

Features

LED Driver

- 3W Class II AC-DC LED Power Supply
- 350mA Constant Current Output
- Drives 1 - 3 High brightness LEDs
- Universal Input Voltage Range
- Fused Input and Protected Output
- 3kVAC Isolation
- IP64
- Low Cost
- 3 Year Warranty

LIGHTLINE

AC/DC-Converter

with 3 year Warranty



3 Watt Single Output



UL-8750 Pending
EN 61347 Certified

RACD03

Description

A compact universal AC input 3W constant current switching power module suitable for driving 1 - 3 high power LEDs (Vf = 3.6V). The output current is fixed at 350mA or 700mA. Connections are via 130mm long flying leads.

Selection Guide

Part Number	Nominal Input Voltage (VAC)	Input Current (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD03-350	universal	38	3-12	350	3 x 1W
RACD03-700	universal	20	3-6	700	1 x 2W

Specifications (typical at 25°C and after warm up time unless otherwise specified)

Input Voltage Range	90-264VAC	
Rated Power	3 Watts max.	
Input Frequency Range	47-63 Hz	
Power Factor	Full Load, 230VAC	0.5
Output Voltage Range	3 - 12VDC max.	
Inrush Current (<2mS)	230VAC	10A max.
Leakage Current	240VAC/50Hz	0.2mA typ.
Input Fuse	Built-in	T1A
Input Current	Full Load, 230VAC	38mA
Output Current Accuracy (combined Tolerance, Load Regulation and Line Regulation)	±10%	
Minimum Load	Open Circuit Protected	1 LED
Output Ripple	0.1Ap-p max.	
Hold Up Time	18ms min.	
Operating Frequency	66kHz typ.	
Efficiency at Full Load	55% typ.	
AC RMS Isolation Voltage (input to output)	3.75kV / 1 minute typ., 3KV/1 minute min.	
Temperature Coefficient	±0.02%/°C typ.	
Overload Protection	120% typ.	
Short Circuit Protection	Continuous Current Limit	
Output Overvoltage Protection	12V Zener Diode Clamp	
Overtemperature Protection	Shutdown, Automatic restart after cooling down	
Operating Temperature Range (free air convection)	Ambient Temperature	0°C to +50°C
	Case Temperature	80°C max.
Storage Temperature Range	-25°C to +85°C	
Humidity	95% RH max.	
IP Rating	IP64	

continued on next page

RACD03

LIGHTLINE

AC/DC-Converter

RACD03

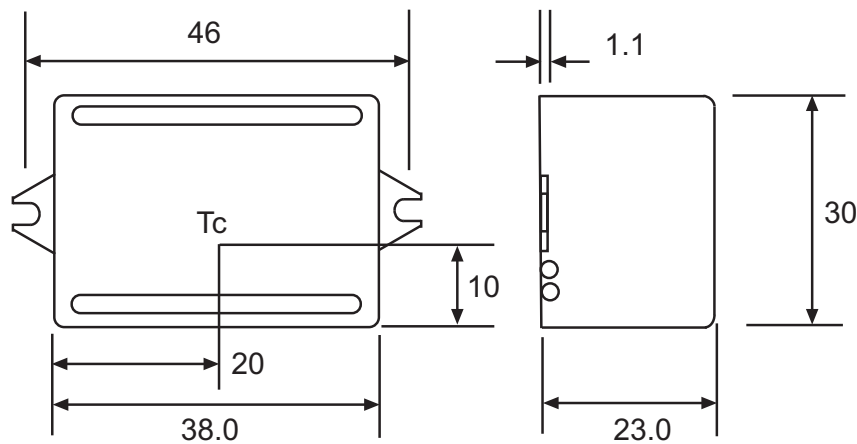
Series

Specifications cont. (typical at 25°C and after warm up time unless otherwise specified)

PCB Material	Plastic Resin with Fibreglass (UL94V-0)	
Case Material	Plastic	
Weight	45g	
Packing Quantity	1pc	
Designed to meet Standards	Electrical Lighting, EMC Emissions Limits for Harmonics Emissions EMC Compatibility: Flicker and Voltage Variations Electrical Lighting: EMC Immunity Class II Power Supply Safety FCC	EN55015:2006 + A1: 2007 + A2:2009 EN 61000-3-2:2006 EN 61000-3-3:2006 EN 61547:1995 + A1:2000 UL1310 FCC18A
Certifications	LED Lighting Safety SEMKO CE Certification, General Safety SEMKO CE Certification, Safety of AC supplied Control Gear for LED Modules	designed to meet UL8750 EN 61347-1: 2008 EN 61347-2-13: 2006
Design Lifetime	25°C ambient	>20 x 10 ³ hours in operation
Connections	AC Input Live AC Input Neutral LED + LED -	Brown Wire, AWG22, 130mm + 5mm stripped and tinned Blue Wire, AWG22, 130mm + 5mm stripped and tinned White Striped Black Wire, AWG24, 130mm + 5mm stripped and tinned* Black Wire, AWG24, 130mm + 5mm stripped and tinned*

* Do not connect or disconnect the LED load while the converter is on. This may damage the LED or reduce its life.

Package Style and Pinning



3rd angle projection

Wire Connections

Wire	Function
Brown	VAC in (L)
Blue	VAC in (N)
White	LED+
Black	LED-

Tolerance

XX = +1mm/ -0.5mm

XX.X = +/- 0.25mm

RACD03

2 Mounting screws are included

Tc = Case Temperature Measuring Point