



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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INPUT:

AC Input Voltage Rating
120VAC to 277VAC

AC Input Frequency
47~63Hz

Maximum Input Current
≤ 0.8A

Leakage Current
0.5mA maximum

Power Factor
≥ 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

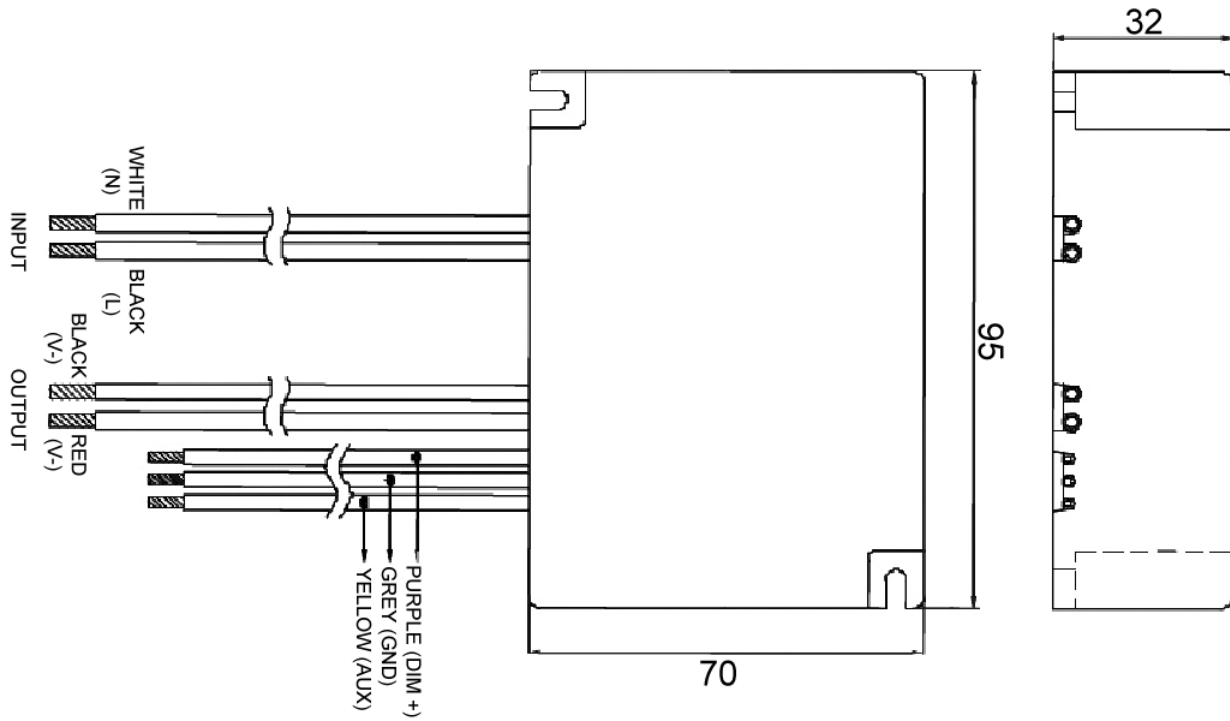
The input power line will be fused with a 2A/300V fuse

Output Over-voltage Protection

Auto shutdown

Input / Output Connections

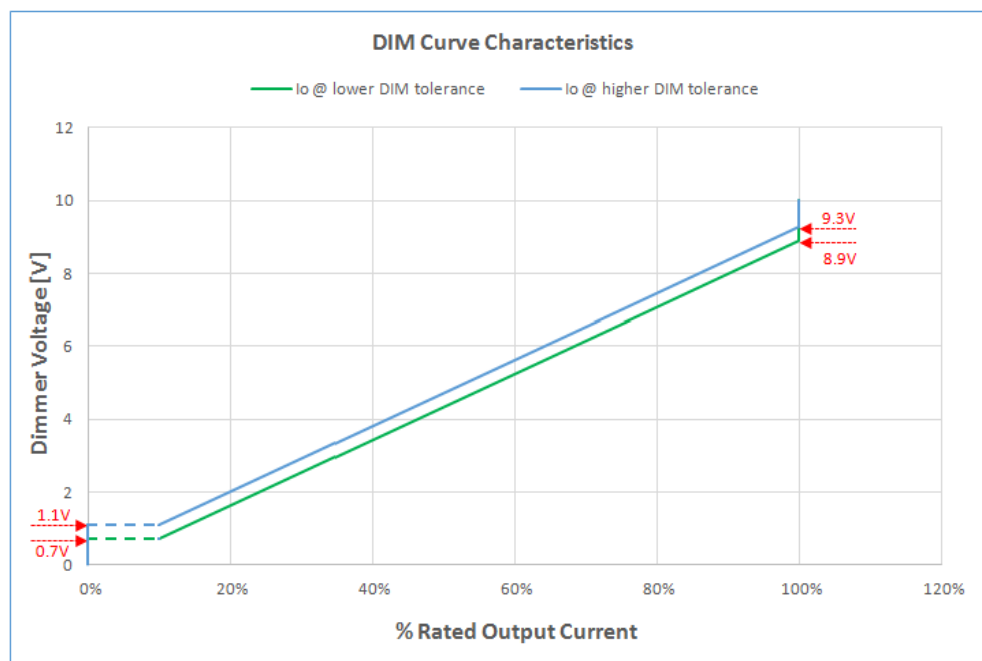
Position	Terminal Color	Specification
Input	Black	AWG16 Solid Wire
	White	AWG16 Solid Wire
Output	Red	AWG18 Solid Wire
	Blue	AWG18 Solid Wire
Dim+	Purple	AWG20 Solid Wire
Dim-	Grey	AWG20 Solid Wire
Auxiliary	Yellow	AWG20 Solid Wire



