



**40W Dimmable Constant Current LED Driver**  
**PDA040W Waterproof LED Driver with 0-10V Dimming**



**Features**

- Class 2 Output per UL1310
- OVP, OCP, Over-Load and Short-Circuit Protection & Brownout Protection
- IP67 Rated
- $\geq 0.9$  Power Factor Correction & THD <20%

**Applications**

- Down lights
- Area Lights
- Architectural lighting

**Safety Approvals**

- cUL/UL 8750
- Class 2 Output per UL1310
- CE
- IEC/EN61347-1, IEC/EN61347-2-13

**Mechanical Characteristics**

- Length: 162.5mm (6.39in)
- Width: 43mm (1.69in)
- Height: 32mm (1.26in)
- Weight: 342g (12.1oz)

**Output Specifications**

Model	DC Output Voltage			Output Current	Output Power
	Min.	Typ.	Max.		
PDA040W-700B	37.8V	-	54V	700mA	38W
PDA040W-1A0B	26.6V	-	38V	1050mA	40W
PDA040W-1A4B	18.2V	-	26V	1400mA	37W

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**INPUT:**

**AC Input Voltage Rating**  
100VAC to 277VAC

**AC Input Frequency**  
47~63Hz

**Maximum Input Current**  
≤ 0.8A

**Leakage Current**  
0.25mA maximum

**Power Factor**  
≥ 0.9

**THD**  
< 20%

**OUTPUT:**  
**Output Current Ripple**  
<40%

**Efficiency**

Model	Typical Efficiency
PDA040W-700B	89%
PDA040W-1A0B	88%
PDA040W-1A4B	88%

**Auxiliary Power Supply**  
12V semi regulated (11-14Vdc)  
0-10mA

**Voltage Dimming Function:**  
0-10VDC

**Resistive Dimming\***

Resistor must be placed between Dim+ and Dim- for operation.  
See following page for dimming table.

**Environmental:**

**Temperature**

Operation case                   +75°C  
Non-operation                   -40 to +80°C  
Operating Humidity           20 to 95%

\*Output derates from 50°C to 62°C Ta

**EMC**

FCC 47 Part 15 Class B, EN55015 Class B

**Immunity**

IEC61000-4-2  
IEC61000-4-4  
IEC61000-4-5  
IEC61000-4-11

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

Primary to secondary: 3000VAC for 1 minute, 10mA

**Insulation Resistance**

Primary to secondary: >10M Ohm 500VDC, 1 Minute

**FEATURES:**

**Short-Circuit Protection**

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

**Input Over Current Protection**

The input power line will be fused with a 2A/300V fuse

**Output Over-voltage Protection**

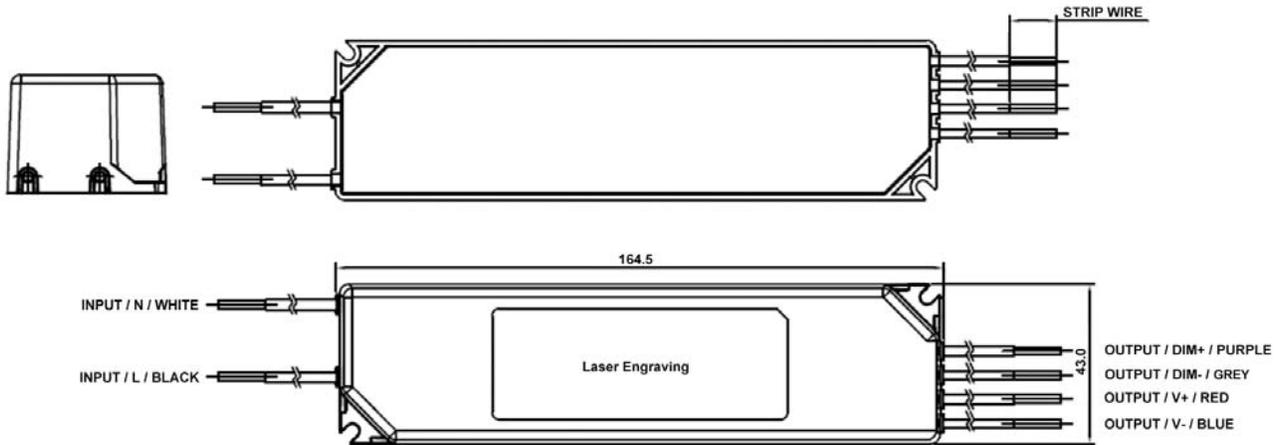
Auto shutdown

**Input / Output Connections**

Position	Terminal Color	Specification	Length
Input	Black	AWG16 Solid Wire	350mm
	White	AWG16 Solid Wire	350mm
Output	Red	AWG18 Solid Wire	350mm
	Blue	AWG18 Solid Wire	350mm
Dim+	Purple	AWG20 Solid Wire	350mm
Dim-	Grey	AWG20 Solid Wire	350mm

