



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Features

Regulated Converters

- Ultracompact AC-DC Power Supply
- 3 Watt PCB Mount Package
- Universal Input Voltage Range
- Low Cost Pinless Design
- Very Low No Load Input Current
- Short Circuit Protected
- +85°C Maximum Operating Temperature
- Efficiency to 77%

Description

The RAC03 series is an ultra-compact low cost universal input AC/DC power module for PCB mounting via slots in the PCB (pinless connectors). It features ultralow no-load power consumption, short circuit, overload and output overvoltage protection as well as a built-in EMC Class B filter.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max Capacitive Load
RAC03-3.3SA	90-264	3.3	900	70	14000µF
RAC03-05SA	90-264	5	600	72	8000µF
RAC03-09SA	90-264	9	333	76	3200µF
RAC03-12SA	90-264	12	250	76	1500µF
RAC03-15SA	90-264	15	200	76	1000µF
RAC03-24SA	90-264	24	125	77	470µF

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

Input Voltage Range	90-264VAC or 120-370VDC	
Rated Power	3 Watts max	
Input Frequency Range (for AC Input)	47-63Hz	
Input Current (full load)	115/230VAC	75/55mA max.
No Load Power Consumption	115/230VAC	120/180mW typ.
Inrush Current (<0.5ms)	115/230VAC	20/50A max.
Leakage Current	0.3mA max	
Output Voltage Accuracy (full load)	single outputs	±10%
Line Voltage Regulation (low line, high line at full load)	3.3V output	±5% typ
	All others	±2% typ
Load Voltage Regulation (0% to 100% full load)	3.3V output	±5% typ
	All others	±2% typ
Output Ripple and Noise (20MHz limited)	100mVp-p max	
Operating Frequency	132kHz typ	
Hold-up time	15ms min.	
Minimum Load	0%	
RMS Isolation Voltage (input to output)	3.75kVAC / 1minute	
Temperature Coefficient	±0.02%/°C typ	
Isolation Resistance	100 MΩ max	
Short Circuit Protection	Hiccup, Automatic Restart	
Output Overvoltage Protection	Zener Clamping Diode	
Operating Temperature Range (natural convection)	no derating	-0°C to +60°C
	with derating	-40°C to +85°C
Storage Temperature Range	-55°C to +125°C	
Humidity	95% RH max	
Case Material	Epoxy with Fibreglass (UL94V-0)	
	Fully potted	
Package Weight	26g	
Packing Quantity	12 pcs	
EMC	Conducted and Radiated	EN 55022 Class B
	Noise Immunity	EN 55024
MTBF (+25°C)	using MIL-HDBK-217F	>350 x 10 ³ hours

POWERLINE

AC/DC-Converter

with 3 year Warranty

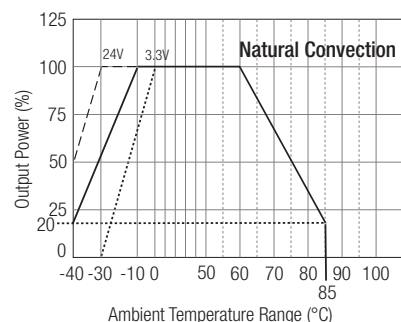


3 Watt Single Output



RAC03-A

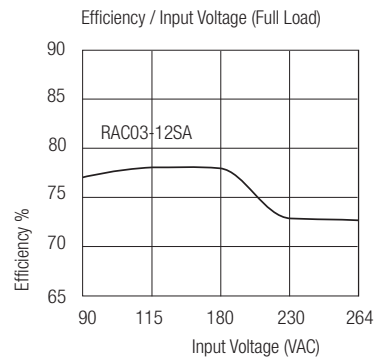
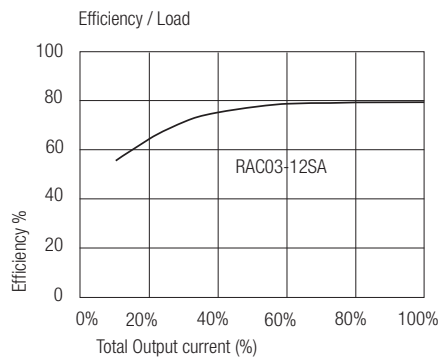
Derating Graph (Ambient Temperature)



