



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!



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Features

Regulated Converters

- AC-DC Power Supply
- 5 Watt PCB Mount Package
- Universal Input Voltage Range
- 3000VAC Isolation
- Low Output Ripple and Noise
- Short Circuit Protected
- UL Approved, CE Marked

Description

Compact UL certified switching AC/DC power module for PCB, screw-terminal connection or DIN-rail mounting.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max Capacitive Load
RAC05-3.3SA	90-264	3.3	1500	62	40000µF
RAC05-05SA	90-264	5	1000	65	19000µF
RAC05-12SA	90-264	12	416	70	4000µF
RAC05-15SA	90-264	15	333	70	3500µF
RAC05-24SA	90-264	24	200	71	900µF
RAC05-05DA	90-264	±5	±500	70	±9500µF
RAC05-12DA	90-264	±12	±200	67	±1400µF
RAC05-15DA	90-264	±15	±160	67	±950µF

*add suffix "-E" for extended temperature range, e.g. RAC05-05SA-E

*add suffix "-ST" for screw terminal module e.g. RAC05-05SA-ST, RAC05-05DA-E-ST

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

Input Voltage Range	90-264VAC or 120-370VDC	
Rated Power	5 Watts max	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	115VAC/230VAC	120mA /70mA max.
No Load Power Consumption	115VAC/230VAC	1.18W max.
Inrush Current (<2ms)	115VAC	10A max. (-E = 23A max.)
	230VAC	20A max. (-E = 46A max.)
Leakage Current	0.75mA max	
Output Voltage Accuracy (full load)	±2%	
Line Voltage Regulation (low line, high line at full load)	±0.3% typ	
Load Voltage Regulation (5% to 100% full load)	±0.5% typ	
Output Ripple and Noise (20MHz limited)	Ripple	<0.2% Vout + 40mVp-p max
	Noise	0.5% Vout + 50mVp-p max
Operating Frequency	100kHz typ	
Efficiency at full Load	see table	
RMS Isolation Voltage (input to output)	3kVAC / 1 minute	
Temperature Coefficient	±0.02%/°C typ	
Isolation Resistance	100 MΩ max	
Short Circuit Protection	Hiccup, Automatic Restart	
Operating Temperature Range	Standard	-25°C to +70°C
(free air convection, with derating)	Suffix -E	-40°C to +70°C
Storage Temperature Range	-40°C to +85°C	
Humidity	95% RH max	
Case Material	Epoxy with Fibreglass (UL94V-0)	
Package Weight	80g	
Packing Quantity	5 pcs (-ST Version: 1 pc)	
EMC	EN 55022 ClassB / EN 50082-1	
MTBF (+25°C)	using MIL-HDBK-217F	300 x 10 ³ hours

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

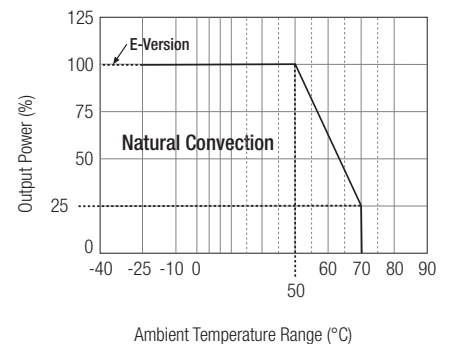
5 Watt Single/Dual Output



UL-60950-1 Certified

RAC05-A

Derating-Graph (Ambient Temperature)



