Yuan Dean Scientific CO.,LTD LDA48 SERIES

Non-Isolated Led Driver

FEATURES:

- 24PIN DIL Package
- Constant Current Output LED Driver
- Wide Input Voltage Range
- Short Circuit and Overtemp. Protected
- High efficiency up to 98%

RoHS Compliant

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified			
Part Number	Input Range	Output Voltage	Constant Current
	Vdc	Vdc	mA
LDA48-0.30	36-72	18-70	300
LDA48-0.35	36-72	18-70	350
LDA48-0.50	36-72	18-70	500
LDA48-0.60	36-72	18-70	600
LDA48-0.70	36-72	18-70	700

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo,Io Nom	36	48	72	Vdc
Filter	Capacitor		2.2		uF

Output Specifications

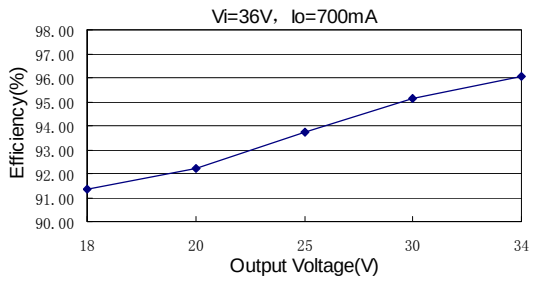
Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Range	Vin=36V	18		70	Vdc
Output Current Range	Vin - Vout >2.0V	300		700	mA
Output Current Accuracy	Vin=48V, 12 LEDS		±5	±8	%
Output Current Stability	Vin=48V, 5LED to 12 LEDS		±5	±10	%
Efficiency at full load				98	%
Capacitive Load				100	uF
Short Circuit Protection	Continuous				

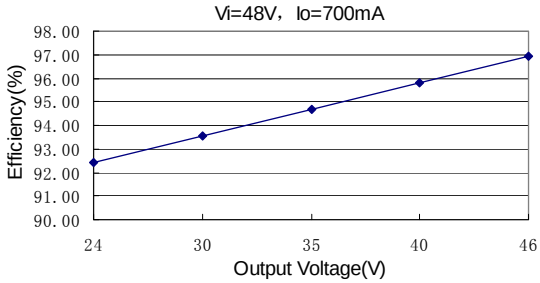
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Operating Frequency	Full load,nominal input		800		KHz
Operation Temperature	300mA / 350mA	-40		+85	℃
	500mA/ 600mA/ 700mA	-40		+71	℃
Case Temperature				100	℃
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Wave Soldering Profile	265℃/10 sec MAX				
Potting Material	Epoxy (UL94-V0)				
MTBF	MIL-HDBK-217F@25℃		2000000		Hours
Case material	DAP				
Weight			12.8		g
Dimensions					mm
PWM	LED ON	<0.5			Vdc
	LED OFF	>2			Vdc

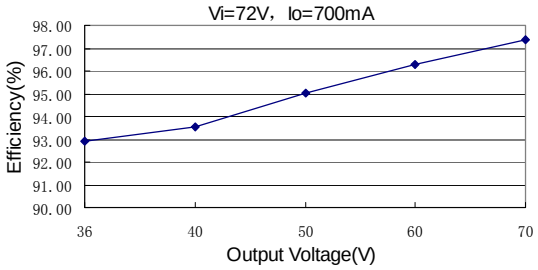
Non-Isolated Led Driver

Efficiency VS Output Voltage

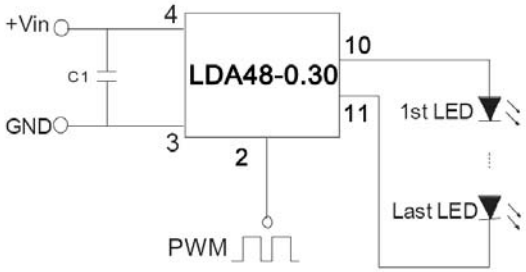




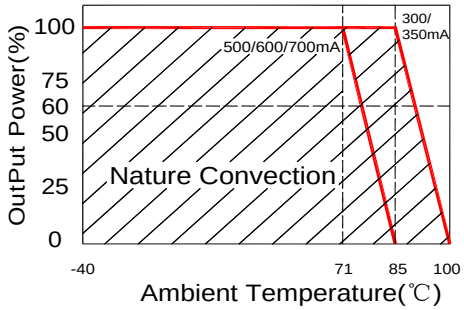
Efficiency VS Output Voltage



EMI filter circuit



Temperature Derating Graph

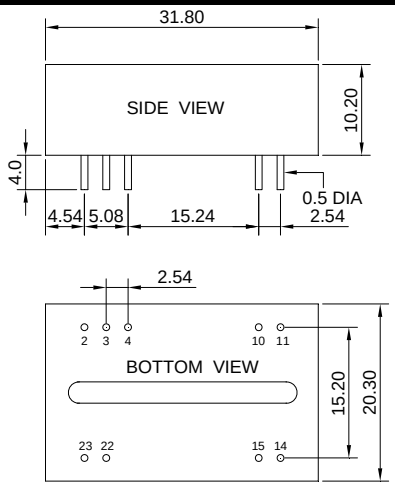


Part Number

L	D	A	48	-	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	2	3	4	10	11	Other
Single	PWM	-Vin	+Vin	+Vout	-Vout	NC