

Non-Isolated Led Driver



FEATURES:

- Constant Current Output LED Driver
- Wide Input Voltage Range
- PWM Dimming and ON/OFF Control
- Short Circuit and Overtemp. Protected
- High efficiency up to 95%



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Range	Output Voltage	Output Current
	Vdc	Vdc	mA
LDA24-0.30	5-36	2-34	300
LDA24-0.35	5-36	2-34	350
LDA24-0.50	5-36	2-34	500
LDA24-0.60	5-36	2-34	600
LDA24-0.70	5-36	2-34	700

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo,Io Nom	5	24	36	Vdc
Filter	Capacitor		2.2		uF

Output Specifications

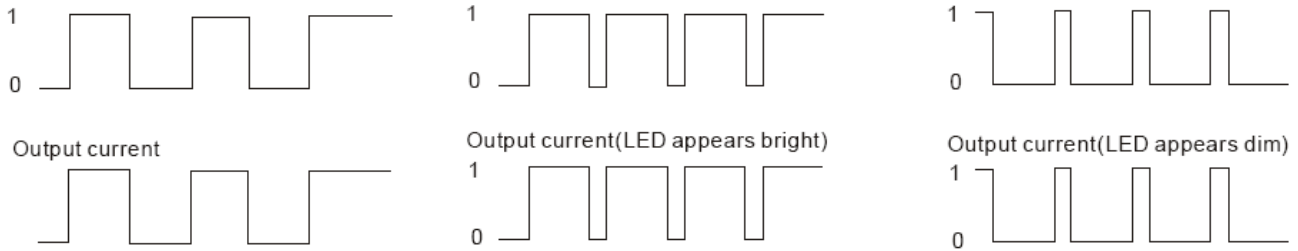
Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Range	Vin=36V	2		34	Vdc
Output Current Range	Vin - Vout >1.5~4.0V	300		700	mA
Output Current Accuracy	Vin=24V, 5 LEDS		±5	±8	%
Output Current Stability	Vin=24V, 1LED to 5 LEDS		±5	±10	%
Efficiency at full load				95	%
Capacitive Load				100	uF
Short Circuit Protection	Continuous				
PWM Dimming and ON/OFF Control (let it open if not use)					
Remote ON/OFF	DC/DC ON			Open or 2.8V<Vc<6V	
	DC/DC OFF(Shutdown)			Vc<0.3V	
Remote pin current	Vc=5V			1	mA
Quiescent input current in Shutdown mode	Vin=24V, Vc <0.6V			400	uA
PWM frequency			0.2	10	KHz

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Operating Frequency	Full load,nominal input		800		KHz
Operation Temperature	300mA / 350mA	-40		+85	°C
	500mA/ 600mA/ 700mA	-40		+71	°C
Case Temperature				100	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Wave Soldering Profile	265°C/10 sec MAX				
Potting Material	Epoxy (UL94-V0)				
MTBF	MIL-HDBK-217F@25°C		2000000		Hours
Case material	DAP				
Weight			4.5		g
Dimensions			22.1x12.55x8.5		mm

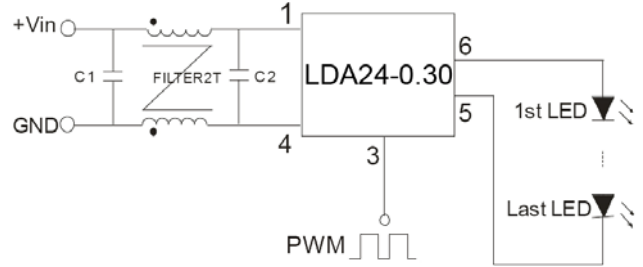
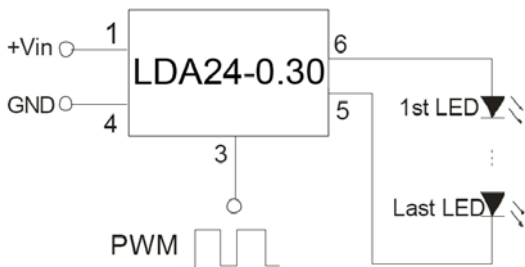
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PWM Digital Control Signal

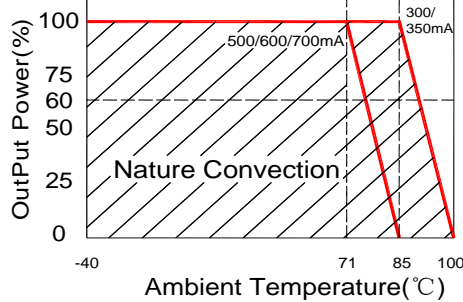


This is a PWM type digital dimming, which you can control the output current by adjusting the pulse width of the PWM signal.

PWM Dimming control circuit EMI filter circuit

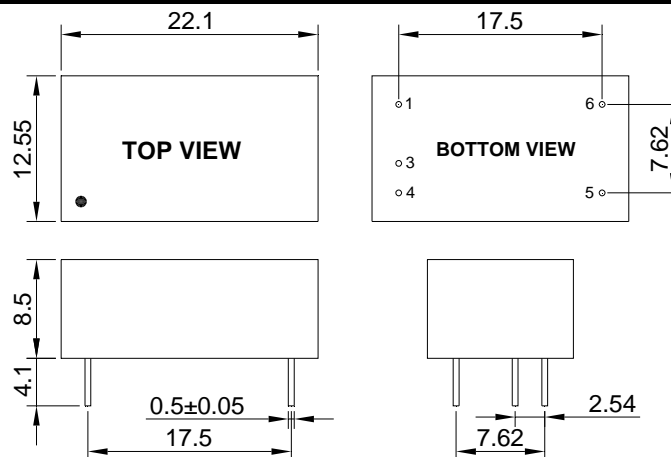


Temperature Derating Graph Part Number



Part Number
L D A 24 - 0.30
A B C D E
 A:Series
 B:DC INPUT
 C:Package
 D:Input Voltage
 E:Output Current

Markings and dimensions



UNIT:mm Unless otherwise specified, all tolerances are ±0.25

PIN Connection

PIN	1	3	4	5	6
Single	+Vin	PWM/ON/OFF	-Vin	-Vout	+Vout