

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: 33T74420

2. Output characteristics

2.1 Output voltage:	12V
2.2 Max. load current	0.5A
2.3 Min. load current	0A
2.4 Output no-load voltage:	12V±5%
2.5 Output load voltage:	12V±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

3.1 Total output power:	6Watts
3.2 Efficiency measurement :	73%(Min.)@full load & input 230VAC, Output set to 12V/0.5A.
For production testing:	73%(Min.)@full load & input 115VAC, Output set to 12V/0.5A.
Efficiency :	73.49%(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:	12V±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

- | | | | |
|-----------------------------------|-----------------------------------|--|---------------------------------|
| <input type="checkbox"/> UL 60950 | <input type="checkbox"/> EN 60950 | <input type="checkbox"/> AS/NZS 60950 | <input type="checkbox"/> J60950 |
| <input type="checkbox"/> UL 60065 | <input type="checkbox"/> EN 60065 | <input checked="" type="checkbox"/> AS/NZS 60065 | <input type="checkbox"/> J60065 |
| <input type="checkbox"/> UL 1310 | <input type="checkbox"/> EN 60335 | <input type="checkbox"/> GB4943 | <input type="checkbox"/> J61558 |
| | <input type="checkbox"/> EN 61558 | <input type="checkbox"/> GB8898 | |

6. EMI standard : meet

- | | |
|--|--|
| <input type="checkbox"/> FCC Part 15 Class B | <input type="checkbox"/> GB 9254-2008 |
| <input type="checkbox"/> EN 55022: 2010+AC:2011 | <input type="checkbox"/> GB 17625.1-2012 |
| <input checked="" type="checkbox"/> EN 55013: 2013 | <input type="checkbox"/> J55022 |
| | <input type="checkbox"/> 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
20AWG	2400cycles Min
22AWG	2000cycles Min
24AWG	1500cycles Min

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		GPE053A-120050-4											
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) 11.4Vdc - 12.6Vdc	90Vac	V	12.19	12.01	12.03								PASS
	115Vac	V	12.16	12.03	12.05								PASS
	230Vac	V	12.15	11.97	12.00								PASS
	264Vac	V	12.11	11.98	12.00								PASS
Rated load output voltage/ 额定负载输出电压 (0.5A) 11.4Vdc -12.6Vdc	90Vac	V	12.07	11.88	11.77								PASS
	115Vac	V	12.08	11.89	11.79								PASS
	230Vac	V	12.06	11.87	11.87								PASS
	264Vac	V	12.04	11.88	11.87								PASS
Output ripple & noise voltage/ 输出纹波及噪声电压 ≤ 300mV	90Vac	mV	136	134	141								PASS
	115Vac	mV	88	87	114								PASS
	230Vac	mV	96	95	83								PASS
	264Vac	mV	79	93	85								PASS
Short-circuit protection test/ 短路保护测试	90Vac	W	0.006	0.005	0.003								PASS
	264Vac	W	0.06	0.08	0.06								PASS
Over current protection/ 过流保护点 (≥0.6A)	90Vac	A	0.68	0.68	0.69								PASS
	264Vac	A	0.70	0.70	0.70								PASS
IC Vcc voltage test/ Vcc电压测试 (规格≤16V)	90Vac	V	10.63	10.72	10.35								PASS
	264Vac	V	11.99	12.12	11.71								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	608	Mosfet规格	700	Derating ≤ 95% Max. Volt.		86.86%				PASS	
输出肖特基D/Vrr耐压测试	264Vac	V	52	Diode规格	60	Derating ≤ 90% Max. Volt.		86.67%				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	2012.07.14	EDITION / 版本	0	PAGE / 页码	OF
TEST / 测试	陈彬	EE CHE./审核		EE CHE./审核	

