



# LDP25 SERIES

## 25 WATT OUTPUT

### LED POWER SUPPLY



## Features

- \* 25W Single outputs
- \* Universal AC input range 90-305Vac
- \* Constant Current Design
- \* Active PFC > 0.9
- \* Low inrush current < 5A
- \* No load power consumption 1W
- \* Low profile with 20mm height and narrow 30mm width
- \* Low frequency flicker design
- \* Continuous short circuit protection
- \* Over temperature protection
- \* IP 67 Rated
- \* Fully isolated plastic case
- \* Dimming function: PWM / 1~10VDC / Potentiometer



| MODEL            | Output Rated Voltage | Constant Current Region | Ripple and Noise(V p-p max.) <sup>Note1</sup> | Output Rated Current | No Load Output Voltage (max.) | Output Rated Power | %EFF. (typ.) |
|------------------|----------------------|-------------------------|---|----------------------|-------------------------------|--------------------|--------------|
| LDP25S240-C110BR | 24V                  | 9-24V                   | 0.24V   | 1100mA               | 29V                           | 26.40W             | 86%          |
| LDP25S240-C110B  | 24V                  | 16-24V                  | 2.0V  |                      |                               |                    | 88%          |
| LDP25S240-C105BR | 24V                  | 9-24V                   | 0.24V   | 1050mA               | 29V                           | 25.20W             | 85%          |
| LDP25S240-C105B  | 24V                  | 16-24V                  | 2.0V  |                      |                               |                    | 87%          |
| LDP25S240-C070BR | 24V                  | 9-24V                   | 0.24V   | 700mA                | 29V                           | 16.80W             | 84%          |
| LDP25S240-C070B  | 24V                  | 16-24V                  | 2.0V  |                      |                               |                    | 86%          |
| LDP25S360-C070BR | 36V                  | 9-36V                   | 0.36V   | 700mA                | 43V                           | 25.20W             | 86%          |
| LDP25S360-C070B  | 36V                  | 24-36V                  | 2.7V  |                      |                               |                    | 88%          |
| LDP25S480-C053BR | 48V                  | 9-48V                   | 0.48V   | 530mA                | 56V                           | 25.44W             | 86%          |
| LDP25S480-C053B  | 48V                  | 32-48V                  | 4.8V  |                      |                               |                    | 88%          |
| LDP25S480-C035BR | 48V                  | 9-48V                   | 0.48V   | 350mA                | 56V                           | 16.80W             | 84%          |
| LDP25S480-C035B  | 48V                  | 32-48V                  | 4.8V  |                      |                               |                    | 86%          |

Note: Ripple and Noise are measured at 20MHz bandwidth with a 0.1uF ceramic capacitor and 10uF aluminum capacitor.

All specifications are Typical at nominal line , full load and 25°C unless otherwise noted

**Order Information:**

| Series | Output(W) | IP Code                  | Output Voltage | Dimming Function                 | Rated Output Current | Input Voltage   | Ripple Noisie  |  |
|--------|-----------|--------------------------|----------------|----------------------------------|----------------------|-----------------|--|--|
| LDP    | 25        | X                        | XXX            | X                                | XXX                  | B               | X  |  |
|        |           | S : Single O/P with IP64 | 240 : 24V      | C : No dimming<br>P : PWM/1-10V, | 24V                  | B : 100-277 Vac | R : 1% output ripple and noise or<br>Blank : 10% output ripple and noise |  |
|        |           |                          | 360 : 36V      |                                  | 36V                  |                 |  | 070: 700mA                               |
|        |           |                          | 480 : 48V      |                                  | 48V                  |                 |  | 053: 530mA<br>035: 350mA                 |
|        |           | A : Single O/P with IP67 | 240 : 24V      |                                  | 24V                  |                 |  | 110: 1100mA<br>105: 1050mA<br>070: 700mA |
|        |           |                          | 360 : 36V      |                                  | 36V                  |                 |  | 070: 700mA                               |
|        |           |                          | 480 : 48V      |                                  | 48V                  |                 |  | 053: 530mA<br>035: 350mA                 |

**Specifications**

**INPUT SPECIFICATIONS:**

AC Input Voltage ..... 90~305Vac  
 Frequency ..... 47 to 63Hz  
 Power Factor.....115Vac/230Vac.....PF≥0.9 at 75%~100%Load  
 .....277Vac.....PF≥0.9 at 100% Load  
 Inrush Current.....<5A After 100µS @240Vac, Cold Start @25°C  
 Leakage Current .....0.5mA max.  
 No load Consumption.....1W typ.

