



## 40W Dimmable Constant Current LED Driver PDA041W Waterproof LED Driver with 0-10V Dimming



### Features

- Class 2 per UL1310
- OVP, OCP, Over-Load and Short-Circuit Protection
- >0.9 Power Factor Correction
- 5 Year Warranty
- IP67 Rating - waterproof
- THD <20%
- UL 8750 Compliant
- 0-10V and Resistive Dimming
- Brownout/Brownout Recovery

### Applications

- Down lights
- Area Lights
- Architectural lighting

### Safety Approvals

- cUL/UL

### Mechanical Characteristics

- Length: 95mm (3.74in)
- Width: 71mm (2.79in)
- Height: 32mm (1.26in)
- Weight: N/A

### Output Specifications

Model	DC Output Voltage			Output Current	Output Power
	Min.	Typ.	Max.		
PDA041W-700B	39V	-	54V	700mA	38W
PDA041W-1A0B	28V	-	38V	1050mA	40W
PDA041W-1A4B	18V	-	26V	1400mA	37W

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## PDA041W Specifications

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### INPUT:

**AC Input Voltage Rating**  
120VAC to 277VAC

**AC Input Frequency**  
47~63Hz

**Maximum Input Current**  
 $\leq 0.8A$

**Leakage Current**  
0.5mA maximum

**Power Factor**  
 $\geq 0.9$

**THD**  
Less than 20%

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

### Efficiency

Model	Typical Efficiency
PDA41W-700B	89%
PDA41W-1A0B	88.5%
PDA41W-1A4B	88%

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

**Dimming Function:**  
Resistance or 0-10VDC dimming  
(See Characteristics below)  
Resistor must be placed between Dim+ and Dim- for operation.  
See following page for dimming table.

### Environmental:

#### Temperature

Operation\* -40 to +62°C  
Non-operation -40 to +80°C  
Operating Humidity 20 to 95%

\*Output derates from 50°C to 62°C

**Warranty**  
5 Years

### EMC

FCC 47 Part 18 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

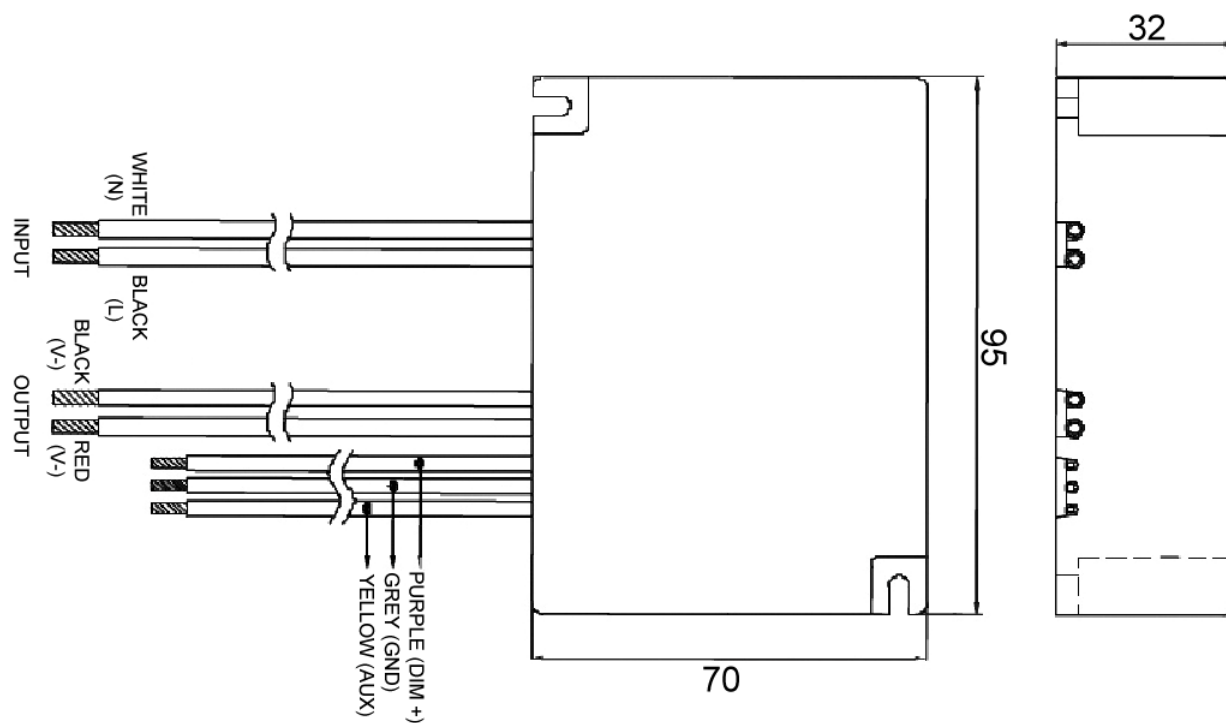
The input power line will be fused with a 2A/300V fuse

