☐ AS/NZS 60950 | ☐ J60950 |
| ☐ UL 60065 | ☐ EN 60065 | ☒ AS/NZS 60065 | ☐ J60065 |
| ☐ UL 1310 | ☐ EN 60335 | ☐ GB4943 | ☐ J61558 |
| | ☐ EN 61558 | ☐ GB8898 | |

6. EMI standard : meet

- | | |
|---|--|
| ☐ FCC Part 15 Class B : 2008 | ☐ GB 9254-2008 |
| ☐ EN 55022: 2010+AC:2011 | ☐ GB 17625.1-2012 |
| ☒ EN 55013: 2013 | ☐ J55022 |
| | ☐ J55013 |

7. HI-POT test

- (1)Primary to secondary: 4525VDC for 3sec. 5mA(production testing)
4242VDC for 1min. 5mA(Sample testing)
(2)Primary to case: 4525VDC for 3sec 5mA(Production test)
(only for metal case)

8. Insulation resistance

Input to output: >10Mohm.@500VDC

9. Reliability:

- 9.1 MTBF: 50K hours min. @full load at 25°C ambient temperature
9.2 Burn-in: 2~4hrs,40+/-5°C 240VAC,ON/OFF cycling full load nominal line
9.3 Altitude: Will operate properly at altitude between 0 to 10000ft

10. Mechanical

10.1 Dimensions: Please see the mechanical dimension drawing.

10.2 Weight: 51.3g

11. Mechanical specification:

11.1 AC plug: as drawing

11.2 AC CORD: as drawing

11.3 DC cord:

11.3.1 Bending test: With load 200g, then bend 120 degree at ratio of 45times/minute.

18AWG	4500cycles Min
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20AWG	2400cycles Min
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22AWG	2000cycles Min
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24AWG	1500cycles Min
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11.4 Cord length: attached drawing

11.5 Output plug: attached drawing

11.6 Case Size: attached drawing

11.7 Label

11.8 Package

SAMPLE PRIMARY TEST REPORT/样品初测报告

CUSTOMER/客户		RADIO		PRODUCT NO./产品编号								GPE053A	
MODEL NO./产品型号		J53A-090050-4											
Test Items./测试项目	Test Condition/测试条件	Unit/单位	Sample quantity and test result/样品数量和测试结果										Pass/Fail
			1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	
Unload output voltage/ 空载输出电压(0.0A) 8.55Vdc - 9.45Vdc	90Vac	V	9.03	9.02	9.08								PASS
	115Vac	V	9.03	8.92	9.10								PASS
	230Vac	V	9.06	9.05	9.25								PASS
	264Vac	V	9.10	9.07	9.23								PASS
Rated load output voltage/ 额定负载输出电压(0.5A) 8.55Vdc -9.45Vdc	90Vac	V	8.99	8.80	8.93								PASS
	115Vac	V	8.99	8.81	8.94								PASS
	230Vac	V	8.98	8.81	8.93								PASS
	264Vac	V	8.98	8.81	8.94								PASS
Output ripple & noise voltage/输出纹波及噪声电压≤300mV	90Vac	mV	94	90	93								PASS
	115Vac	mV	76	94	93								PASS
	230Vac	mV	94	92	92								PASS
	264Vac	mV	90	89	87								PASS
Short-circuit protection test/短路保护测试	90Vac	W	0.0062	0.0061	0.0061								PASS
	264Vac	W	0.21	0.31	0.29								PASS
Over current protection/过流保护点(≥0.6A)	90Vac	A	0.69	0.76	0.77								PASS
	264Vac	A	0.69	0.78	0.78								PASS
IC Vcc voltage test/ Vcc电压测试(规格≤16V)	90Vac	V	8.37	7.92	8.00								PASS
	264Vac	V	9.49	8.95	9.00								PASS
Hi-pot test/介电强度	4242Vdc/3.5mA/1Minute		OK	OK	OK								PASS
Appearance/外观	无刮伤,字迹清晰 无误		OK	OK	OK								PASS
Mosfet(IC)/Vds耐压测试	264Vac	V	572	Mosfet规格		700		Derating≤95% Max. Volt.		81.71%		PASS	
输出肖特基D/Vrr耐压测试	264Vac	V	51	Diode规格		60		Derating≤90% Max. Volt.		85.00%		PASS	
变压器反馈绕组上所连接电阻(R)功率损耗(PD)	90Vac	P	-	R(功率)规格		-		Derating≤65% Max Power		-		PASS	
	264Vac	P	-	R(功率)规格		-		Derating≤65% Max Power		-		PASS	

