

Features

LED DRIVER

- 12W AC/DC LED Power Supply
- 350mA or 700mA Constant Current Output
- Drives 1 - 10 High Brightness LEDs
- Universal AC Input
- Active Power Factor Corrected >0.95
- Fused Input, Protected Output
- 3kVAC Input/Output Isolation
- Output Socket Connector
- UL-8750 Certified
- Low Cost
- 5 Year Warranty

Description

A compact 12W constant current switching power module suitable for driving up to ten high power LEDs ($V_f = 3.6V$). 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 connector avoids the possibility of miswiring and damaging the LED load if the LEDs are pre-assembled 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
RACD12-700	universal	200	3-15	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
Output Voltage Range	350mA Version	3 - 36VDC
	700mA Version	3-15VDC
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 to output)	3kVAC / 1 minute	
Temperature Coefficient	±0.02%/°C typ.	
Overload Protection	120% typ.	
Short Circuit Protection	Continuous Current Limit	
Output Overvoltage Protection	350mA Version	36V Zener Diode Clamp
	700mA Version	15V Zener Diode Clamp

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LIGHTLINE AC/DC-Converter



12 Watt PFC Single Output



UL-8750 Certified

RACD12

Please Read Application Notes

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

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.
Weight	100g	
Packing Quantity	1pc	
Storage Temperature Range	-40°C to +100°C	
Humidity	95% RH max.	
IPRating	IP20	
PCB Material	Plastic Resin with Fibreglass (UL94V-0)	
Case Material	Plastic	
Designed to meet Standards	Lamp Control Gear, General Safety	EN 61347-1
	Lamp Control Gear for LED Modules	EN 61347-2-13
	Electrical Lighting, EMC Emissions	EN55015
	Limits for Harmonics Emissions	EN 61000-3-2
	EMC Compatibility: Flicker and Voltage Variations	EN 61000-3-3
	Electrical Lighting: EMC Immunity	EN 61547
	Class II Power Supply Safety	UL1310
THD	<20%	
Certifications	LED Lighting Safety	UL8750
Design Lifetime	25°C ambient	>70 x 10 ³ hours in operation
Connections	AC Input	Screw terminal
	LED Output	Screw Terminal
	LED Output	5.5mm Socket with 2mm Pin (Suitable matching plug Switchcraft S760 or similar)

Package Style and Pinning