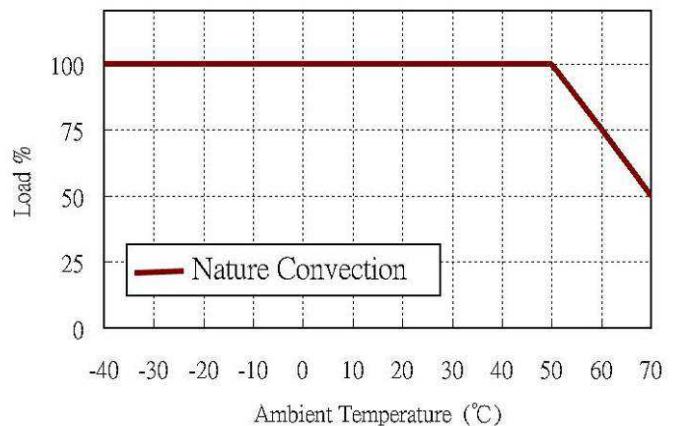
**OUTPUT SPECIFICATIONS:**

Maximum Output Voltage..... See Table  
 Constant Current Accuracy...(note1).....±5%max.  
 Current Line Regulation .....(note 2)..... ±5%max.  
 Current Load Regulation.....(note 3)..... ±5%max.  
 Start up time.....0.5 second max.  
 Over Voltage Protection.....TVS Clamp  
 Short Circuit Protection..... Hiccup Mode, Auto Recovery

**GENERAL SPECIFICATIONS:**

Efficiency.....See Table  
 Temperature .....±0.05%/°C (0~50°C)  
 Isolation voltage, Input to output.....3.75KVac  
 Isolation resistance, Input to output.....10<sup>8</sup>Ω min.  
 Operating Ambient Temperature .....-40°C~70°C(see derating curve)  
 Cooling.....natural  
 Storage Temperature..... -40 ~ 85°C  
 Operating Humidity.....20%~95%RH non-condensing.  
 Operating Altitude.....Sea Level to 3000m  
 MTBF,MIL-HDBK-217F(25°C Ta) . . . . . 200K hrs.  
 Dimensions,.....5.511x1.181x0.787Inches (140.00x30.00x20.00mm)  
 Weight.....100g

**LDP25 Series Derating Curve**



**SAFETY AND EMISSIONS:**

Safety .....UL8750, IEC/EN61347-1  
 IEC/EN61347-2-13,  
 EMI.....FCC Part 18/EN55015 Class B  
 EMS.....EN61547,EN61000-4-2,3,4,5,6  
 EN61000-3-2 Harmonic Class C,EN61000-3-3

**NOTE:**

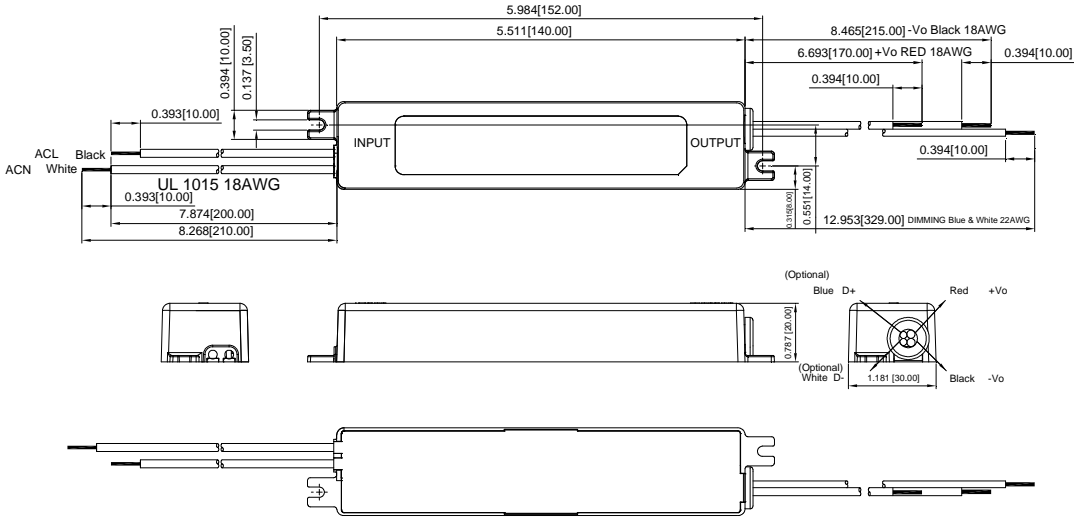
1. Current accuracy is set at nominal input voltage and full load.
2. Line regulation is measured from High Line to Low Line with full load.
3. Load regulation is measured minimum to maximum of the constant current region
4. Nominal Input Voltage at 230Vac
5. The input/output wires accessibility shall be evaluated during final system assembly.