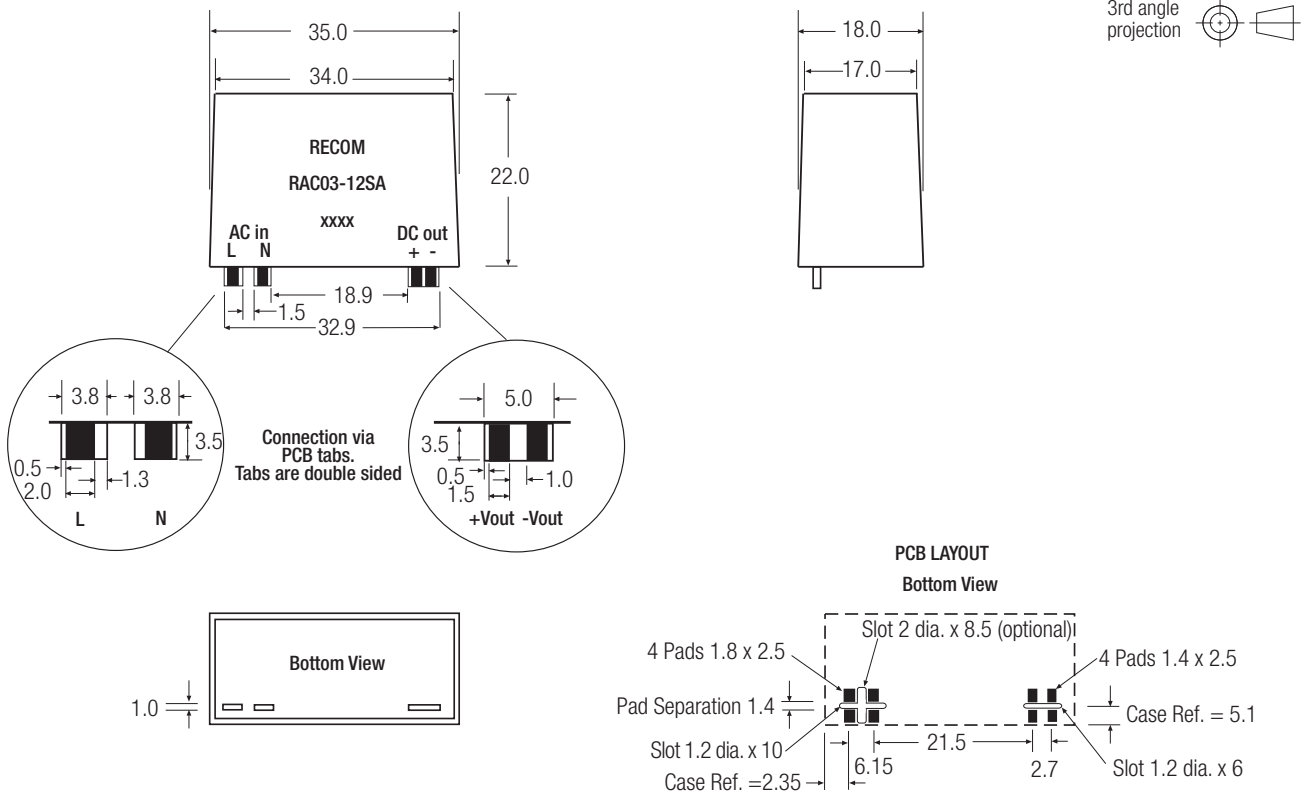
Please Read Application Notes

www.recom-electronic.com

Typical Characteristics



Standard Package Style and Pinning



RAC03-A

Standard Application Circuit

Compact single output regulated power supply

Suggested fuse rating:

1A Slow Blow

