



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
- ≥ 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

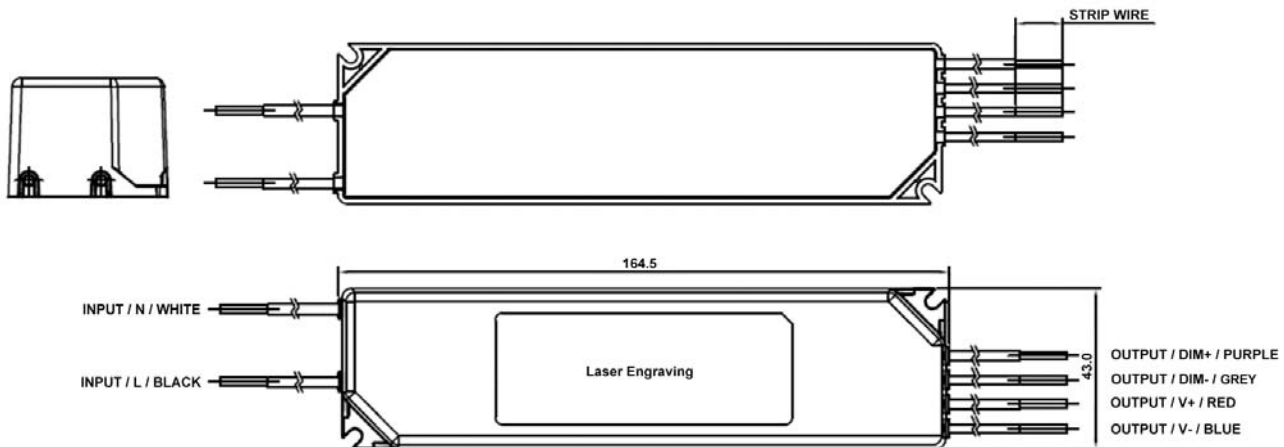
Auto shutdown

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

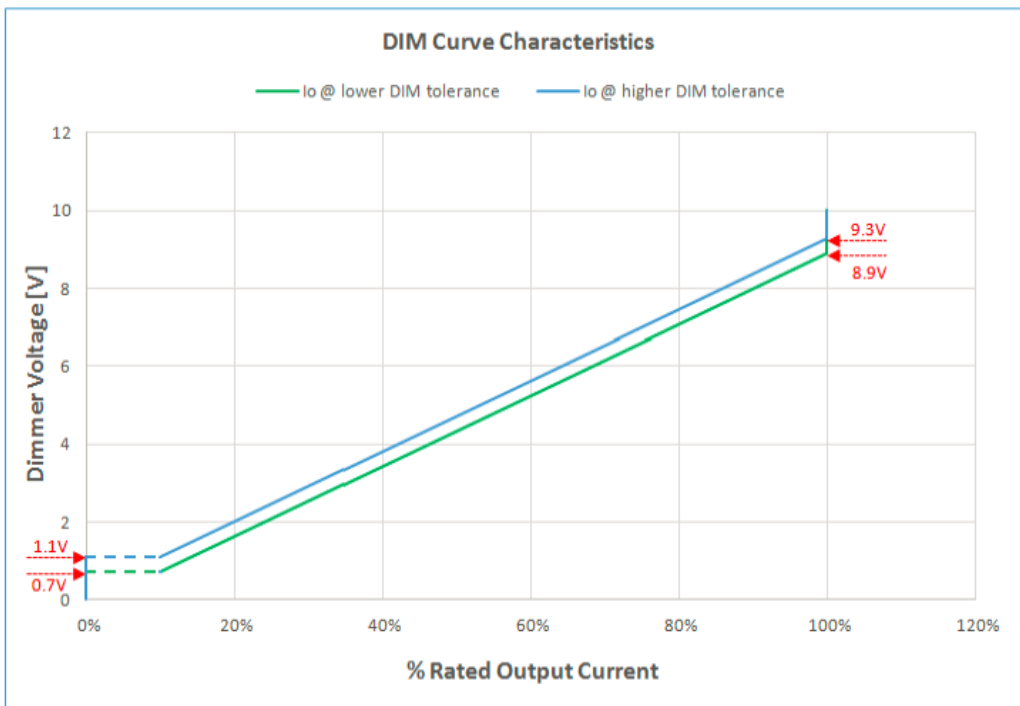
5 Years



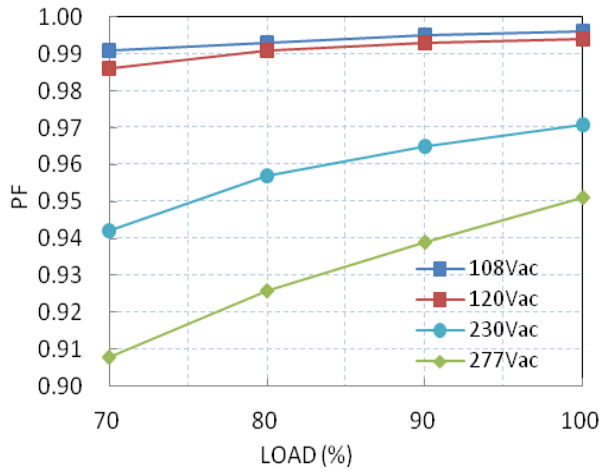
Dimming Characteristics

Resistive Dimming Functions

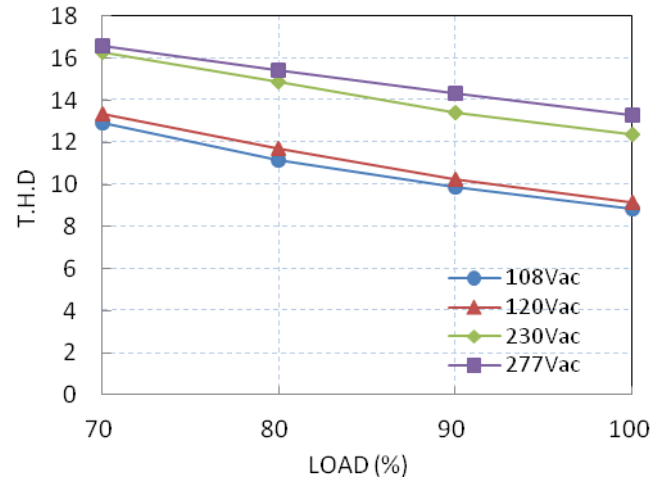
Resistance Value	0kΩ	9kΩ	13kΩ	23kΩ	45kΩ	68kΩ	91kΩ