#### Output Over-voltage Protection

Auto shutdown

### Input / Output Connections

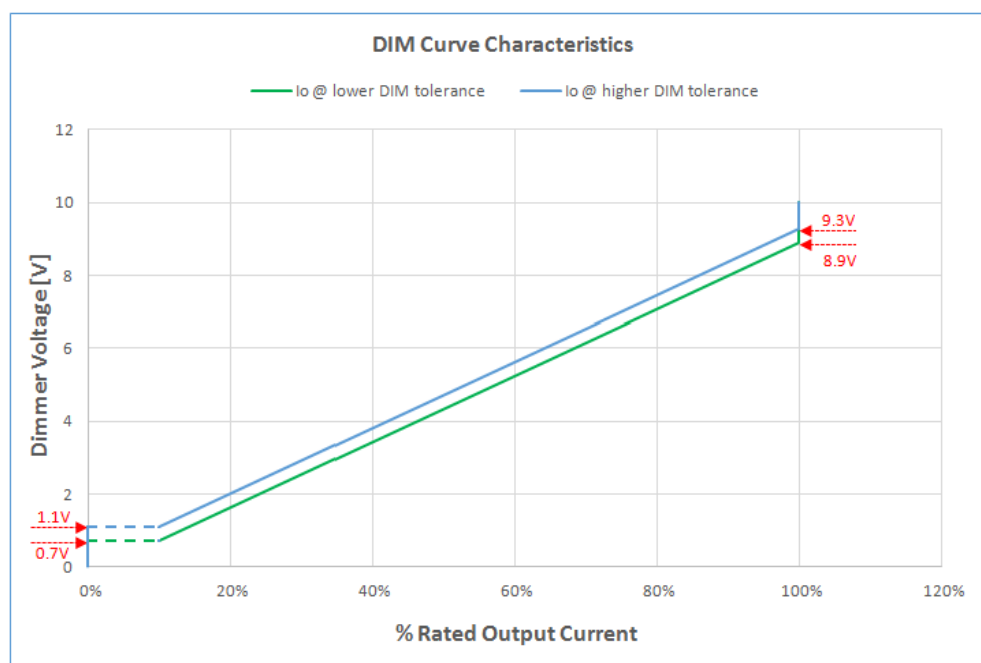
Position	Terminal Color	Specification
Input	Black	AWG16 Solid Wire
	White	AWG16 Solid Wire
Output	Red	AWG18 Solid Wire
	Blue	AWG18 Solid Wire
Dim+	Purple	AWG20 Solid Wire
Dim-	Grey	AWG20 Solid Wire
Auxiliary	Yellow	AWG20 Solid Wire



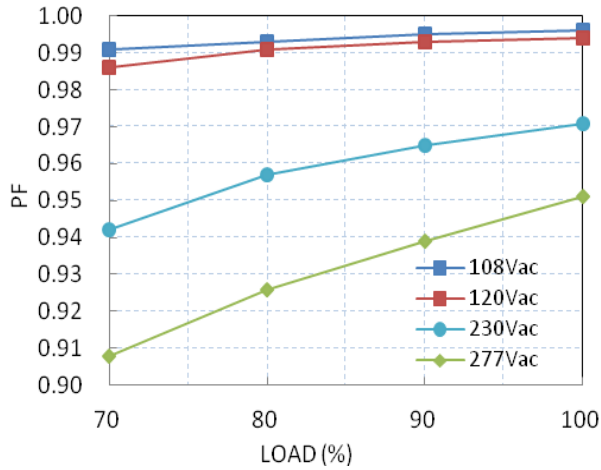
## Dimming Characteristics

### Resistive Dimming Functions

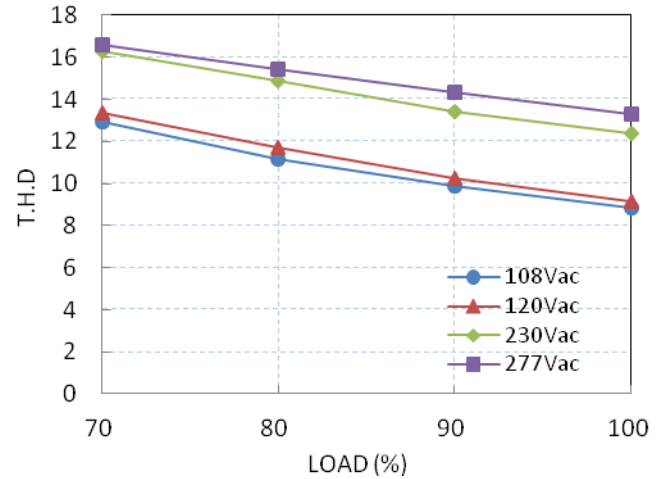
Resistance Value	0k $\Omega$	9k $\Omega$	13k $\Omega$	23k $\Omega$	45k $\Omega$	68k $\Omega$	91k $\Omega$
Dim Voltage	0V	0.9V	1.3V	2.3V	4.5V	6.8V	9.1V
Output Current	Off	Off	15%	25%	50%	75%	100%



