



LITEMAX LID15A01

Inverter

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All information is subject to change without notice.

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General

The LID15A01 is designed to power High White LED Light Bar to a nominal power level of 24W (TYPICAL)

Intensity control (0-100%) is accomplished by the user providing a variable dc level of 0.5V (full-on) to 4.8V (off) at pin7 of LJ1.

Enable control is accomplished at pin8 of LJ1 (5V=on, 0V=off)

Specifications:

- $V_{in}=+10V$ to $+14V \pm 10\%$
- Constant current and voltage function.
- No load voltage=30V
- LED Light Bar output Voltages=17V(TYPICAL)
- LED Light Bar output current=1.4A @100%(TYPICAL)
- Nominal LED Light Bar working frequency=125KHz ± 5 KHz
- Nominal PWM frequency=200Hz $\pm 10\%$
- PWM duty cycle range=0 to 100%
- Average electrical efficiency > 90%

LED Application

This specification is applied to LED converter unit for 15 " 168pcs LED backlight

Operating Characteristics

Item	Symbol	Conditions	MIN.	TYP.	MAX.	Unit	Remark
Input Voltage	V_{in}		10.0	12.0	14.0	V	
Input Current (Low Brightness)	I_{inL}	$V_{IN}=12V, V_{adj}=5V$	0.0	-----	-----	mA	
Input Current (High Brightness)	I_{inH}	$V_{IN}=12V, V_{adj}=0V$	1.60	2.00	2.40	A	
LED Current (Low Brightness)	I_{outL}	$V_{IN}=12V, V_{adj}=5V$	0.0	-----	-----	Arms	
LED Current (High Brightness)	I_{outH}	$V_{IN}=12V, V_{adj}=0V$	1280	1350	1420	mA	
Working	Freq	$V_{IN}=12V, V_{adj}=0V$	120	125	130		
PWM Frequency	Freq	$V_{IN}=12V$	180	200	220	HZ	
Brightness Control	V_{adj}	Connection of Voltage	0.5	-----	4.8	V	
ON/OFF Control	$V_{on/off}$	Normal Operation	2	-----	5	V	
Output Voltage	V_{out}	$V_{IN}=12V, V_{adj}=0V$	16.0	17.0	18.0	V	
Efficiency	η	$V_{IN}=12V, V_{adj}=0V$	90	-----	-----	%	

Environment

Operation Temperature	-20 ~ 70°C
Operation Humidity	90% Max. RH
Storage Temperature	-40 ~ 85°C
Storage Humidity	90% Max. RH

Connector Socket

Input Connector :LJ1 (JST B2B-PH-K-S or Compatible)

PIN No	Symbol	Description
1	Vin	DC+12V
2	Vin	DC+12V
3	Vin	DC+12V
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	Brightness	Brightness Control 5V~0V
8	Control	ON/OFF Control 0.8V(OFF) 2~5V(ON)

Output Connector :LJ2,LJ3 (JST S2B-EH or Compatible)

PIN NO	Symbol	Description
1	Output	LED High Voltage(+)
2	Output	LED Low Voltage (-)

Mechanical Characteristics

Dimension: 124mm*50mm*15mm

INPUT CONNECTOR
 LJ1:
 PIN1:VIN
 PIN2:VIN
 PIN3:VIN
 PIN4:GND
 PIN5:GND
 PIN6:GND
 PIN7:BRIGHTNESS
 PIN8:ON/OFF