Dim Voltage	0V	0.9V	1.3V	2.3V	4.5V	6.8V	9.1V
Output Current	Off	Off	15%	25%	50%	75%	100%



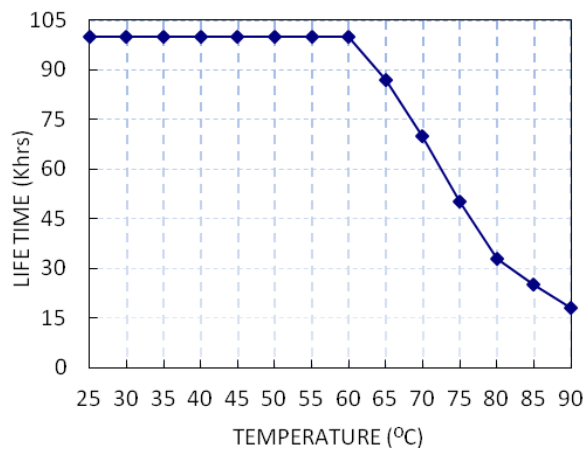
Power Factor vs. Load



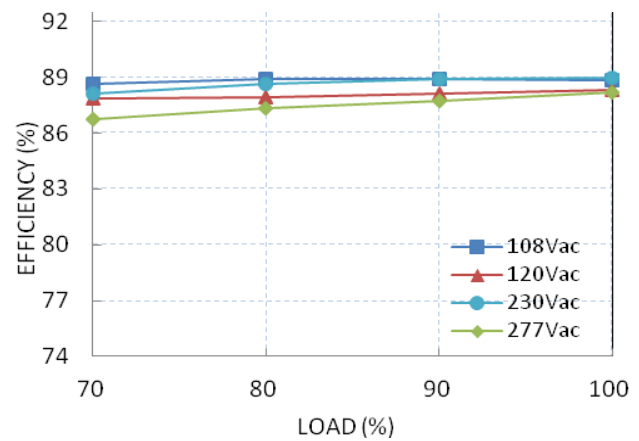
Total Harmonic Distortion vs. Load



Lifetime vs. Tc

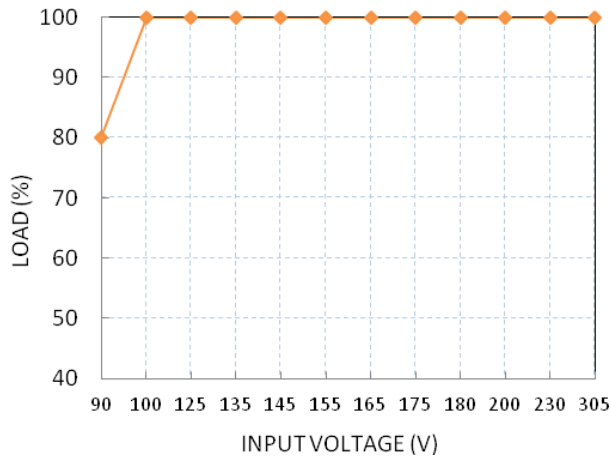


Efficiency vs. Load (PDA040W-700B)



Temperature Rating

Static Characteristic: Load vs. Input Voltage



Derating Curve: Load vs Ta