**Warranty**

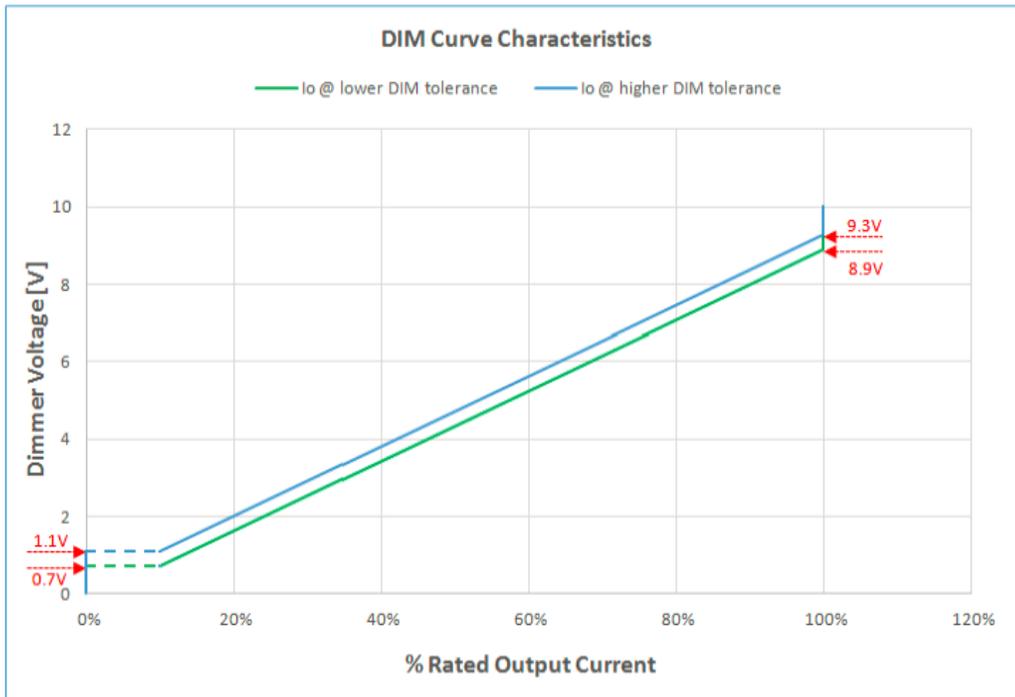
5 Years



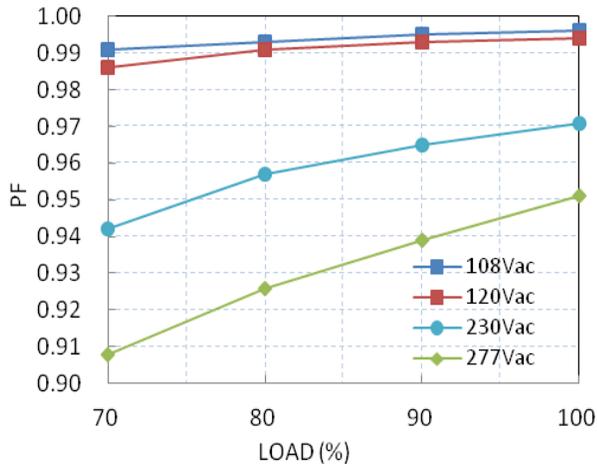
## Dimming Characteristics

### Resistive Dimming Functions

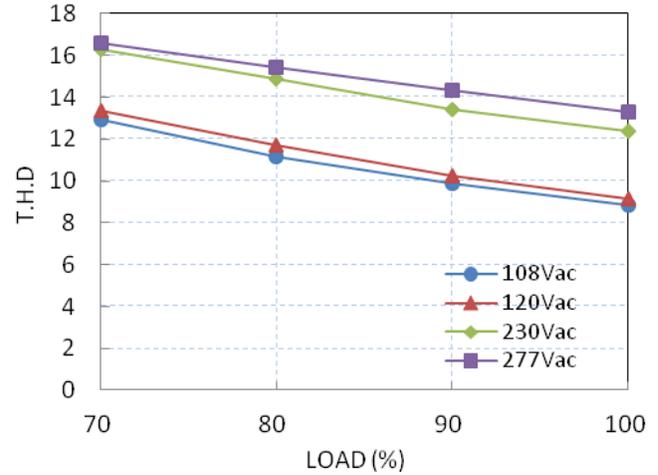
Resistance Value	0kΩ	9kΩ	13kΩ	23kΩ	45kΩ	68kΩ	91kΩ
Dim Voltage	0V	0.9V	1.3V	2.3V	4.5V	6.8V	9.1V
Output Current	Off	Off	15%	25%	50%	75%	100%



