



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

- Compact 40W AC-DC Power Supply
- Universal Input Voltage Range
- 4000VAC Isolation, Low Leakage Current
- Low Output Ripple and Noise
- Short Circuit Protected
- Triple Output with Independent Outputs
- UL-60601 Certified for Medical Applications
- CE Marked

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max. Capacitive Load
RAC40-3.3SA	90-264	3.3	8000	76	70000µF
RAC40-05SA	90-264	5	8000	79	33000µF
RAC40-12SA	90-264	12	3333	83	4000µF
RAC40-15SA	90-264	15	2666	83	3000µF
RAC40-24SA	90-264	24	1667	83	1200µF
RAC40-05DA	90-264	±5	±4000	80	±6000µF
RAC40-12DA	90-264	±12	±1666	83	±1000µF
RAC40-15DA	90-264	±15	±1333	83	±2000µF
RAC40-0512DA	90-264	5/12	5000/1250	80	15000/750µF
RAC40-0512TA	90-264	5/±12	+5000/±600	79	18000/±150µF
RAC40-0515TA	90-264	5/±15	+5000/±500	79	18000/±400µF

*add suffix "-E" for extended temperature range, e.g. RAC40-05SA-E

*add suffix "-ST" for screw terminal module e.g. RAC40-05SA-ST, RAC40-05DA-ST, RAC40-0512TA-ST

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

Input Voltage Range	90-264VAC or 100-370VDC	
Rated Power	40 Watts max.	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	115VAC/230VAC	860mA/ 460mA max.
No Load Power Consumption	115VAC/230VAC	720mW max.
Inrush Current (<2ms)	115VAC/230VAC	10A / 20A max.
Leakage Current	115VAC/230VAC	100µA/ 200µA max.
Output Voltage Accuracy (Full load) (note 2)	Single, Dual Outputs ±2% typ. Others: Main Output ±3% typ., Secondary Output(s) ±5% typ.	
Line Voltage Regulation (low line, high line at full load)	Single, Dual Outputs ±0.5% typ. Double&Triple: Main Output ±0.5% typ., Secondary Output(s) ±5% typ.	
Load Voltage Regulation (10% to 100% symmetric load)	Single, Dual Outputs ±1% typ. Double: Main Output 2% typ., Secondary Output 6% typ. Triple: Main Output ±3% typ., Secondary Output(s) ±7% typ.	
Cross Regulation	Dual	±5% typ.
	Double	Main Output 1%, Secondary Output 7% typ.
	Triple	Main Output ±3%, Secondary Output ±7% typ.
Output Ripple and Noise (20MHz limited, 0.1µF and 47µF across outputs)	3.3V Output	50mVp-p max.
	Others	1% Vout max.
Operating Frequency	132kHz typ.	
RMS Isolation Voltage (input to output)	4kVAC / 1 minute	
Temperature Coefficient	±0.01%/°C typ.	
Isolation Resistance	100 MΩ min.	
Short Circuit Protection	Continuous, Automatic Restart	
Overcurrent Protection	105% typ.	
Over Temperature Protection	100°C	
Operating Temperature Range (free air convection, with derating)	Standard	-25°C to +70°C
	Suffix -E	-40°C to +70°C
Storage Temperature Range	-40°C to +100°C	
Humidity	95% max.	

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POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

40 Watt Single/Dual, Double & Triple Output



UL-60601-1 Certified

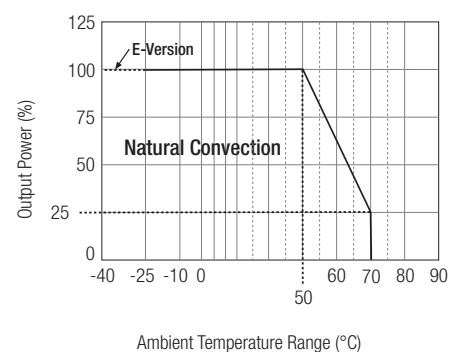
RAC40-A

Description

Compact switching power module for PCB or DIN-rail mounting with medical certification UL-60601-1.

Derating Graph

(Ambient Temperature)



Please Read Application Notes

www.recom-electronic.com

Specifications continued

Case Material	Epoxy with Fibreglass (UL94V-0)
Package Weight	280g
suffix (-ST)	300g
Packing Quantity	5 pcs (-ST Version: 1 pc)
EMC	EN 55011 Class B / EN60601-1-2
MTBF (+25°C)	using MIL-HDBK-217F 200~400 x 10 ³ hours

Screw Terminal Module Option (suffix -ST)

Removable DIN-Rail Mounting Bracket

RAC40-xxS_D_TA

Fuse

Pin Connections

Pin #	Single Out	Dual Out	Double Out	Triple Out
1	NC	NC	NC	NC
2	VAC in (L)	VAC in (L)	VAC in (L)	VAC in (L)
3	VAC in (N)	VAC in (N)	VAC in (N)	VAC in (N)
4	+VDC out	+VDC out	+12V Out	+VDC out
5	NC	NC	+5V Out	+5V Out
6	-VDC out	Com	+12V Rtn	Com
7	NC	NC	+5V Rtn	+5V Rtn
8	NC	-VDC out	NC	-VDC out

NC = No Connection

Package Style and Pinning

Bottom View

Tolerance = ± 0.5 mm

Pin Connections

Pin #	Single Out	Dual Out	Double Out	Triple Out
1	VAC in (L)	VAC in (L)	VAC in (L)	VAC in (L)
2	VAC in (N)	VAC in (N)	VAC in (N)	VAC in (N)
3	+VDC out	+VDC out	+12V Out	+VDC out
4	No Pin	No Pin	+5V Out	+5V Out
5	-VDC out	Com	+12V Rtn	Vout Com
6	No Pin	No Pin	+5V Rtn	+5V Rtn
7	NC	-VDC out	No Pin	-VDC out

Notes

Note 1: Suggested input fuse rating 3.15A Slow Blow.

Note2: Triple output version has +/-Vout common that is not connected to +5V Return pin internally.