

**規 格 書**  
**Electrical Specification**

**Model No :** LSE0107A1240

**Description :** 12V/3.33A 40W Output Adapter

**Revision :** 0.3

**Issued Date :** AUG.21. 2003

**Customer Part No. :**



力信興業股份有限公司

**LI SHIN INTERNATIONAL ENTERPRISE CORP.**

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Approve By	Check By	Prepared By



<b>Change List</b>			
<b>ECN No</b>	<b>REV</b>	<b>Revision Description</b>	<b>Date</b>
	0.1	Release to factory	05.15.2003
	0.2	MODIFY 2.10 Ripple change to 200mVp-p	06.11.2003
BB1-380062	0.3	Modify 2.12 OVP : Change to Shut down and auto-recovery function Tripped voltage will be less than 18Vdc	08.21.2003



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## 1. Description.

This product is a AC to DC power transfer device, it can provide for a 40W single dc output with constant voltage source.

## 2. Electrical.

### 2.1 Input Voltage(AC~).

- a. From 100 - 240Vac Normal.
- b. From 90 - 265Vac Universal.

### 2.2 Input Frequency.

From 47- 63Hz.

### 2.3 Input Current.

1.00A max at 90Vac input & dc output full-loading.

### 2.4 Inrush Current.

90A max at cold-start and 25°C, dc output full-loading and 230Vac input.

### 2.5 Hold-Up time.

10msec min. at dc output full-loading and 115Vac input.

### 2.6 Input wattage.

Less than 0.75W at 230Vac input & no-load condition.

### 2.7 Efficiency.

79% min. at dc output full-loading and 115/230Vac input.

### 2.8 Safety Test.

- a. Leakage current less than 0.75mA at 254Vac, 50Hz.
- b. Hi-Pot test : 1800Vac, 10mA, 1Sec between Primary to Secondary ground.
- c. Insulation : at dc 500Vdc, 1 Sec between Primary to Secondary circuit, IR shall  $\geq 20M\Omega$ .
- d. Grounding test : AC 30A , 2 Sec between input safety ground and SELV output GND, GR  $\leq 0.1\Omega$ .

### 2.9 Output Voltage and Current (DC).

V out	Range	I out(min)	I out(max)
12.00V	11.40 - 12.60V	0A	3.33A



2.10 Ripple and Noise.

Low frequency ripple ( < 100KHz )  $\leq$  200mVpp, and Total composite Ripple and Noise. Less than 300mVp-p, tested by dc loading side parallel with a 10uF/EC and 0.1uF/Ceramic. Capacitors and Measured Band-Width with DC-20MHz.

2.11 Over-Shoot and under-shoot.

Less than 10% of nominal Voltage value.

2.12 Protection.

- a. SCP : Short circuited protection and with auto-recovery function.
- b. OVP : Over Voltage protection with shut down and auto-recovery function, Tripped voltage will be less than 18Vdc.
- c. OCP : Over current protection with auto recovery function.  
Current limit : 6.0A (max.)

2.13 LED Indication.

Green light for Nominal operation.                      Blank or Flash for SCP mode.

2.14 Rise time.

Rise time shall be less than 50msec. it should be measured from 10% to 90%of the output voltage,

2.15 Output voltage Temperature Coefficient.

Less than 0.2%/C.

2.16 Output Transient Response.

Dynamic loading condition.

DC output	I1 ( A )	I2 ( A )	dVmax.(V)	Time-max.	dI/dT
12.0	0.00	0.83	+/- 1.0V	10 msec.	$\geq$ 50mA/usec.
12.0	0.83	1.66	+/- 1.0V	10 msec.	$\geq$ 50mA/usec.
12.0	1.66	3.33	+/- 1.0V	10 msec.	$\geq$ 50mA/usec.

**3. Environment.**

3.1 Temperature

- a. Operation : 0 to 40 °C
- b. Storage : -40 to 70 °C

3.2 Humidity

- a. Operation : 20 to 80%
- b. Storage : 10 to 90%

3.3 Altitude.

From sea level to 10,000Ft (operation) and 40,000Ft (Non operation).