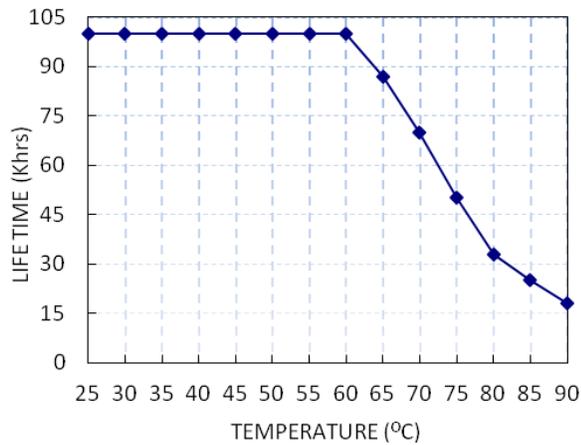
Power Factor vs. Load



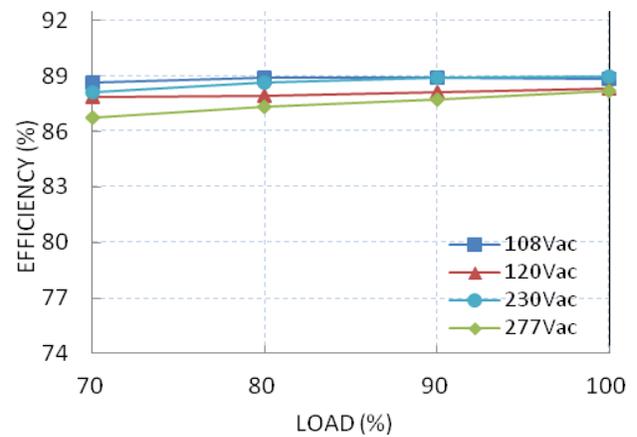
Total Harmonic Distortion vs. Load



Lifetime vs. Tc

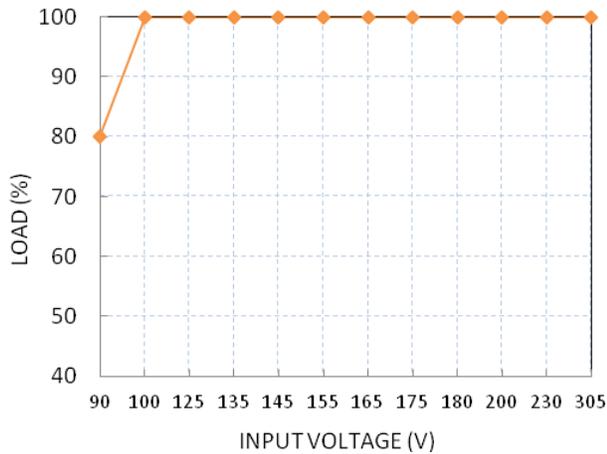


Efficiency vs. Load (PDA040W-700B)

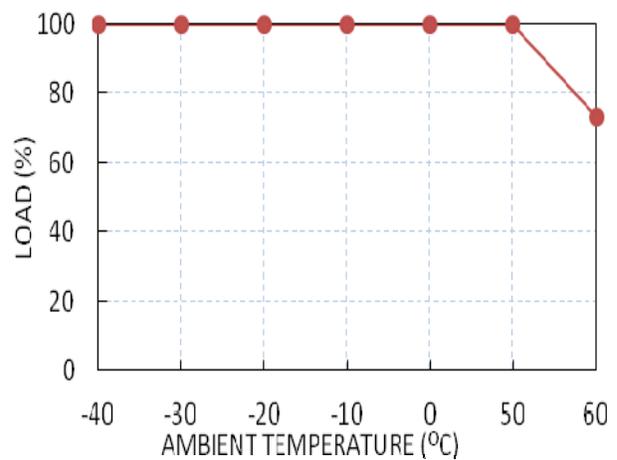


Temperature Rating

Static Characteristic: Load vs. Input Voltage



Derating Curve: Load vs Ta



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