CEC TEST

Model : 053A-120050-4

Date : 2012.07.14

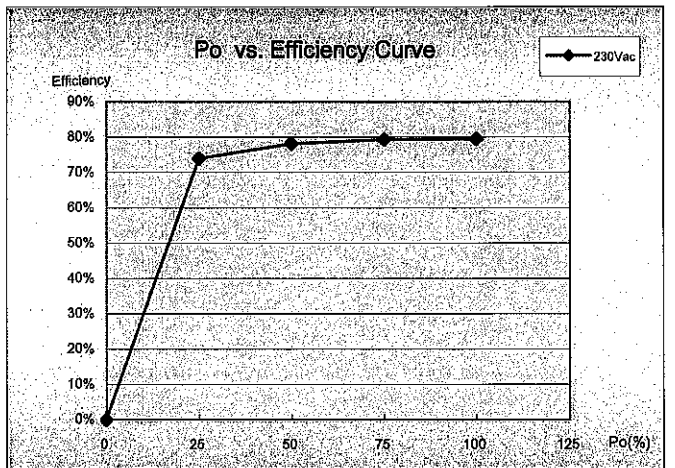
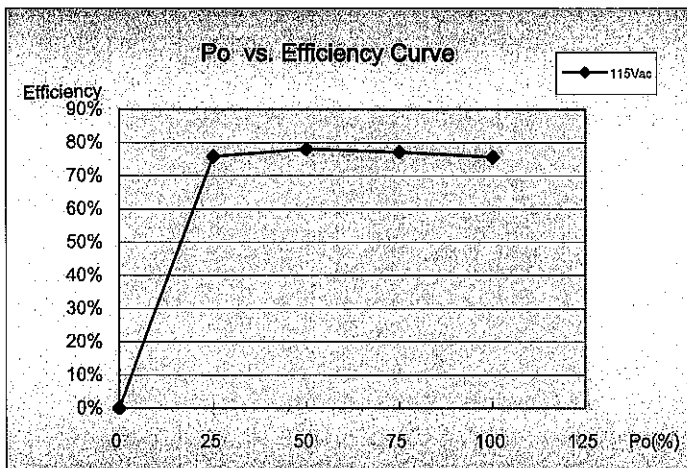
Tested by : 陈彬

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	12.14	0.000	---	0.21	0	0.0%	PASS
25	12.09	0.125	---	1.99	1.51125	75.9%	---
50	12.04	0.250	---	3.85	3.01	78.2%	---
75	12.04	0.375	---	5.85	4.515	77.2%	---
100	12.05	0.500	---	7.96	6.025	75.7%	---
Po_typical (w)				6	Average 76.7%		PASS
					Spec. 73.49%		V

1 Vin: 230Vac/50Hz							
Load (%)	Vout(V)	Iout(A)	PF	Pin(w)	Po(w)	Efficiency	Result
0	12.13	0.000	---	0.25	0	0.0%	PASS
25	12.08	0.125	---	2.04	1.51	74.0%	---
50	12.05	0.250	---	3.85	3.0125	78.2%	---
75	12.03	0.375	---	5.68	4.51125	79.4%	---
100	12.03	0.500	---	7.56	6.015	79.6%	---
Po_typical (w)				6	Average 77.8%		PASS
					Spec. 73.49%		V



RIPPLE AND NOISE TEST

Model : **053A-120050-4**

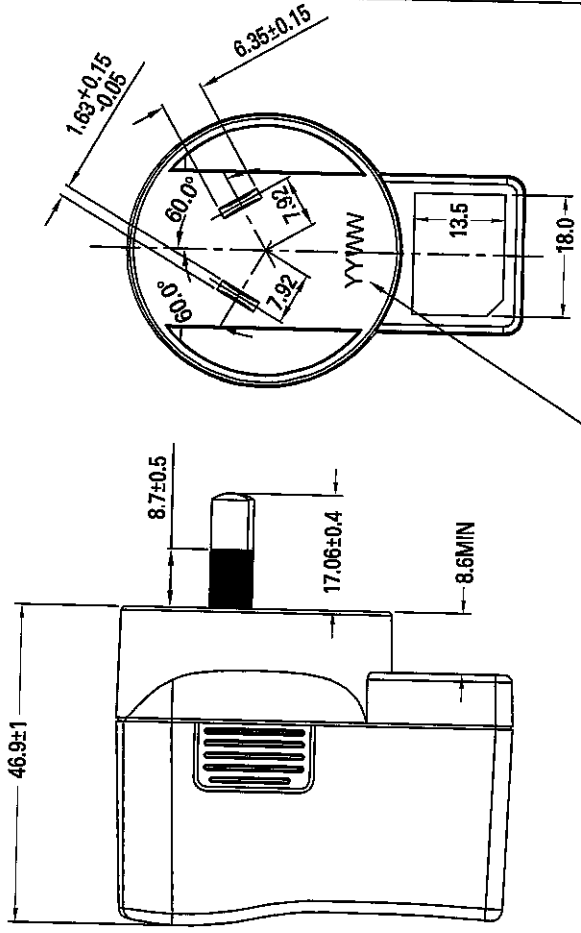
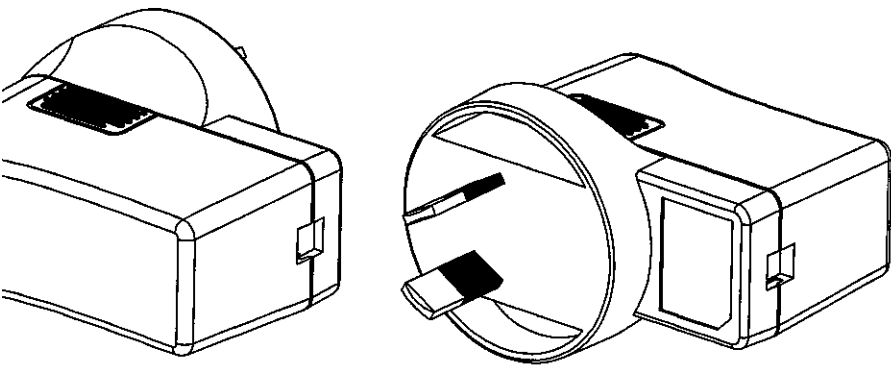
Date : **2012.07.14**

