

承認書

Specification For Approval

COMPANY NAME	
CUSTOMER P/N	
PRODUCT NAME	AC/DC ADAPTER
PARTS P/N	CP1220
DATE	2009-9-21

APPROVED BY	CHECKED BY	PREPARED BY	CUSTOMER APPROVAL SIGNATURE

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1. FEATURE:

- INPUT :UNIVERSAL 100-240 Vac/47-63 Hz INPUT, WITHOUT ANY SLIDE SWITCH
- OUTPUT :+12V / 0-2A
- DIMENSION:80(D)*53(W)*52(H) mm
- EFFICIENCY :82% TYPICAL
- SAFETY :UL/BSMI/CB/CE/TUV/C-Tick/DOFT/ 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	0.5A Max
2.4 INRUSH CURRENT	10A Max/100Vac;20A Max/240Vac (COLD STABT AT 25°C FULL LOAD)
2.5 EFFICIENCY	82% 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	2A Max
	REGULATION	11.40V Min~12.00V Typ.~12.60V Max
	RIPPLE & NOISE	120mV Max
	TOTAL POWER	24W 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.

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5. SAFETY AND EMI REQUIREMENT:

5.1 SAFETY REQUIREMENT

- a. SAFETY : UL/BSMI/CB/CE/TUV/C-Tick/DOFT/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 3.5mA

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°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	12.31V
115Vac / 50% load	11.40~12.60V	12.31V
132Vac / 50% load	11.40~12.60V	12.31V
180Vac / 50% load	11.40~12.60V	12.31V
230Vac / 50% load	11.40~12.60V	12.31V
264Vac / 50% load	11.40~12.60V	12.31V

(II). EFFICENCY TEST

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	82% Typical	81%
230Vac / 100% load	82% Typical	80%

(III). LOAD REGULATION TEST

Test result:

Test condition	Spec.	Reading
115Vac / 0% load	11.40~12.60V	12.53V
115Vac / 50% load	11.40~12.60V	12.31V
115Vac / 100% load	11.40~12.60V	12.07V
230Vac / 0% load	11.40~12.60V	12.53V
230Vac / 50% load	11.40~12.60V	12.31V
230Vac / 100% load	11.40~12.60V	12.07V

(IV).RIPPLE & NOISE TEST

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	120mV Max	40mV
230Vac / 100% load	120mV Max	30mV

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(VI). OVER VOLTAGE PROTECTION

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	Vout*(110%~140%)	120%
230Vac / 100% load	Vout*(110%~140%)	128%

(VII). HOLD UP TIME

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	15mS Min	20mS
230Vac / 100% load	15mS Min	27mS

(VIII). RISE TIME

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	50mS Max	25mS
230Vac / 100% load	50mS Max	30mS

(IX). OVER CURRENT PROTECTION

Test result:

Test condition	Spec.	Reading
115Vac / 100% load	Iout*(110%~140%)	119%
230Vac / 100% load	Iout*(110%~140%)	132%

(X). SHORT CIRCUIT PROTECTION

Test result:

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

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