

# Features

## LED Driver

- 3W Class II AC-DC LED Power Supply
- 350mA to 700mA Constant Current Output
- Drives 1 - 6 High brightness LEDs
- Universal Input Voltage Range
- Fused Input and Protected Output
- 3kVAC Isolation
- IP66
- Low Cost
- 3 Year Warranty

### Description

A compact universal AC input 3W constant current switching power module suitable for driving 1 - 6 high power LEDs. The output current is fixed at 350mA, 500mA or 700mA. Connections are via 118mm 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
RACD03-500	universal	25	3-9.5	500	6 x 0.5W
RACD03-700	universal	20	3-4.5	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	-20°C to +50°C
	Case Temperature	85°C max.
Storage Temperature Range	-25°C to +85°C	
Humidity	95% RH max.	
IP Rating	IP66	

continued on next page

**LIGHTLINE**  
AC/DC-Converter  
with 3 year Warranty

**RECOM**

**3 Watt  
Single  
Output**



**UL-8750 Pending  
EN 61347 Certified**

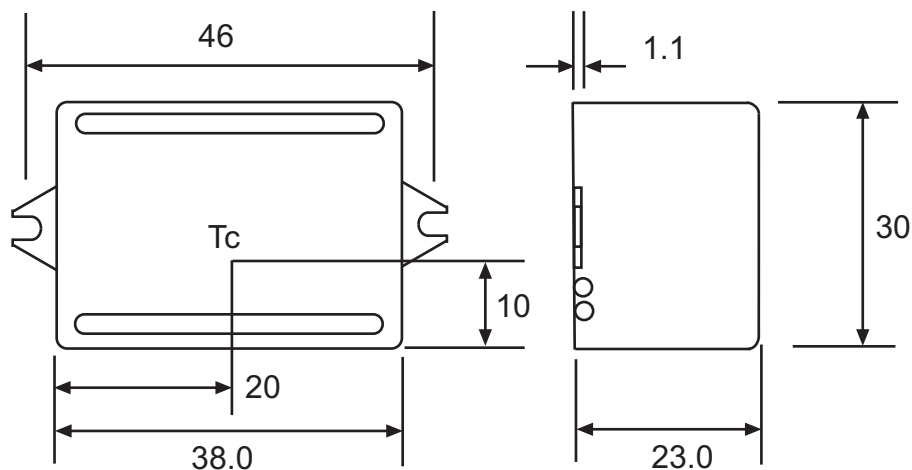
**RACD03**

**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 General Safety 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 <sup>3</sup> hours in operation
Connections	AC Input Live AC Input Neutral LED + LED -	Brown Wire, AWG22, 118mm + 5mm stripped and tinned Blue Wire, AWG22, 118mm + 5mm stripped and tinned Red Striped Wire, AWG24, 118mm + 5mm stripped and tinned* Black Wire, AWG24, 118mm + 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**



**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

2 Mounting screws are included

Tc = Case Temperature Measuring Point