

## LED-21425



### Overview:

The LED-21425 backlight driver is designed to power 4 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 4 LED strings
- Wide input voltage range
- Constant LED current (25mA)
- Wide dimming control support
- Short circuit and overload protection
- Low profile and concise design

### Mechanical Characteristics:

Dimension (L x W x H): 100mm x 30mm x 7.5mm

Weight: 24g

### LCD Application:

LCD Model: NEC-NL6448BC26-22F

### Operating Condition:

Item	Symbol	Condition	Min.	Max.	Unit
Input Voltage	Vin		11	15	V
Operating Temperature	Top	Ha ≤ 90%RH	-20	70	°C
Storage Temperature	Tstg	Ha ≤ 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 Characteristics:

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	23	25	27	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	Cathod4
4	LEDIN4	Anode4	11	LEDO5	NC
5	LEDIN5	NC	12	LEDO6	NC
6	LEDIN6	NC	13	ENA	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.