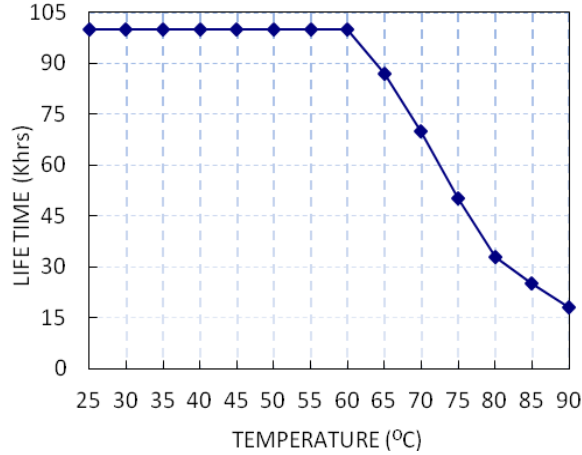
Power Factor vs. Load



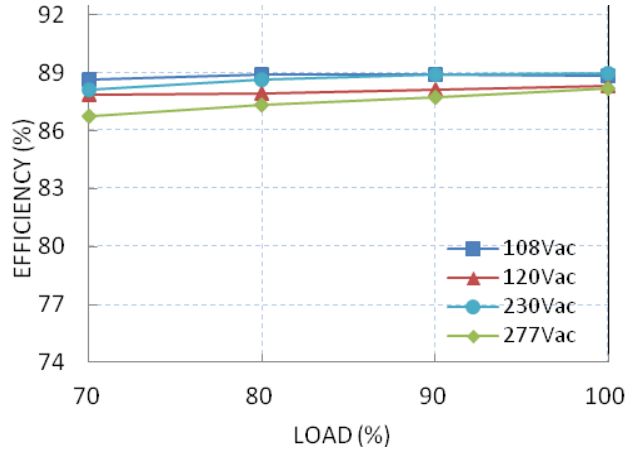
Total Harmonic Distortion vs. Load



Lifetime vs. Tc

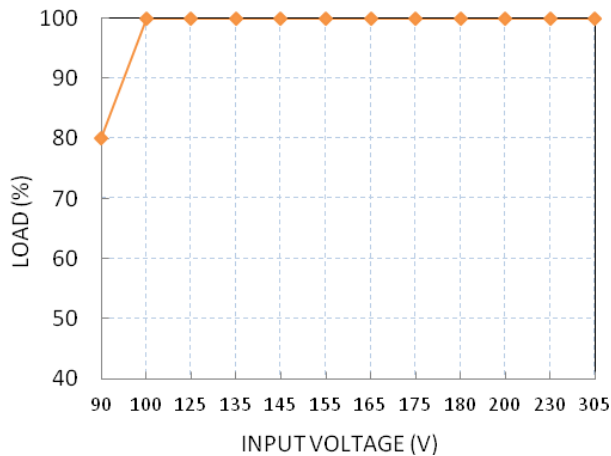


Efficiency vs. Load (PDA041W-700B)

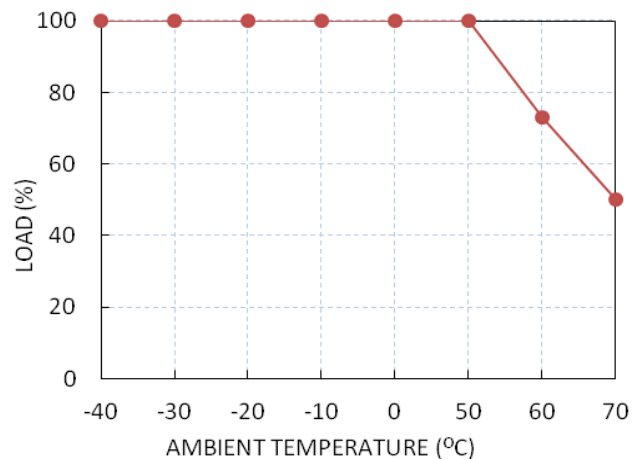


## Temperature Rating

Static Characteristic: Load vs. Input Voltage



Derating Curve: Load vs Ta





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