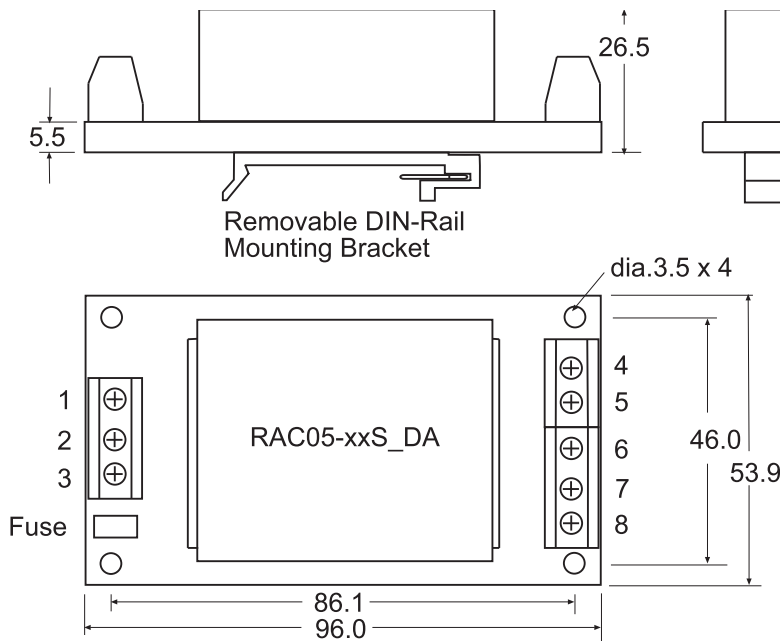
Refer to Application Notes

POWERLINE

AC/DC-Converter

RAC05-S_DA Series

Screw Terminal Module Option (suffix -ST)

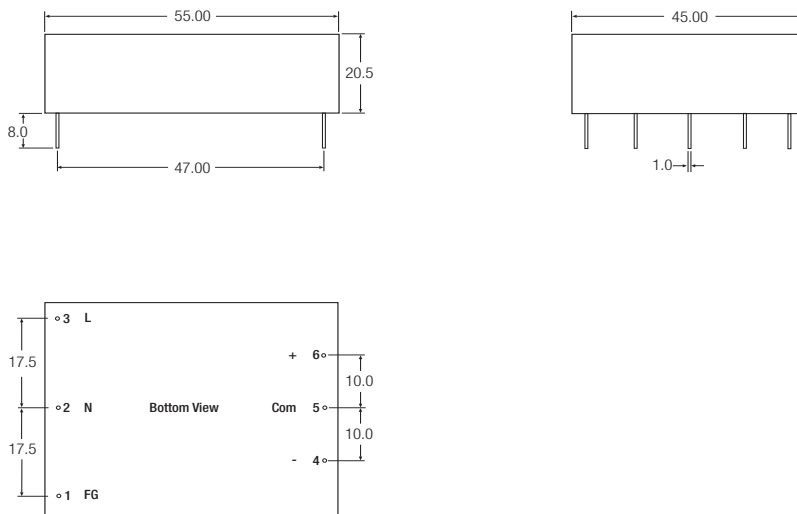


Pin Connections-

Pin #	Single Out	Dual Out
1	FG	FG
2	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)
4	NC	NC
5	-VDC out	-VDC out
6	NC	Com
7	+VDC out	+VDC out
8	NC	NC

NC = No Connection

Standard Package Style and Pinning



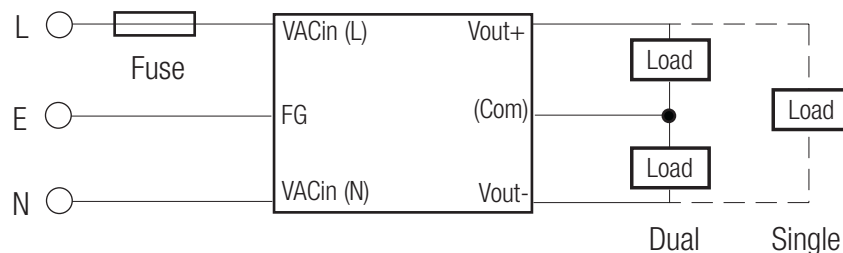
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Pin #	Single Out	Dual Out
1	FG	FG
2	VAC in (N)	VAC in (N)
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4	-VDC out	-VDC out
5	No Pin	Com
6	+VDC out	+VDC out

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

Standard Application Circuit

Suggested fuse rating
1A Slow Blow



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