Tested by : **陈彬**

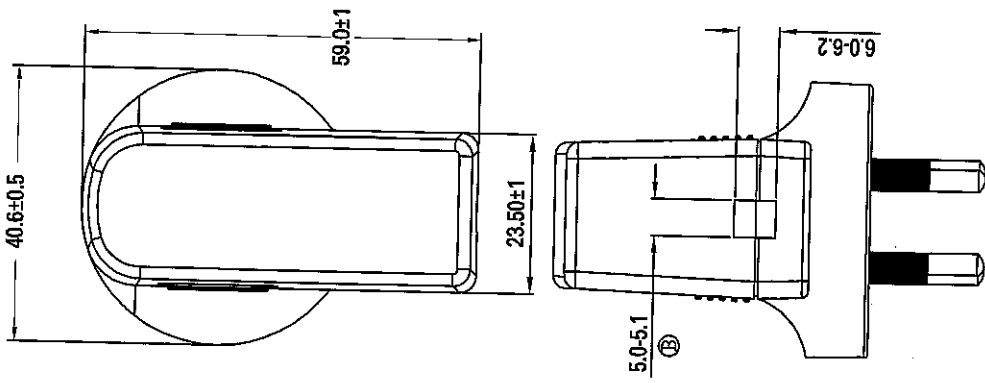
Environment : Ambient High Low : 25°C

No.	90Vac		264Vac	
	Min. load	Max. load	Min. load	Max. load
1#	21	136	23	79
2#	20	134	22	93
3#	19	141	20	85
4#				
5#				
6#				
7#				
8#				
9#				
10#				
11#				
12#				
13#				
14#				
15#				
16#				
17#				
18#				
19#				
20#				

