

承認書

Specification For Approval

COMPANY NAME	
CUSTOMER P/N	
PRODUCT NAME	AC/DC ADAPTER
PARTS P/N	CP-1230
DATE	2009-8-21

APPROVED BY	CHECKED BY	PREPARED BY	CUSTOMER APPROVAL SIGNATURE

寶三電子有限公司
POWSUN CO.,LTD.

一厂:

工厂地址: 广东省东莞市清溪镇渔梁围朱屋村

TEL: (0769) 86814578

FAX: (0769) 86814576

二厂:

工厂地址: 广东东莞清溪镇长山头村康怡路 180 号

TEL: (0769) 86814698

FAX: (0769) 86814697

<http://www.powsun.com>

E-mail:powsun@powsun.com

TABLE OF CONTENTS

1. FEATURE -----	2
2. INPUT -----	2
INPUT VOLTAGE-----	2
INPUT FREQUENCY-----	2
INPUT CURRENT-----	2
INRUSH CURRENT-----	2
EFFICIENCY-----	2
INPUT POWER DISSIPATION-----	2
3. OUTPUT -----	2
OUTPUT VOLTAGE-----	2
OUTPUT CURRENT-----	2
REGULATION-----	2
RIPPLE & NOISE-----	2
TOTAL POWER-----	2
4. PROTECTION -----	2
OVER VOLTAGE PROTECTION-----	2
SHORT CIRCUIT PROTECTION-----	2
OVER POWER PROTECTION-----	2
5. SAFETY AND EMI REQUIREMENT -----	3
SAFETY REQUIREMENT-----	3
EMI REQUIREMENT-----	3
LEAKAGE CURRENT-----	3
6. OPERATION & ENVIRONMENT PERFORMANCE -----	3
TEMPERATURE RANGE-----	3
HUMIDITY RANGE(NON CONDENSING)-----	3
7. M.T.B.F -----	3
8. SAMPLE TEST REPORT -----	4、5
9. OUTLINE DRAWING -----	6

POWSUN CO.,LTD SPECIFICATION FOR APPROVAL

1. FEATURE:

- INPUT :UNIVERSAL 100-240 Vac/47-63 Hz INPUT, WITHOUT ANY SLIDE SWITCH
- OUTPUT :+12V / 0-3A
- DIMENSION :98(L)*50(W)*56(H) mm
- EFFICIENCY :83% TYPICAL
- SAFETY : UL/BSMI/CB/CE/C-Tick/DOFT/PSE/CCC
- EMI :CISPR 22 / FCC /VCCI CLASS B; CONDUCTED & RADIATED MEETED
- HIGH FREQUENCY DESIGN, LESS POWER CONSUMPTION
- OVER VOLTAGE PROTECTION, SHORT CIRCUITED PROTECTION, OVER POWER PROTECTION
- CAN BE USED AT TEL COMMUNICATION, COMPUTER, INDUSTRIAL CONTORLLER & OA SYSTEM

2. INPUT:

2.1 VOLTAGE	UNIVERSAL 100~240Vac,SINGLE PHASE
2.2 FREQUENCY	47HZ~63HZ
2.3 CURRENT	1.8A Max
2.4 INRUSH CURRENT	25A Max/100Vac;50A Max/240Vac (COLD STABT AT 25°C FULL LOAD)
2.5 EFFICIENCY	83% TYPICAL (AT NOMINAL LINE VOLTAGE FULL LOAD)
2.6 INPUT POWER DISSIPATION	UNDER 0.5W < ZERO LOAD 115V/60HZ INPUT
	UNDER 0.5W < ZERO LOAD 230V/50HZ INPUT

3. OUTPUT:

3.1 DC OUTPUT	VOLTAGE	+12.00V
	CURRENT	3.0A Max
	REGULATION	11.40V Min~12.00V Typ.~12.60V Max
	RIPPLE & NOISE	120mV Max
	TOTAL POWER	36W Max

NOTE: FOR RIPPLE & NOISE MEASUREMENT, USE A 20MHZ BAND WIDTH FREQUENCY OSCILLOSCOPE, AND ADD A 0.1uF MULTILAYER CAP. AND A LOW ESR ELECTROLYTICCAP. (10uF) AT OUTPUT CONNECTOR TERMINALS. (AT NOMINAL LINE VOLTAGE FULL LOAD)

