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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!



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# 80W Constant Voltage LED Driver PDA080 Series for Outdoor Lighting





## **Features**

- High Efficiency
- Class 2 per UL1310
- 5 Year Warranty
- OVP, Short and Open Circuit Protection
- IP67 waterproof, Potted
- Wide Operating Temperature Range
- Brownout/Brownout Recovery
- 120V-277V AC Operation

# Applications

- General Lighting
- Street Lighting

- Outdoor Lighting
- Architectural Lighting

# **Safety Approvals**

• CE

• cUL/UL

# **Mechanical Characteristics**

Length: 241mm (9.5in)Width: 43mm (1.7in)

Height: 30.5mm (1.2in)Weight: 750g (1.65lbs)

# **Output Specifications**

Model <sup>(1)</sup>	Output Voltage	Output Current			Output
		Min.	Тур.	Max.	Power <sup>(2)</sup>
PDA080X-48VG	48V	0A	1.67A	1.70A	80W

Note (1): X is B for non-dimming or W for 0-10V Dimming

Note (2): Output power derated to 72W when input voltage is <100VAC

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# PDA080X Characteristics

# **Input:**

**AC Input Voltage Rating** 

90VAC to 304VAC

**AC Input Frequency** 

47~63Hz

**Maximum Input Current** 

< 2A

**Leakage Current** 

0.5mA maximum at 230VAC Input

**Inrush Current** 

 $\leq 20A$ 

**OUTPUT:** 

**Power Factor** 

> 0.9 at nominal

**Ripple and Noise** 

<7% (p-p)

**Efficiency (Target)** 

87% at 277VAC 85% at 120VAC

**Turn-on Delay Time** 

0.5s maximum at nominal AC Power ON

**Environmental:** 

**Temperature** 

 $-40 \text{ to } +60^{\circ}\text{C}$ Operation Non-operation  $-40 \text{ to } +85^{\circ}\text{C}$ 

Operating Humidity 10 to 95%

**Case Temperature** 

80°C maximum

Warranty

5 Years

**Dimming Function: (W Models)** 

**Dimming Control** 

0-10VDC

**Dimming Output to Load** 

PWM at 500Hz

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# **Dimming Grounding**

Dim(-) and Vout(-) must never be connected together to ensure proper operation and isolation requirements

#### **EMC**

EN55015/CISPR 15, FCC 47 CFR Part 15/18, Class A

# **Immunity**

IEC61000-4-2

IEC61000-4-3

IEC61000-4-4

IEC61000-4-5\*

IEC61000-4-6

IEC61000-4-8

IEC61000-4-11

IEC61000-3-2 Class C

\*Surge Differential mode: 2.0kV, Common mode: 4.0kV

# Ring Wave Surge (ANSI C62.41.2 Cat A)

Differential mode: 4.0kV Common mode: 6.0kV

# **Input Over Current Protection**

The input power line will be fused with a 3.15A fuse

# **Short-Circuit Protection**

The PSU will withstand a short circuit across the outputs without damage

## **Open Circuit Protection**

Once the circuit is opened, the output voltage should be less than 120% at nominal AC input conditions

# **Dielectric Withstand (Hi-pot) Test**

Primary to secondary: 4242VDC for 1 minute, 5mA

# **Insulation Resistance**

Primary to secondary: >5M Ohm 500VDC, 1 Minute

#### **Design Life**

50K hours at full power, ambient 50°C and Tcase < rating

## **Wire Connections**

Position	Terminal Color	Specification
Line	Black	AWG18 solid wire
Neutral	White	AWG18 solid wire
Ground	Green/Yellow	AWG18 solid wire
Vout+	Red	AWG18 solid wire
Vout-	Blue	AWG18 solid wire
Dim+	Violet	AWG18 Solid wire
Dim-	Grey	AWG18 Solid Wire

