

DC-DC Converter Constant Current LED Driver



FEATURES

- ◆ EFFICIENCY UP TO 95%
- ◆ For 48V LED track light application
- ◆ Constant current output up to 1A
- ◆ Wide input and output voltage range
- ◆ 3 in 1 dimming (dim-to-off)
- ◆ Short circuit and over temperature protection
- ◆ INTERNAL SMD TECHNOLOGY
- ◆ UL 94V-0 PACKAGE MATERIAL

APPLICATION

- ◆ Landscape illumination
- ◆ Special illumination
- ◆ Commercial illumination
- ◆ Street light illumination
- ◆ Home use illumination

SPECIFICATIONS

Input Voltage 12~56VDC
 Output Current Accuracy $\pm 6\%$ max
 Output Current Stability $\pm 8\%$ max
 Ripple & Noise (20MHz BW) 350mVp-p
 Switching Frequency 40~1000KHz
 Short Circuit Protection Continuous, Recovery
 Over temperature Protection Shut down
 recovers automatically after temperature goes down

Cooling Free-air convection
 Working Temperature -40°C to +71°C with derating
 Storage Temperature -55°C to +125°C
 Case Temperature 110°C max.
 Isolation Voltage Non-Isolation
 EMC Emission Compliance to En55015
 EMC Immunity Compliance to EN61000-4-2,3,4,6,8
 Light industry level, Criteria A

* All specifications are measured at $T_a = 25^\circ\text{C}$, humidity < 75%, nominal input voltage, and rated output load unless otherwise specified.

Model Number	INPUT NOMINAL VOLTAGE (VDC)	INPUT VOLTAGE RANGE (VDC)	OUTPUT VOLTAGE RANGE (VDC)	OUTPUT CURRENT RANGE (mA)	CAPACITOR LOAD (Max.)	EFF. (% MAX)
DLHR-0025Wxy	48	12~56	2~45	0~250	2.2uF	94
DLHR-0030Wxy	48	12~56	2~45	0~300	2.2uF	94
DLHR-0035Wxy	48	12~56	2~45	0~350	2.2uF	95
DLHR-0050Wxy	48	12~56	2~45	0~500	2.2uF	95
DLHR-0070Wxy	48	12~56	2~45	0~700	2.2uF	95
DLHR-0100Wxy	48	12~56	2~45	0~1000	2.2uF	95

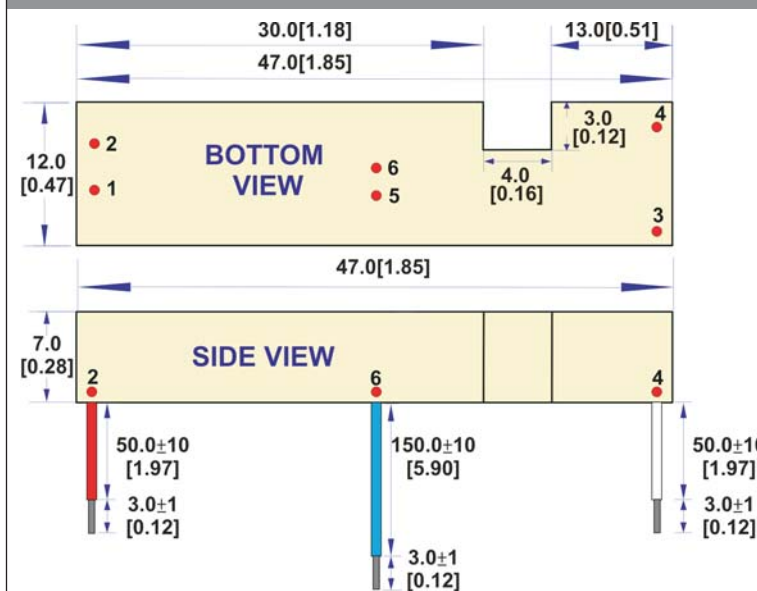
Ordering Information:

x = blank for 3 in 1 Dimming or A for PWM/DC function
 Suffix "y" = blank or A~Z for market purpose

Note:

Output voltage will always step down 4 volts from input voltage.
 Efficiency and input current are measured at nominal input voltage and full load (10LEDs).
 Other input to output voltages may be available. Please contact us.

MECHANICAL DRAWING (Unit: mm)



CONNECTION		
PINOUT		COMMENT
1 (Black)	-Vin	Don't connect to -Vout
2 (Red)	+Vin	DC Supply
3 (Black)	DIM(-)	Connect to -Vin
4 (White)	DIM(+)	ON/OFF control Leave open if not used
5 (Yellow)	+Vout	LED + Connection
6 (Blue)	-Vout	LED - Connection

NOTE :

- All dimensions are in mm [inches]
 1. Case Tolerance .x or .xx $\pm 0.5\text{mm}$
 2. Wire outside diameter = $1.6\text{mm} \pm 0.1$
 3. Wire core diameter = $0.75\text{mm} \pm 0.1$
 4. Wire is UL 3385/CAS TEM listed #22AWG /300V /105°C Rated