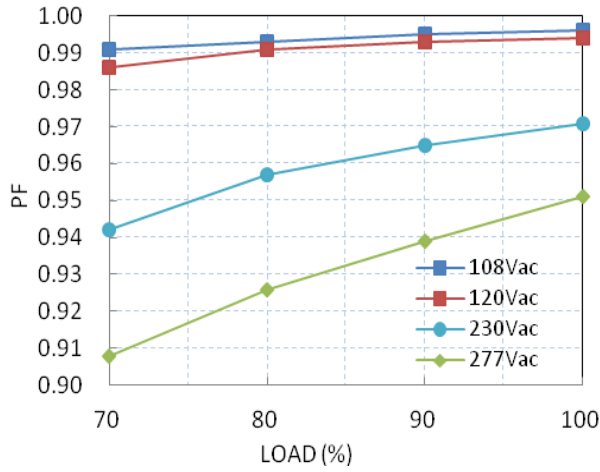
Dimming Characteristics

Resistive Dimming Functions

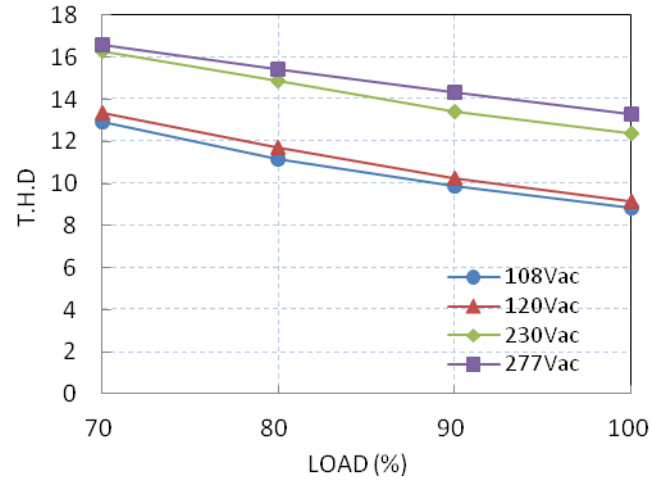
Resistance Value	0kΩ	9kΩ	13kΩ	23kΩ	45kΩ	68kΩ	91kΩ
Dim Voltage	0V	0.9V	1.3V	2.3V	4.5V	6.8V	9.1V
Output Current	Off	Off	15%	25%	50%	75%	100%



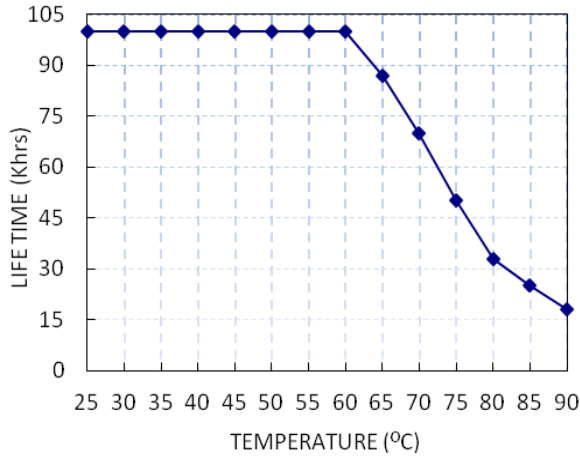
Power Factor vs. Load



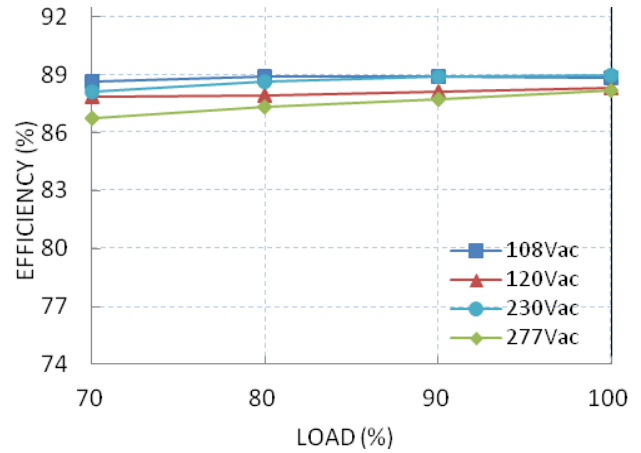
Total Harmonic Distortion vs. Load



Lifetime vs. Tc

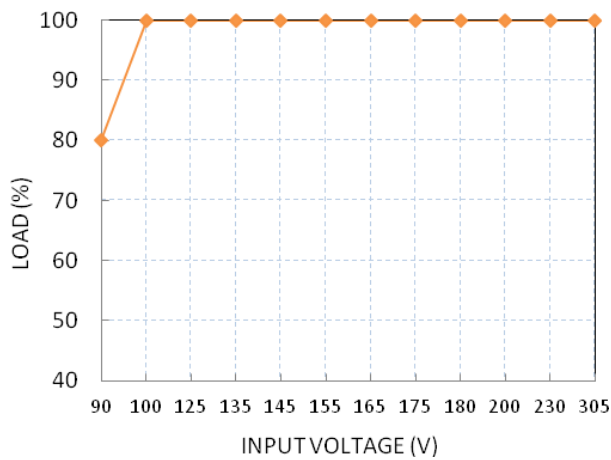


Efficiency vs. Load (PDA041W-700B)



Temperature Rating

Static Characteristic: Load vs. Input Voltage



Derating Curve: Load vs Ta