DATE / 日期	2012.09.10	EDITION / 版本	0	PAGE / 页码	0F
TEST / 测试	陈彬	EE CHE./审核		EE CHE./审核	

CEC TEST

Model : 053A-090050-4

Date : 2012.09.10

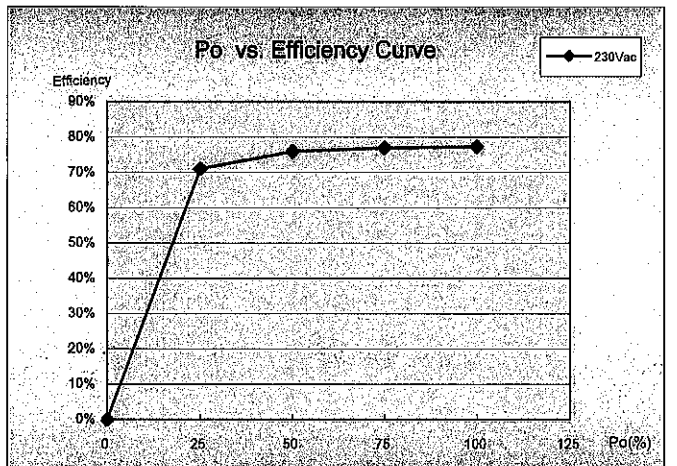
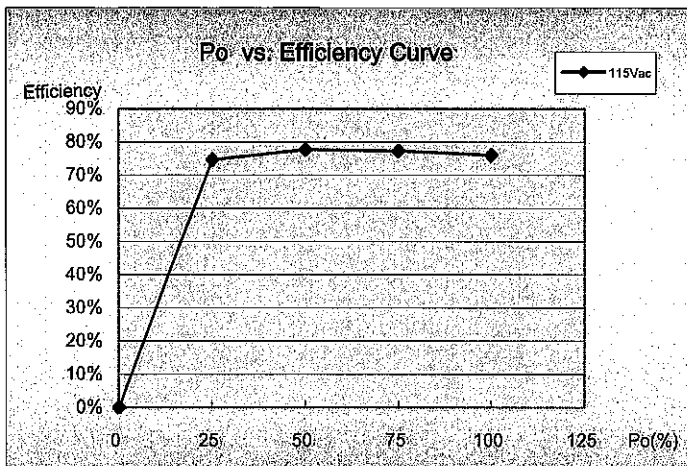
Tested by : 陈彬

Environment : ● Ambient ○ High ○ Low : 25°C

Test Condition: Vac=115V/230V ,Load :0~100% step Load :25%

1 Vin: 115Vac/60Hz							
Load (%)	Vout(V)	Iout(A)	PF	Pin(w)	Po(w)	Efficiency	Result
0	9.04	0.000	---	0.15	0	0.0%	PASS
25	9.02	0.125	---	1.51	1.1275	74.7%	---
50	9.02	0.250	---	2.9	2.255	77.8%	---
75	9.01	0.375	---	4.37	3.37875	77.3%	---
100	8.99	0.500	---	5.91	4.495	76.1%	---
Po_typical (w)				4.5	Average 76.5% PASS		
					Spec. 71.68% V		

1 Vin: 230Vac/50Hz							
Load (%)	Vout(V)	Iout(A)	PF	Pin(w)	Po(w)	Efficiency	Result
0	9.04	0.000	---	0.17	0	0.0%	PASS
25	9.05	0.125	---	1.59	1.13125	71.1%	---
50	9.03	0.250	---	2.97	2.2575	76.0%	---
75	9.00	0.375	---	4.38	3.375	77.1%	---
100	8.98	0.500	---	5.8	4.49	77.4%	---
Po_typical (w)				4.5	Average 75.4% PASS		
					Spec. 71.68% V		