**4. EMC.**

## 4.1 EMS

Test Item	Test Specification	IEC Standards
ESD	Contact                      8KV	61000-4-2
ESD	Air                                15KV	61000-4-2
RF	FR : 26MHz-1.0GHz, Field Strength : 3V/M	61000-4-3
EFT	2KV on AC power line.	61000-4-4
SURGE	+/- 1KV (DM) & +/- 2KV (CM)	61000-4-5
CS	3V/M	61000-4-6
DIPS	0% 250Cy, 40% 5 Cy, 70% .5Cycle	61000-4-11

## 4.2 EMI

Referring Standards	Specification
FCC	Part 15,class B
VCCI	Class B
CISPR	Part 22,class B
C-TICK	AS/NZS3548
BSMI	CNS 13438 乙類 Class B

**5. Reliability.**

## 5.1 Life.

12000 hours (8 hours/day \* 300 days/year \* 5 years)

At dc output full loading, 115/230Vac input & ambient temperature 25C

## 5.2 M.T.B.F.

60,000 Power On Hours at 25°C

## 5.3 Temperature Rise.

Less than 45°C at nominal AC input / DC output full loading and environment temperature 25+/-1°C on Top/Bottom of plastic case.

## 5.4 Burn-in.

100% Burn-In with 80~100% loading & 35~45°C Environment temperature.



5.5 Vibration Test.

- a. Non operation vibration with shipping container shall be 2G'S peak, 7-50Hz, 4G'S / 50-500Hz, after test no abnormally to be found.
- b. Operation vibration shall be 0.5G'S peak, 10-60Hz, 3 AXES, after test no abnormally to be noted.

5.6 Drop-Test.

Test height 100cm, after drop test no function abnormally to be noted.

