

## Features

### LED Driver

- 6W AC-DC Class II LED Power Supply
- 350mA to 700mA CC/CV Output
- ENEC, UL, RCM and CB Certified
- 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 (dual constant voltage / constant current mode) current limit is fixed at 350mA, 500mA or 700mA. At lower output currents, the output is constant voltage.

### Selection Guide

Part Number	Nominal Input Voltage (VAC)	Input Current at full load (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs	Efficiency typ. (%)
RACD06-350	universal	120	2.5-24	350	6 x 1W	79
RACD06-500	universal	120	2.5-15	500	12 x 0.5W	70
RACD06-700	universal	120	2.5-12	700	3 x 2W	72

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

Input Voltage Range	90-264VAC or 120-370VDC	
Rated Power	6W nom. / 7.5W max.	
Input Frequency Range	47-63 Hz	
Power Factor	Full Load, 115VAC/230VAC	0.4
Output Voltage Range	350mA CC	2.5 - 22VDC
	0-300mA CV	24V typ.
	500mA CC	2.5 - 13VDC
	0-490mA CV	15V typ.
	700mA CC	2.5 - 10VDC
	0-600mA CV	12V typ.
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.
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, according to CE/UL)	Ambient Temperature	-20°C to +40°C
	Case Temperature	70°C max.
Operating Temperature Range (free air convection, according to ENEC)	Ambient Temperature	-20°C to +50°C
	Case Temperature	70°C max.

continued on next page

## LIGHTLINE

### AC/DC-Converter

with 3 year Warranty

RECOM

## 6 Watt Single Output



**UL-8750 Certified**  
**EN 61347 Certified**  
**ENEC Certified**

## RACD06

Refer to Application Notes

## Specifications (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	10pc	
PCB Material	(UL94V-0)	Plastic Resin with Fibreglass
Case Material	(UL94V-0)	Plastic
Designed to meet Standards	Electrical Lighting, EMC Emissions	EN55015:2006 + A1: 2007 + A2:2009
	Limits for Harmonics Emissions	EN 61000-3-2:2006
	EMC Compatibility: Flicker and Voltage Variations	EN 61000-3-3:2006
	Electrical Lighting: EMC Immunity	EN 61547:1995 + A1:2000
	Class II Power Supply Safety	UL1310
	FCC	FCC18A
Certifications	LED Lighting Safety (E340696)	UL8750
	RCM (U21382)	AS/NZS 61347.1:2002, IEC 61347-2-13
	ENEC General Safety	EN 61347-1: 2008
	ENEC Safety of AC supplied Control Gear for LED Modules	EN 61347-2-13: 2006
Design Lifetime	25°C ambient	>20 x 10 <sup>3</sup> hours in operation
Connections	AC Input	Screw terminal
	LED Output	Screw Terminal

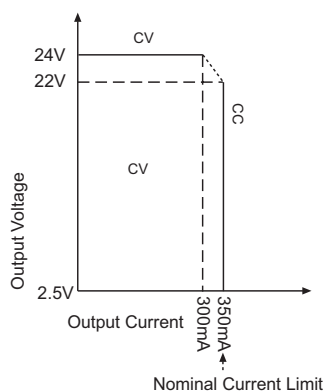
### Note:

All LED Drivers may not be used without a load. They must be switched on the primary side only. Noncompliance may damage the LED or reduce its lifetime.

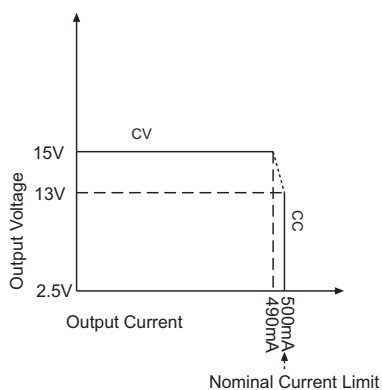
## Characteristics

### Constant Current (CC) and Constant Voltage (CV) Graph

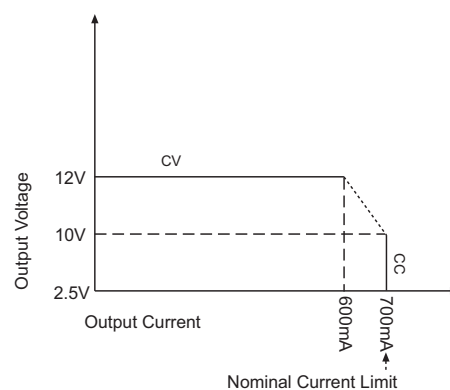
RACD06-350



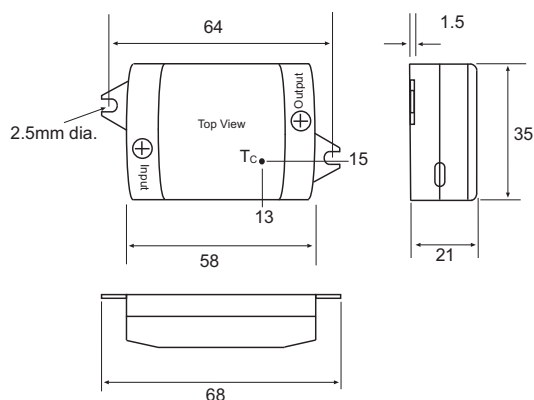
RACD06-500



RACD06-700



## Package Style and Pinning



2 Mounting screws are included

T<sub>c</sub> = Case Temperature Measuring Point

### Connections

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

### Tolerance

XX = +/-0.5mm

XX.X = +/-0.25mm