

SPECIFICATION

规格书

Model: ZX-L0707-236 VER 1.1

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2.0 General Description / 概述

This DC-DC LED Backlight driver was developed for LED backlight system

本产品专为LED背光系统设计。

2.1 Features / 性能

High performance, low consumption/高性能，低损耗。

Wide Dimming Range / 宽范围调亮

LED constant current drive/ LED 恒流驱动

OVP Protection/输出过压保护

2.2 Application /应用

The LED backlight driver is specially designed for LCD display

(i.e. LCD monitor, LCD TV, NB etc.) /

此产品专门为LED背光显示设计，应用于LCD显示器，LCD TV，笔记本电脑等

2.3 Suitable load / 适用负载

LED backlight panel

3.0 Environmental Condition / 适用环境条件

Operating temperature /工作温度:-20℃ -- 50℃

Storage temperature / 贮存温度 : -20℃-- 70℃

Operating humidity / 工作湿度 : 10% -- 95%RH

Storage humidity / 贮存湿度 : 10% -- 95%RH

4.0 Input Electrical Characteristics /输入电气参数

No	Item(项目)	Symbol	Min	Type	Max	Unit
1	Input Voltage/输入电压	Vin	10	12	15	V
2	Input Current/输入电流	Iin	-----	0.55	-----	A
3	Input Power/输入功率	Pin	-----	6.61	-----	W
4	Brightness Voltage/调亮电压	Vadj	0	-----	5	V
5	Control Voltage/ 开关电压	Enable Von=1.2---5.0V		Disable Voff=0---0.8V		

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5.0 Output electrical characteristics /输出电气参数

Item 项目	Symbol 符号	Test Conditions 测试条件	Min 最小值	Type 典型值	Max 最大值	Unit 单位
OutputCurrent (Each group) 每组输出电流	Iout	Vin=12.0V;Von=5V; Ta=25℃	---	20	30	mA
Output Voltage 输出电压	Vout	Vin=12.0V;Von=5V; Ta=25℃	---	37.2	----	V
Efficiency 效率	η	Vin=12.0V; Von=5V;	---	90	---	%
Output otal group 输出总组数			---	8	---	

6.0 Pin assignments/引脚定义

6.1 Input connector/输入插座

Pin No./ 引脚	Symbol/ 符号	Description/描述	Values/数值
1. 2	VCC	Supply voltage/供电电压	10---15V
3	ON/OFF	ON/OFF /开关	Von=1.2---5.0V Voff=0---0.8V
4	Vadj	Dimming control/亮度调节	MAX=0V MIN=5V
5. 6	GND	GND/地	0V

6.2 Output connector/输出插座

CN4	Description(Pitch=0.5mm, 12Pin)		
1	Channel 1		
2	Channel 2		
3	Channel 3		
4	Channel 4		
5	NC		
6	VLED		
7	VLED		
8	NC		
9	Channel 5		
10	Channel 6		
11	Channel 7		
12	Channel 8		

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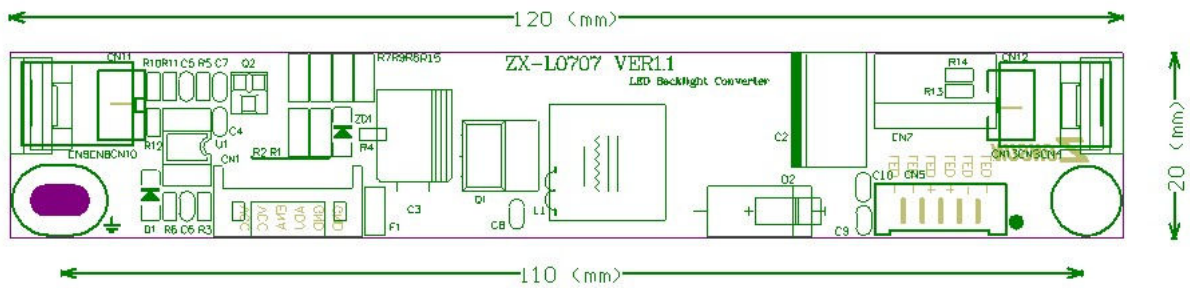
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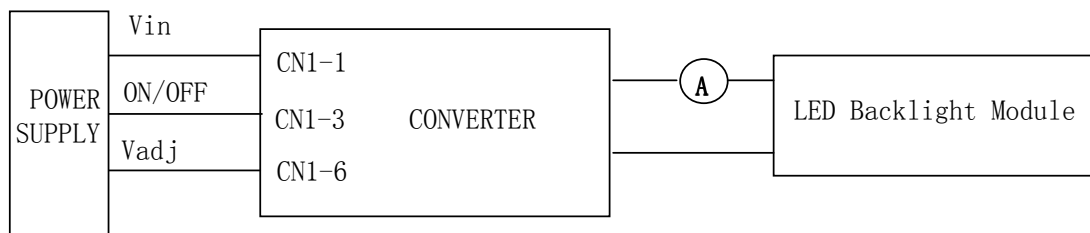
7.0 Mechanical Dimension / 机械尺寸图

Unit/单位 : mm

Tolerance/公差: 0.5mm



8.0 Testing Circuit(测试线路)



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9.0					
Sample Test Report/样品测试记录					
MODEL ZX-L0707		测试仪器 MEASURE EQUIPMENT		RXN-305D / TDS GDM-8145	
		测试数据 TEST DATA			
NO.	测试条件 Conditions	环境温度 Ambient Temperature	SAMPLE 1	SAMPLE 2	
输入电流 I_{in}	Vin=12V ON/OFF=5V Vbrit=0V	26 ⁰ C	0.54A		
输出电压 V_{out}	Vin=12V ON/OFF=5V Vbrit=0V	26 ⁰ C	37.2V		
总输出电流 I_o	Vin=12V ON/OFF=5V Vbrit=0V	26 ⁰ C	162mA		
调亮输出电流 I_{brit}	Vin=12V ON/OFF=5V Vbrit=0V	26 ⁰ C	162mA		
	Vin=12V ON/OFF=5V Vbrit=5V	26 ⁰ C	52mA		
恒流能力 Constant current Capacity		输入电压在 10V 至 15V 变化时,输出总电流变化<0.5mA Input voltage varies between 10V-15V,total output current varies<0.5mA.			

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9.1. **Operating temperature/温度测试报告** (°C) 环境温度/Ambient Temperature: 30°C
(Vin=12V ON/OFF=5V Vbrit=0V)

SAMPLE 1	1	2	3	4	5	6	7
测试点/test point	L1	Q1	U1	D2			
温度/temperature	43.7	43.9	39.2	42.3			
温升/Temperatuer rise	13.7	13.9	9.2	12.3			

SAMPLE 2	1	2	3	4	5	6	7

10.0 Notice/注意事项

A. 请正确插入输出排线，避免正负极短路。

Make sure that cable is properly inserted, be careful not to short-circuit the positive and negative.

B. 组装产品时，确保本产品与金属材料保持至少 5mm 以上距离，或用绝缘材料隔离。

Please keep the converter at least 5.0mm away from the metal parts when assembly, or put a insulator between the inverter and the metal parts.

C. 本产品仅用于 LED 背光驱动，请勿用于其他用途。

This converter is only used to drive LED backlight, Used for other purposes is not allowed.