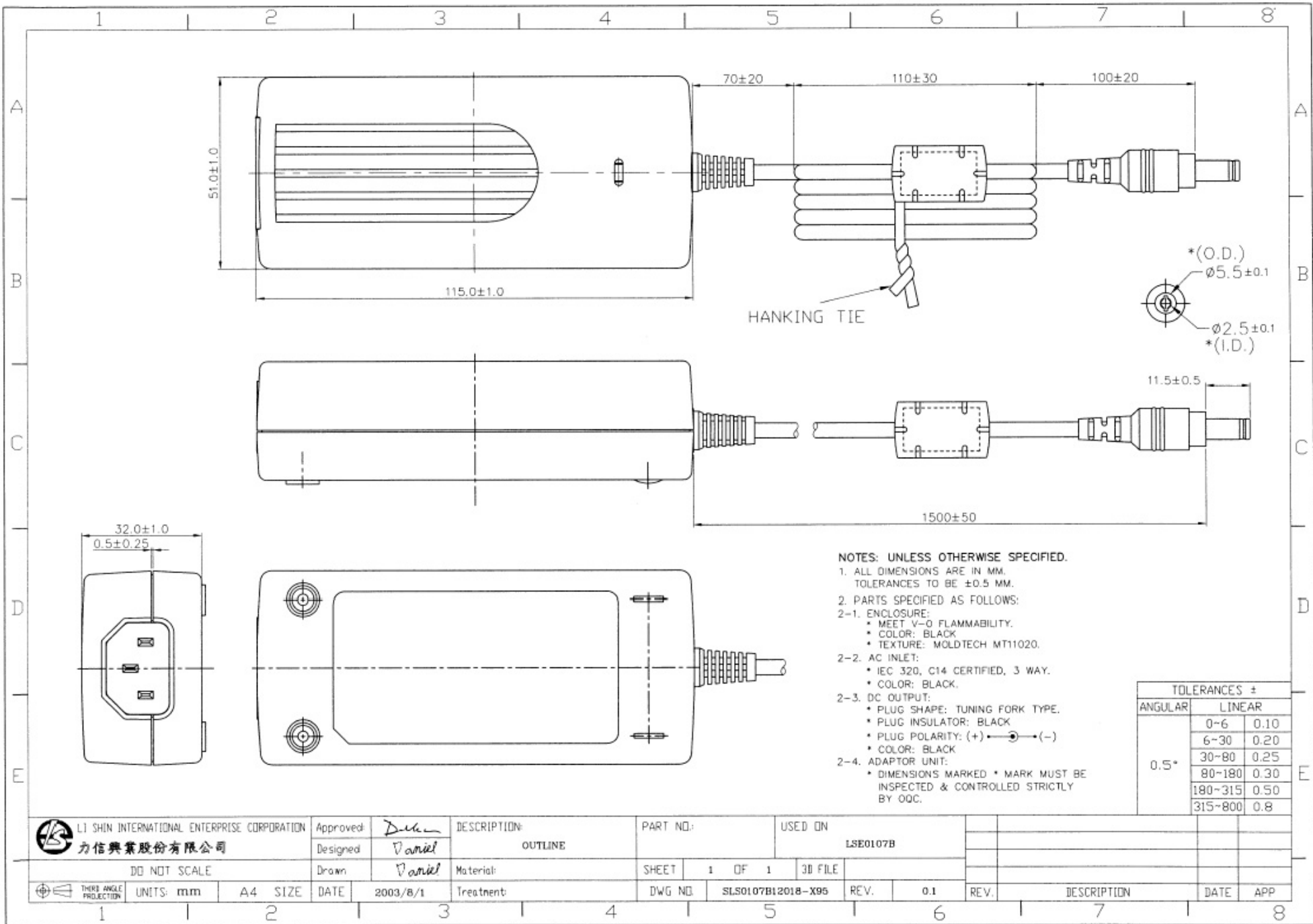
**6. Mechanical.**

6.1 Plastic Case : Case with UL PC+ABS GE C2950 material.

6.2 Physical Size : 115.00mm( L ) × 51.00mm ( W ) × 32.00mm ( H ).

6.3 Output cable with UL2468/1185,18AWG wires and two pins direct angle dc jack plug.

END... ..



**NOTES: UNLESS OTHERWISE SPECIFIED.**

1. ALL DIMENSIONS ARE IN MM. TOLERANCES TO BE  $\pm 0.5$  MM.
2. PARTS SPECIFIED AS FOLLOWS:
  - 2-1. ENCLOSURE:
    - \* MEET V-0 FLAMMABILITY.
    - \* COLOR: BLACK
    - \* TEXTURE: MOLDTECH MT11020.
  - 2-2. AC INLET:
    - \* IEC 320, C14 CERTIFIED, 3 WAY.
    - \* COLOR: BLACK.
  - 2-3. DC OUTPUT:
    - \* PLUG SHAPE: TUNING FORK TYPE.
    - \* PLUG INSULATOR: BLACK
    - \* PLUG POLARITY: (+)  $\bullet \rightarrow$  (-)
    - \* COLOR: BLACK
  - 2-4. ADAPTOR UNIT:
    - \* DIMENSIONS MARKED \* MARK MUST BE INSPECTED & CONTROLLED STRICTLY BY OQC.

TOLERANCES $\pm$		
ANGULAR	LINEAR	
0.5°	0-6	0.10
	6-30	0.20
	30-80	0.25
	80-180	0.30
	180-315	0.50
	315-800	0.8

	LI SHIN INTERNATIONAL ENTERPRISE CORPORATION		Approved: <i>Daniel</i>	DESCRIPTION: <b>OUTLINE</b>	PART NO.:	USED ON								
	力信興業股份有限公司		Designed: <i>Daniel</i>			LSE0107B								
DO NOT SCALE			Drawn: <i>Daniel</i>	Material:	SHEET	1	OF	1	3D FILE					
	UNITS: mm	A4 SIZE	DATE: 2003/8/1	Treatment:	DWG. NO.	SL50107B12018-X95		REV.	0.1	REV.		DESCRIPTION	DATE	APP

NOTES: UNLESS OTHERWISE SPECIFIED.

- ALL DIMENSIONS ARE IN mm.  
TOLERANCES TO BE  $\pm 0.25$  mm.
- THE ARRANGEMENT OF LAMINATE WITH MATERIAL THICKNESS AS FOLLOWS:  
(反銀面上層紙)  
① OPP FILM(MAT) 0.025  
② ACRYLIC ADHESIVE 0.018  
③ POLYESTER(#75) 0.075  
④ ACRYLIC ADHESIVE 0.028

GRAND TOTAL THK. 0.146  $\pm$  10%

- THE LINES ARE 0.5 mm WIDE.
- COLOR: CHARACTERS, LOGOS AND LINES SHALL BE SILVER, BASE TO BE BLACK (GE #701). (底色銀字)
- APPROVED VENDOR MUST BE UL RECOGNIZED AND CSA CERTIFIED.
- THE LABEL SHALL BE MARKED WITH THE CSA VENDOR IDENTIFICATION MARK AS SPECIFIED IN THE CSA LIST (CM, CM-1, ...).
- SAFETY STANDARD ORGANIZATION IN SYMBOLS ARE 7.62MM TO 5.0MM HIGH.
- LETTERING SHOULD BE CLEAR-CUT, SURFACE TO BE FREE OF DEFECT.
- BAR CODE(CODE128) SPECIFIED AS FOLLOWS:(PRINTED BY LI SHIN)
  - FACTORY CODE, CHINA SU ZHOU(Kowloon)-->A2
  - A.D. THE END NUMBER OF PRODUCE YEAR.  
1995-->95, 1996-->96, 1997-->97, ...,  
2000-->2K, ..., 3000-->3K
  - WEEK, PRODUCE WEEK. 01, 02, 03, ..., 52, ...
  - PRODUCE NO. SERIAL NO. (MONTH RESET FROM 000001 TO 999999)



- (1 CHARACTER) 2
- (2 CHARACTERS) 2
- (2 CHARACTERS) 3
- (6 CHARACTERS) 4



LI SHIN INTERNATIONAL ENTERPRISE CORP.