4. PROTECTION:

4.1 OVER VOLTAGE PROTECTION	$V_{out} * (110\% - 140\%)$
4.2 SHORT CIRCUIT PROTECTION	AUTOMATIC RECOVERY AFTER SHORT-CIRCUIT FAULT REMOVED
4.3 OVER POWER PROTECTION	THE ADAPTER PROVIDE PROTECTION AT 110-140% OF RATED OUTPUT POWER

NOTE: WHEN PROTECTION CIRCUIT IS WORKING THE POWER SUPPLY WILL SHUTDOWN, ONCE THE ABNORMAL CONDITIONS ARE REMOVED. THE POWER SUPPLY WILL RESTART AUTOMATICALLY.

POWSUN CO.,LTD SPECIFICATION FOR APPROVAL

5. SAFETY AND EMI REQUIREMENT:

5.1 SAFETY REQUIREMENT

- a. SAFETY : UL/BSMI/CB/CE/ C-Tick/DOFT/PSE/CCC
- b. DIELECTRIC STRENGTH :10mA Max. CUT OFF CURRENT

(1):PRIMARY TO SECONDARY	: 1800Vac FOR 1 MINUTE
(2):PRIMARY TO FRAME GROUND	: 1500Vac FOR 1 MINUTE

c. INSULATION RESISTANCE:

(1):PRIMARY TO SECONDARY	: 10 M OHMS FOR 500Vdc
(2):PRIMARY TO FRAME GROUND	: 10 M OHMS FOR 500Vdc

5.2 EMI REQUIREMENT MEET CISPR 22/FCC/VCC1, CLASS B

5.3 LEAKAGE CURRENT LESS THAN 5mA @1500V

6.OPERATION & ENVIRONMENT PERFORMANCE:

6.1 TEMPERATURE RANGE

OPERATING	0°C ~ +40°C
STORAGE	-40°C ~+70°C

6.2 HUMIDITY RANGE (NON CONDENSING)

OPERATING	10% ~ 90% RH
STORAGE	5% ~ 95% RH

6.3 COOLING SHOULD OPERATE WITHOUT FAN

6.4 MAX TEMPERATURE INCREMENT $\cong 30^{\circ}\text{C}$

7.M.T.B.F.: 50000 HOURS Min ; 40°C SEE CONDITION

TEST REPORT

(I). LINE REGULATION TEST

Test result:

Test condition	Spec.	Reading
90Vac / 50% load	11.40~12.60V	11.88V
115Vac / 50% load	11.40~12.60V	11.88V
132Vac / 50% load	11.40~12.60V	11.88V
180Vac / 50% load	11.40~12.60V	11.88V
230Vac / 50% load	11.40~12.60V	11.88V
264Vac / 50% load	11.40~12.60V	11.88V

(II). EFFICENCY TEST

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	83% Typical	83%
230Vac / 100% load	83% Typical	82.5%

(III). LOAD REGULATION TEST

Test result:

Test condition	Spec.	Reading
115Vac / 0% load	11.40~12.60V	12.15V
115Vac / 50% load	11.40~12.60V	11.88V
115Vac / 100% load	11.40~12.60V	11.68V
230Vac / 0% load	11.40~12.60V	12.15V
230Vac / 50% load	11.40~12.60V	11.88V
230Vac / 100% load	11.40~12.60V	11.68V

(IV).RIPPLE & NOISE TEST

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	120mV Max	50mV
230Vac / 100% load	120mV Max	45mV

POWSUN CO.,LTD SPECIFICATION FOR APPROVAL

(VI). OVER VOLTAGE PROTECTION

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	Vout*(110%~140%)	122%
230Vac / 100% load	Vout*(110%~140%)	130%

(VII). RISE TIME

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	50mS Max	18mS
230Vac / 100% load	50mS Max	25mS

(VIII). OVER CURRENT PROTECTION

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	Iout*(110%~140%)	115%
230Vac / 100% load	Iout*(110%~140%)	128%

(IX). SHORT CIRCUIT PROTECTION

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	Under 1W	OK
230Vac / 100% load	Under 1W	OK

POWSUN CO.,LTD SPECIFICATION FOR APPROVAL

