

# Features

## LED Driver

- 6W AC-DC Class II LED Power Supply
- 350mA to 700mA Constant Current Output
- Drives 1 - 12 High brightness LEDs
- Universal Input Voltage Range
- Fused Input, Protected Output
- 3kVAC Isolation
- Low Cost
- 3 Year Warranty

## Description

A compact universal input 6W constant current switching power module suitable for driving up to 12 high power LEDs. The output current is fixed at 350mA, 500mA or 700mA. If the LED load is too high (Vout 22V for 350mA version, Vout 12V for 500mA version or Vout 8.4V for 700mA version) the converter will power limit and reduce the output current to 300mA, 490mA and 600mA respectively.

## Selection Guide

Part Number	Nominal Input Voltage (VAC)	Input Current at full load (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD06-350	universal	120	3-22	350	6 x 1W
RACD06-500	universal	120	3-12	500	12 x 0.5W
RACD06-700	universal	120	3-8.4	700	2 x 2W

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

Input Voltage Range	90-264VAC	
Rated Power	6 Watts max.	
Input Frequency Range	47-63 Hz	
Power Factor	Full Load, 115VAC/230VAC	0.5
Output Voltage Range	350mA Version	3 - 22VDC
	350mA derated to 300mA	up to 24V
	500mA Version	3 - 12VDC
	500mA derated to 490mA	up to 14V
	700mA Version	3 - 8.4VDC
	700mA derated to 600mA	up to 12V
Inrush Current (<2mS)	115VAC/230VAC	10A max.
Leakage Current	115VAC/240VAC - 60/50Hz	0.4mA typ.
Input Fuse (Built-in)	Standard	T2A
Input Current	Full Load, Nominal Vin	see table
Output Current Accuracy	(combined Tolerance, Load Regulation and Line Regulation)	±10%
Minimum Load	Open Circuit Protected	1 LED
Output Ripple		0.2A <sub>p-p</sub> max.
Hold Up Time		18ms min.
Operating Frequency		132kHz max.
Efficiency at Full Load		65% 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	350mA Version	24V Zener Diode Clamp
	500mA Version	14V Zener Diode Clamp
	700mA Version	12V Zener Diode Clamp
Overtemperature Protection	Shutdown, Automatic restart after cooling down	
Operating Temperature Range (free air convection)	Ambient Temperature	-20°C to +65°C
	Case Temperature	80°C max.

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

**RECOM**

**6 Watt  
Single  
Output**



**UL-8750 Certified  
EN 61347 Certified**

**RACD06**

Please Read Application Notes

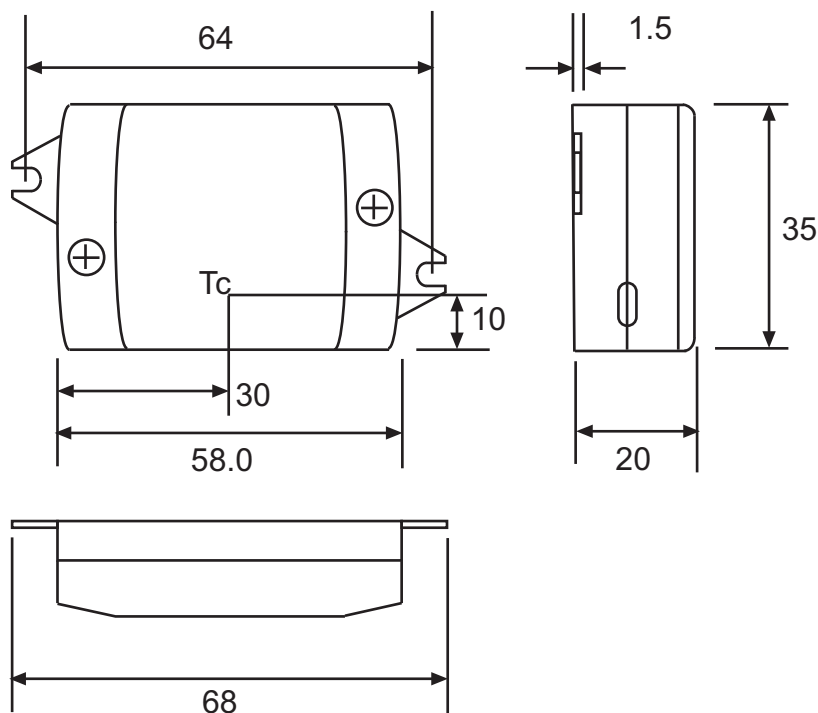
www.recom-electronic.com

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

Storage Temperature Range	-40°C to +85°C	
Humidity	95% RH max.	
IP Rating	IP20, Indoor Use Only	
Weight	34g	
Packing Quantity	1pc	
PCB Material	(UL94V-0)	Plastic Resin with Fibreglass
Case Material	(UL94V-0)	Plastic
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 (E340696) 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 LED Output	Screw terminal Screw Terminal*

\* 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**



Connections	
CN1	Function
L	VAC in (L)
N	VAC in (N)
CN2	Function
+	LED+
-	LED-

Tolerance  
XX = +/-0.5mm  
XX.X = +/-0.25mm

2 Mounting screws are included

Tc = Case Temperature Measuring Point