RIPPLE AND NOISE TEST

Model :  U53A-090050-4

Date : 2012.09.10

Tested by : 陈彬

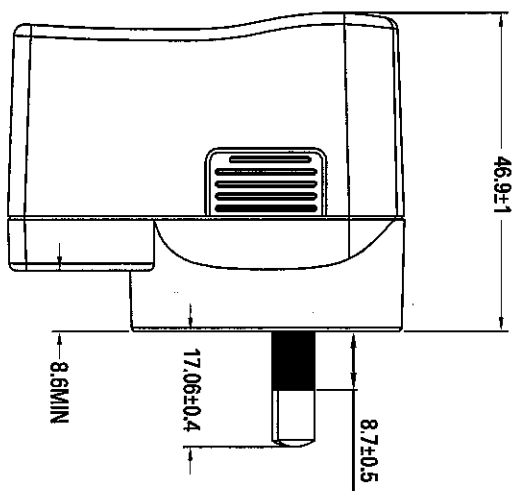
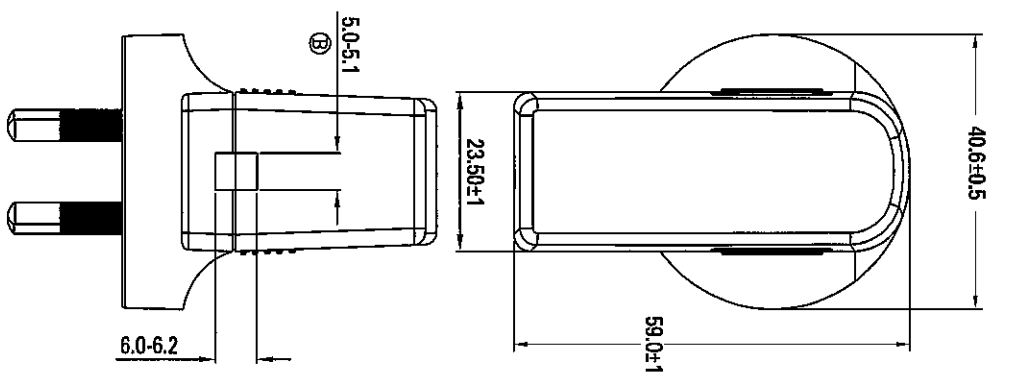
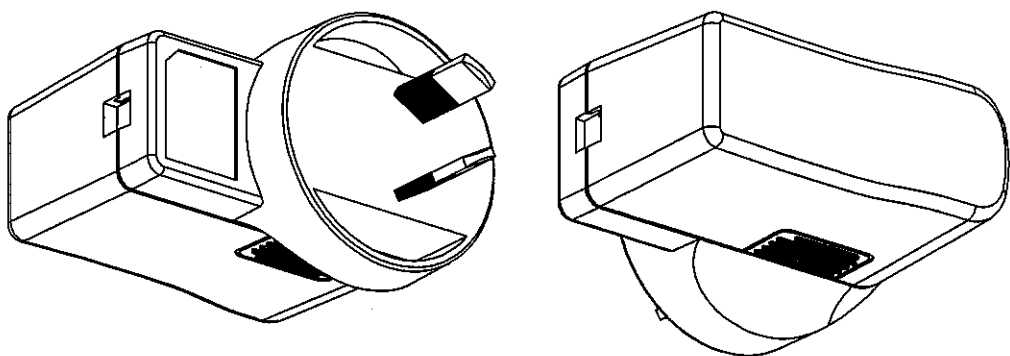
Environment : ☒ Ambient ☐ High ☐ Low : 25°C

No.	90Vac		264Vac	
	Min. load	Max. load	Min. load	Max. load
1#	24	94	22	90
2#	25	90	28	89
3#	31	93	29	87
4#				
5#				
6#				
7#				
8#				
9#				
10#				
11#				
12#				
13#				
14#				
15#				
16#				
17#				
18#				
19#				
20#				

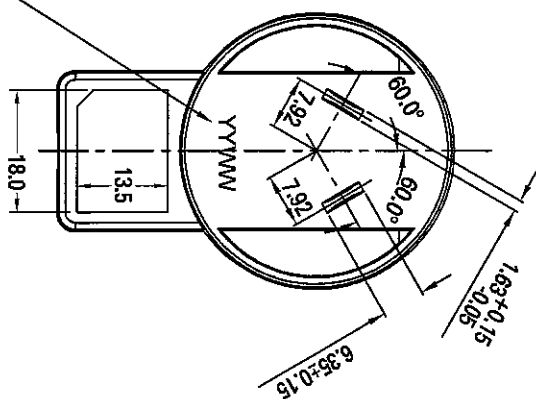
Specification : 300

Measured : 94.0

Test result : PASS



DATE CODE:YY:YEAR
WW:WEEK



B	SR 卡口由5.5更改为5.1MM	李增灿	2011.5.20
版本	变更内容	变更人	变更时间