Specification : 300
 Measured : 141.0
 Test result : PASS

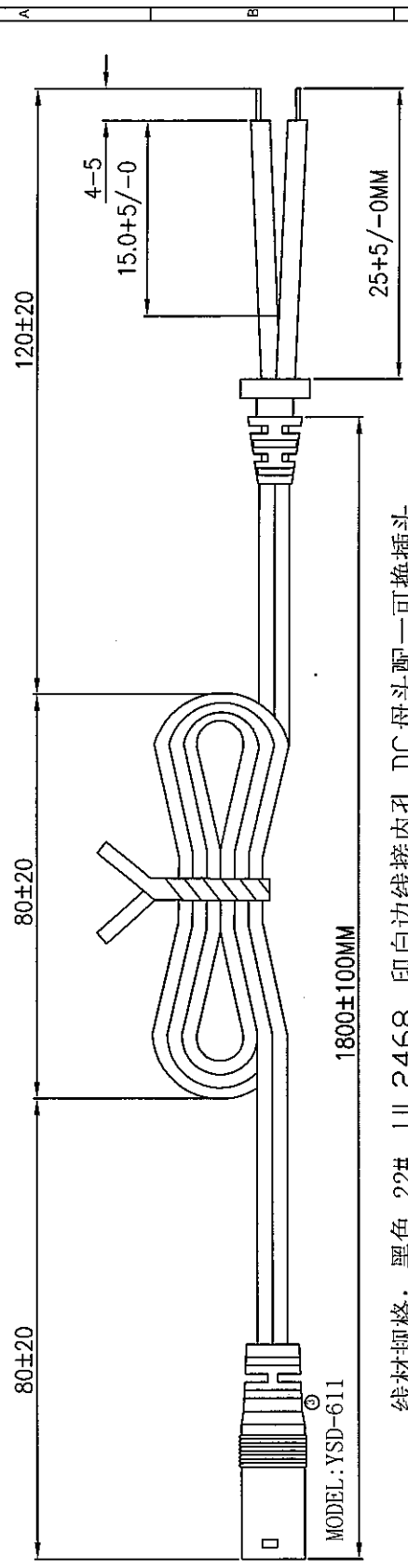


DATE CODE:YY:YEAR
MM:WEEK

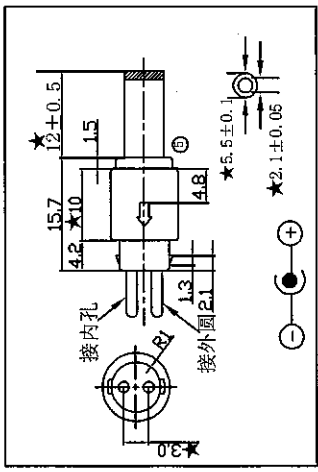


版本	变更内容	变更人	变更时间
B	SR卡口由5.5更改为5.1MM	李增灿	2011. 5. 20

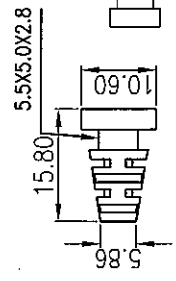
版本	变更内容	变更人	变更时间
E	1. 增加接线方法标示 2. 内长由30mm变更为25mm.	李增灿	2012.06.13
F	1. DC头模具变更.	向增娟	2012.07.19



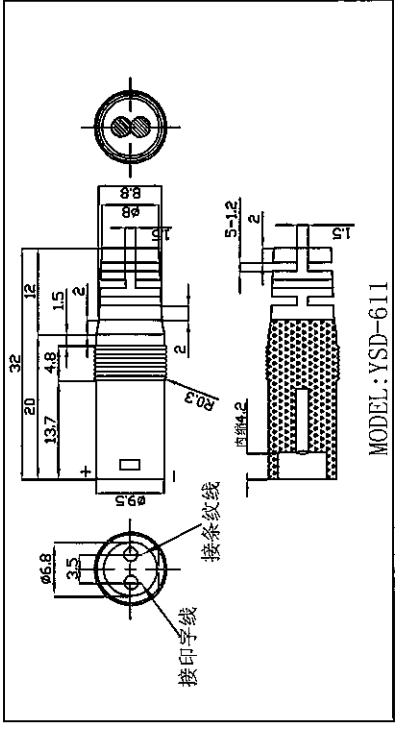
线材规格: 黑色 22# UL2468 印白边线接内孔 DC 母头配一可换插头



箭头指示正极
★为重点尺寸



SR规格:
编号: 052
材质: 70+/-5P PVC 黑色

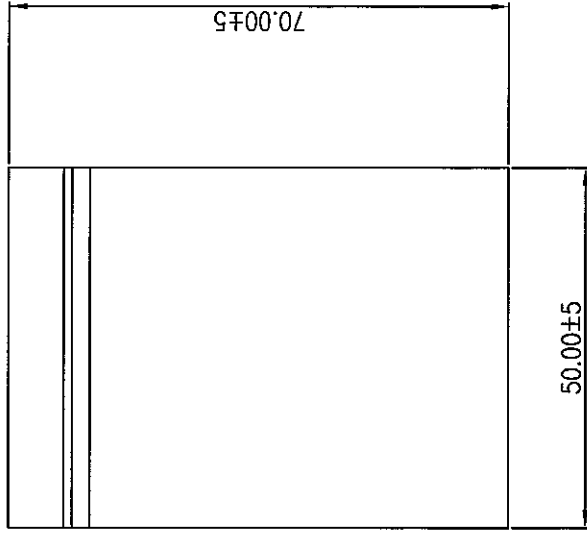
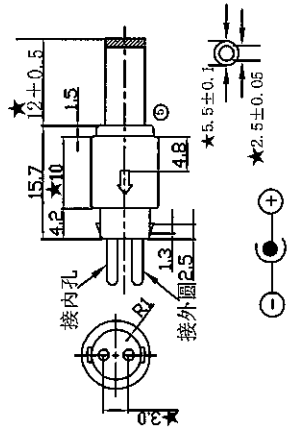


DC头规格:
编号: YSD611
包胶材质: 50+/-5P PVC 黑色
DC头规格: 平头黑胶2.1X5.5X12直头
DC直头配母头可拆卸转换

★为重点尺寸

- 技术要求:
1. 线材摇摆测试, 拉力测试依照盈线材测试标准。
 2. 热变形温度大于60度。
 3. 产品必须符合ROHS+PAHS+16P要求。

PLUG A



70*50mm 自封PE袋