Features LED DRIVER	<ul> <li>350mA or 700mA Constant Current Output</li> <li>Drives 1 - 10 High Brightness LEDs</li> <li>Universal AC Input</li> <li>Active Power Factor Corrected &gt;0.95</li> <li>Fused Input, Protected Output</li> <li>3kVAC Input/Output Isolation</li> <li>Output Socket Connector</li> <li>cUL/UL-8750 Certified</li> <li>Low Cost</li> </ul>
	Long 5 Year Warranty

#### Description

A compact 12W constant current switching power module suitable for driving up to ten high power LEDs (Vf = 3.6V). The output current is fixed at 350mA, 500mA or 700mA. Active power factor correction is standard and the converters are UL8750 certified for use with LED assemblies. The driver modules features both screw terminal and socket output connections. The socket connecter avoids the possibility of miswiring and damaging the LED load if the LEDs are preassembled into a wiring harness or lamp fitting.

Selection Guide					
Part Number	Nominal Input Voltage (VAC)	Input Current at 230VAC (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD12-350	universal	200	3-36	350	10 x 1W
RACD12-500	universal	200	3-24	500	6 x 2W
RACD12-700	universal	200	3-17	700	4 x 2W, 8 x 1W

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

Input Voltage Range		90VAC-264VAC
Rated Power		12 Watts max.
Input Frequency Range		47-63 Hz
Power Factor	Full Load, 115VAC/230VAC	0.95
Open Circuit Voltage	350mA Version	39VDC
(Zener Clamp)	500mA Version	26VDC
	700mA Version	19VDC
Inrush Current (<2mS)	115VAC/230VAC	10A max.
Input Current	230VAC, Full Load	200mA max.
Leakage Current	115VAC/240VAC - 60/50Hz	0.5mA typ.
Input Fuse	Standard	T1A
Output Current Accuracy	(combined Tolerance, Load Regulation	and Line Regulation) ±10%.
Minimum Load	Open Circuit Protected	1 LED
Output Ripple		150mA max.
Hold Up Time		18ms min.
Operating Frequency		50-120kHz typ.
Efficiency at Full Load		78%
RMS Isolation Voltage (input 1	to output)	3kVAC / 1 minute
Temperature Coefficient		±0.02%/°C typ.
Overload Protection		120% typ.
Short Circuit Protection		Continuous Current Limit
Output Overvoltage Protection	n	Zener Diode Clamp
		continued on next page

# **LIGHTLINE** AC/DC-Converter

with 5 year Warranty



# 12 Watt PFC Single Output



**Please Read Application Notes** 

# **LIGHTLINE** AC/DC-Converter

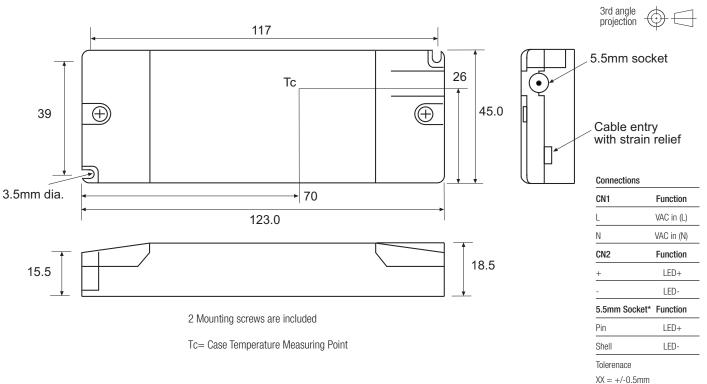
# RACD12

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

Overtemperature Protection	Shut	Shutdown, Automatic restart after cooling down		
Operating Temperature Range	Amb	pient Temperature	-20°C to +50°C	
(free air convection)	Case	e Temperature	85°C max.	
Weight			100g	
Packing Quantity			1pc	
Storage Temperature Range			-40°C to +100°C	
Humidity			95% RH max	
IP Rating			P20, Indoor Use Only	
PCB Material		Plastic Resin with Fibreglass (UL94V-0)		
Case Material			Plastic	
Designed to meet Standards	Electrical Lighting, EMC Emissions EN5501		15:2006 + 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 615	EN 61547:1995 + A1:2000	
	Class II Power Supply Safety	C	complies with UL1310	
	FCC	C	complies with FCC18A	
THD			<20%	
Certifications	LED Lighting Safety		UL8750	
	LED Lighting Safety (Canada)		cUL8750	
			EN 61347-1: 2008	
	SEMKO CE Certification, Safety of AC supplied Control Gear for LED	Modules E	N 61347-2-13: 2006	
Design Lifetime	25°C ambient	_70 v 1	0 <sup>3</sup> hours in operation	
Connections	AC Input	210 X 1	Screw terminal	
	LED Output	Screw Terminal		
	LED Output 5.5mm Socket with 2mm Pin (Suitable n	natching plug Switch		

\* 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



XX.X =+/-0.25mm