

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# **PLEDDC-120W Series, Fixed Output & Dimmable**

AC or DC Input

Flicker-Free LED Drivers

**Constant Current & Constant Voltage with Isolation** Black Magic Thermal Advantage™ Aluminum Housing

# **Electrical Specifications**

Input Voltage Range: 100-277 Vac Nom. (90-305 V Min/Max),

Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max) Power Factor: >0.90 @ > 70% load, 120-277V

<30 Amps max @ 277 Vac, cold start, full load Inrush Current: Input Current: 0.60 Amps max @ 230 Vac, 1.10 A max @ 120 Vac

Maximum Power: 120W ± 3% Line Regulation: Load Regulation: ± 4%

THD: ≤ 20% @ > 70% load, 120-277V

Ripple & Noise: 5% Vo max @ 20 MHz BW, Full load output in parallel with 0.1  $\mu F$  ceramic & 10  $\mu F$  Electrolytic (Vpk-pk) 5% Io max @ 20 MHz BW. Full load output Ripple:

in parallel with 0.1 µF ceramic & 10 µFElectrolytic. (lpk-pk)

120 Hz component (Flicker Free)

Start-up Time: 150mS typical @ Full Load, 120Vac/60Hz (1000mS max)

Leakage Current: 0.68 mA max @ 120Vac, 0.75 mA max @ 277Vac

**Hold Up Time:** 30mS typical @ Full Load, 277Vac

**Output Protection:** Over-Voltage, Over-Current, and Short Circuit

(reset by power cycling)

# **Environmental Specifications**

-30°C Minimum Starting Temp: Maximum Case Temp.

**UL Type TL Rating:** Non-Class 2: 90/82°C Storage Temperature: -40°C to +85°C **Humidity:** 5% to 95%

Vibration Frequency: 5-55 Hz/2g, 30 minutes

Sound Rating: Class A

280,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2 MTBF:

EMC: FCC 47CFR Part 15 Class B compliant

Convection

Impact Resistance: 1a/s

Weight: 24.4 oz (690 grams)

# 120W Constant-Current Dir PLEDDC129W 634-C3699

Total Power: 120 Watts

• Input Voltage: 100-277 Vac Nom. or 108-250 Vdc

UL Dry & Damp Location Rated

IP66 & NEMA6

· High Power Factor

UL Type HL Rated for Hazardous Locations

## **Constant Current Versions - Product Specifications** Output Current Output Voltage Max Output Typical Model Number (mA ±5%) Range (Vdc) Power (W) PLEDDC120W-343-C0350-XX 450 PLEDDC120W-266-C0450-XX 89-266 120 92% 120 91% PLEDDC120W-171-C0700-XX 700 57-171 PLEDDC120W-114-C1050-XX 1050 38-114 120 91% PLEDDC120W-086-C1400-XX 1400 29-86 120 91% PLEDDC120W-068-C1750-XX 1750 23-68 120 91% PLEDDC120W-057-C2100-XX 2100 19-57 120 90% PLEDDC120W-049-C2450-XX 2450 17-49 120 90% PLEDDC120W-043-C2800-XX 2800 15-43 120 90% PLEDDC120W-038-C3150-X 120 90% PLEDDC120W-034-C3500-X 3500 12-34 120 89% PLEDDC120W-028-C4200-XX 4200 10-28 89% 120 PLEDDC120W-024-C5000-XX 5000 120 89% 8-24

-XX indicates dimming options are available. See options at left. Blank = fixed current output

Output Current Max Output

Power (W)

120

Range (mA)

88-350

Constant Voltage Versions - Product Specifications

Output Voltage

(Vdc ±5%)

**Model Number** 

PLEDDC120W-343

## **Ordering Options:**

Coolina:

0-10V & Resistance dimmable models dim 100-10%. Two extra wires on the output side (+Purple/-Gray). Compatible with most quality 0-10V wall dimmers. See page 3.