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**Mechanical Specification**

**Standard Cable for LDP25Sxxx-PxxxBR, LDP25Axxx-PxxxBR**

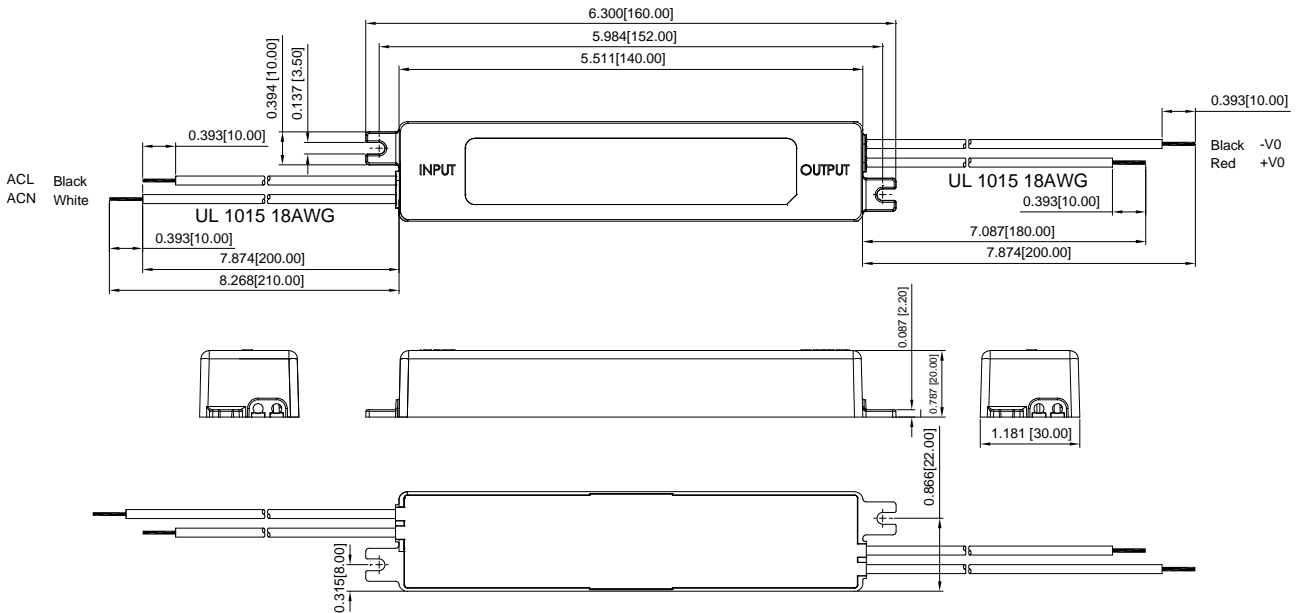
All Dimensions are in inches(mm)  
 Tolerance: Inches: X.XXX±0.02  
 Millimeters: X.XX±0.5  
 UNIT : inches(mm)



| WIRE CONNECTION |            |             |
|-----------------|------------|-------------|
| COLOR           | NO DIMMING | PWM DIMMING |
| BLUE            | (N.A.)     | D+          |
| WHITE           | (N.A.)     | D-          |
| RED             | +VO        | +VO         |
| BLACK           | -VO        | -VO         |

**Standard Cable for LDP25Sxxx-CxxxBx, LDP25Axxx-CxxxBx**

All Dimensions are in inches(mm)  
 Tolerance: Inches: X.XXX±0.02  
 Millimeters: X.XX±0.5  
 UNIT : inches(mm)



All specifications are Typical at nominal line , full load and 25°C unless otherwise noted