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
- 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	3-15	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	3VDC (min) - 36VDC (Zener Clamp)
	500mA Version	3VDC (min) - 24VDC (Zener Clamp)
	700mA Version	3VDC (min) - 15VDC (Zener Clamp)
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 Regula	ation 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	on	Zener Diode Clamp

continued on next page

AC/DC-Converter with 5 year Warranty



12 Watt PFC Single Output



UL-8750 Certified EN 61347 Certified CE Marked



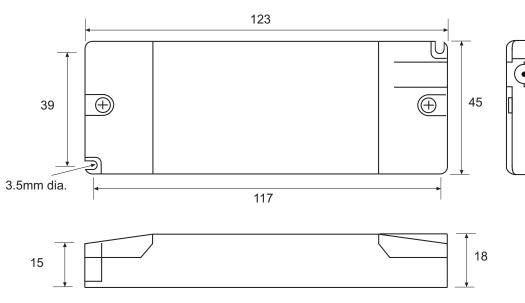


RACD12

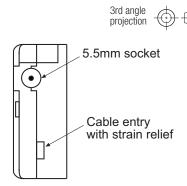
Specifications cont. (typical at 25°C and after warm up time unless otherwise specified)

Overtemperature Protection	Shutdo	wn, Automatic res	start after cooling down
Operating Temperature Range	Ambier	nt Temperature	-20°C to +50°C
(free air convection)	Case Te	emperature	85°C max.
Weight			100g
Packing Quantity			1pc
Storage Temperature Range			-40°C to +100°C
Humidity			95% RH max.
IP Rating			IP20, Indoor Use Only
PCB Material		Plastic Resin wit	h Fibreglass (UL94V-0)
Case Material			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 Compatibilty: Flicker and Voltage Variations		EN 61000-3-3:2006
	Electrical Lighting: EMC Immunity	EN 61	547:1995 + A1:2000
	Class II Power Supply Safety		UL1310
	FCC		FCC18A
THD			<20%
Certifications	LED Lighting Safety		UL8750
	SEMKO CE Certification, General Safety		EN 61347-1: 2008
	SEMKO CE Certification, Safety of AC supplied Control Gear for LED Mo	odules I	EN 61347-2-13: 2006
Design Lifetime	25°C ambient	>70 v	10 ³ hours in operation
Connections	AC Input	>10 X	Screw terminal
OOTHOODING	•		Screw Terminal
	LED Output 5.5mm Cooket with 2mm Din (Cuitable ma	stobina plua Cwito	
	LED Output 5.5mm Socket with 2mm Pin (Suitable ma	atching plug Switc	

Package Style and Pinning



2 Mounting	SCREWS	are	included	



Connections	
CN1	Function
L	VAC in (L)
N	VAC in (N)
CN2	Function
+	LED+
-	LED-
5.5mm Socket	Function
Pin	LED+
Shell	LED-