| PLEDDC120W-024 | 24  | 1250-5000 | 120 | 89% |
|----------------|-----|-----------|-----|-----|
| PLEDDC120W-028 | 28  | 1050-4200 | 120 | 89% |
| PLEDDC120W-034 | 34  | 875-3500  | 120 | 89% |
| PLEDDC120W-038 | 38  | 788-3150  | 120 | 90% |
| PLEDDC120W-043 | 43  | 700-2800  | 120 | 90% |
| PLEDDC120W-049 | 49  | 613-2450  | 120 | 90% |
| PLEDDC120W-057 | 57  | 525-2100  | 120 | 90% |
| PLEDDC120W-068 | 68  | 438-1750  | 120 | 91% |
| PLEDDC120W-086 | 86  | 350-1400  | 120 | 91% |
| PLEDDC120W-114 | 114 | 263-1050  | 120 | 91% |
| PLEDDC120W-171 | 171 | 175-700   | 120 | 91% |
| PLEDDC120W-266 | 266 | 113-450   | 120 | 92% |

343



LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

Specifications subject to change without notice.

Rev 10-12-16

92%

Typical

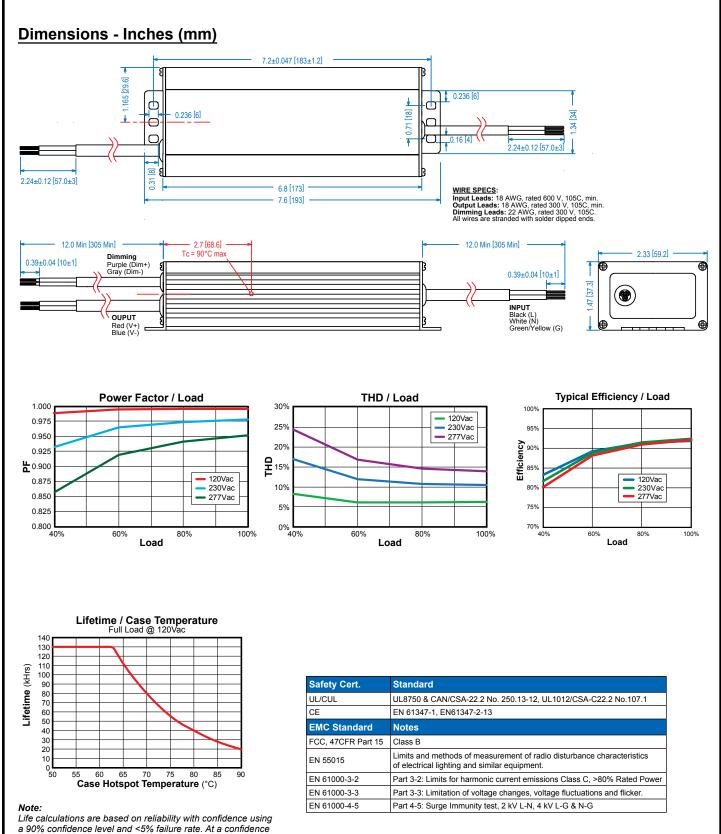
Efficiency

# **PLEDDC120W Series**









# **UL Conditions of Acceptability**

See website for additional information

level of 90% it is expected that <5% of the parts will fail at

outside specification, rather than fail to operate)

the rated life provided. (Failure is defined as a driver drifting

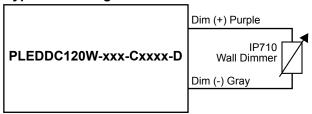
SSL Solutions Faster Than The Speed Of Light®



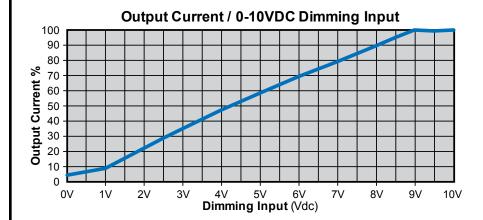
"-D" Option: 0-10VDC and Resistance Dimming

| Parameters                                      | Minimum | Typical | Maximum |
|---|---------|---------|---------|
| 10V Output Source Current, Purple Wire          | 0mA     |         | 10mA    |
| Absolute Voltage Range on 0-10V (+) Purple Wire | -2.0V   | _       | +15V    |
| Source Current out of 0-10V Purple Wire         | 0mA     | _       | 2mA     |

# **Typical Dimming Circuit**



(Dimmer must be current-sink type control)



- 1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
- 2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
- 3. 0-10V dimmable version is not intended to dim to zero (off). Will be lout <10% @ Vdim <1.0V
- 4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.