

LED-21320



Overview:

The LED-21320 backlight driver is designed to power 3 strings of LED backlight module. It is a high efficiency and low profile driving board. Wide dimming control allows users to set LED brightness smoothly. Power protection feature is able to protect LED module from damage by over current or over voltage.

Features:

- Applicable to 3 LED strings
- Wide input voltage range
- Constant LED current (20mA)
- Wide dimming control support
- Short circuit and overload protection
- Low profile and concise design

Mechanical Characteristic:

Dimension (L x W x H): 100mm x 30mm x 10mm

Weight: 24g

LCD Application:

LCD Model: NEC-NL12876BC15-01

Operating Condition:

Item	Symbol	Condition	Min.	Max.	Unit
Input Voltage	Vin		11	15	V
Operating Temperature	Top	Ha $\leq$ 90%RH	-20	70	°C
Storage Temperature	Tstg	Ha $\leq$ 95%RH	-30	85	°C
Operating Humidity	Hop	Ta=0 ~ 55°C	20	90	%RH
Storage Humidity	Hstg	Ta=20 ~ 80°C	-	95	%RH

Operating Characteristic:

Unless otherwise noted Vin=12 Volts DC and T=25°C

Item	Symbol	Min.	Typ.	Max.	Unit
Input Voltage	Vin	11.0	12.0	15	V
Input Current	I-in	310	320	340	mA
LED String Voltage	V-led	30.4	31.6	32.8	V
Efficiency	H	78	80	82	%
Output Current (Per String)	I-out	18	20	22	mA
Turn-on Threshold	V-thon	2	2.2	5	V
Turn-off Threshold	V-thoff	0.5	0.6	0.7	V

(CN1) Input Connector:

Pin No.	Symbol	Description
1	BKLT	DC+12V
2	BKLT	DC+12V
3	GND	Ground
4	GND	Ground
5	ENA	Enable
6	PWM	Brightness Control
7	AR	NC

(CN2) Output Connector:

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	LEDIN1	Anode1	8	LEDO2	Cathod2
2	LEDIN2	Anode2	9	LEDO3	Cathod3
3	LEDIN3	Anode3	10	LEDO4	NC
4	LEDIN4	NC	11	LEDO5	NC
5	LEDIN5	NC	12	LEDO6	NC
6	LEDIN6	NC	13	EMA	Enable
7	LEDO1	Cathod1	14, 15	PWM, VCC	NC

Spectrah Dynamics, Inc.

Tel: 886-2-86472026 | Fax: 886-2-86472201 | E-mail: spec_info@spectrah.com
Add: 5F-2, No. 188, Sec #3, Ta-tung Road, Hsi-Chi, Taipei Hsien 221, Taiwan.

www.spectrah.com