AC ADAPTER 交流适配器

MODEL: 型号:LSE0107A1240  
INPUT: 输入:100-240V~, 50/60Hz 1A  
OUTPUT: 输出:12V --- 3.33A 40W MAX



WARNING: 注意:

RISK OF ELECTRIC SHOCK DO NOT OPEN  
For Indoor Use Only 仅限资讯设备使用



ADVERTENCIA:

RIESGO DE SHOCK ELÉCTRICO NO ABRA  
Para uso interior solamente



品名: 交流适配器  
型号: LSE0107A1240  
额定输入: AC100-240V, 50/60Hz, 1A  
额定输出: DC12V, 3.33A, 40W  
制造商: Suzhou Farpoint  
Electronics Co., Ltd. / China  
苏州富点电子科技有限公司  
AS 证号: (02)022-1000/1000



KTL SU10104-2006  
승인번호: KTL SU10104-2006

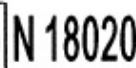
\*Apparatet må kun tilkoples jordet stikkontakt!  
\*Apparatet skal anvendes til jordet stikkontakt  
den anvendes til et netværk!  
\*Endast för hontorsmansida!  
\*For IEC 60338 products only!



D43011



020642-11



LEVEL 3 LISTED  
I.T.E. POWER SUPPLY E193430



BZ02

MADE IN CHINA 中国制造

CM-1 B

LABEL SIZE:

74.25(L) x 39.25(W),  
R3(3X), C4.3

CM-1, SEE NOTE 6



LI SHIN INTERNATIONAL ENTERPRISE CORPORATION  
力信興業股份有限公司

Approved: *Wang G...*  
Designed: *Poly Lin...*

SPICE-LABEL

PART NO.:

S7341-0448-22

USED ON

LSE0107A1240

DO NOT SCALE



UNITS: mm

A3

SIZE

DATE

2002/06/12

Treatment:

DWG NO.

357341-0448-22

REV.

0.1

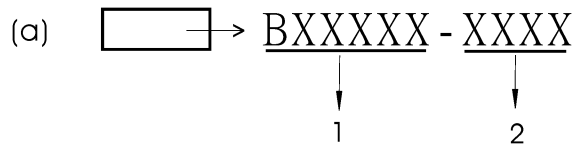
REV.

DESCRIPTION

DATE

APP

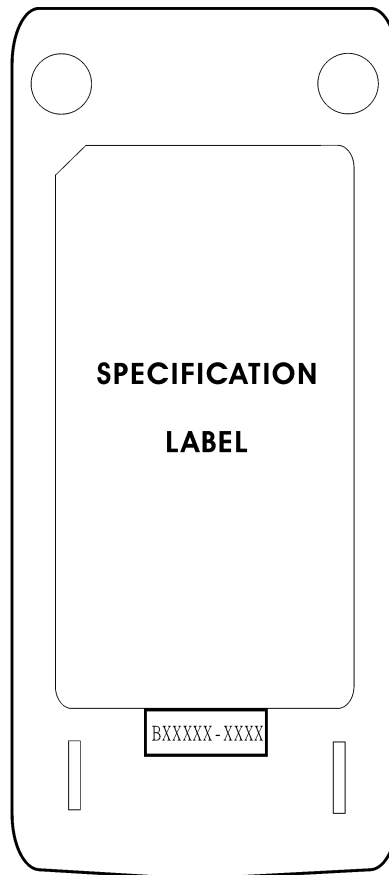
- 1.尺寸:16.0(L)X6.0(W)
- 2.角度:
- 3.顏色:白色
- 4.材質:UL無塵紙列印標籤
- 5.厚度:
- 6.編碼原則如下:





1.xxxxx : 表系列機種識別碼  
 力信機種料號,後6碼:  
 例:SLS0107B12000,即  
 印:B12000.

2.xxxx : 表生產內控碼,依製程需求調整.

(b)code : 阿拉伯數字及英文數字代表



 LI SHIN INTERNATIONAL ENTERPRISE CORPORATION 力信興業股份有限公司		Approved: <i>Cammy</i> Designed:	DESCRIPTION: SPEC. LABEL	PART NO. :	USED ON LSE0107B					
DO NOT SCALE		Drawn: Cammy	Material:	SHEET 1 OF 1	3D FILE					
 THIRD ANGLE PROJECTION	UNITS: mm	A3 SIZE	DATE: 2003/07/01	Treatment:	DWG NO. 01078標籤位置圖-701	REV. 0.1	REV.	DESCRIPTION	DATE	APP