

Features

Regulated Converters

- Compact AC-DC Power Supply
- 10 Watt PCB Mount Package
- Universal Input Voltage Range
- 3000VAC Isolation
- Low Output Ripple and Noise
- Short Circuit Protected
- UL Certified, 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 |
|-------------|-------------------|----------------------|---------------------|----------------|----------------------|
| RAC10-3.3SA | 90-264 | 3.3 | 3000 | 65 | 70000µF |
| RAC10-05SA | 90-264 | 5 | 2000 | 71 | 35000µF |
| RAC10-12SA | 90-264 | 12 | 833 | 76 | 11000µF |
| RAC10-15SA | 90-264 | 15 | 666 | 75 | 7000µF |
| RAC10-24SA | 90-264 | 24 | 426 | 76 | 2300µF |
| RAC10-05DA | 90-264 | ±5 | ±800 | 73 | ±22000µF |
| RAC10-12DA | 90-264 | ±12 | ±380 | 75 | ±3000µF |
| RAC10-15DA | 90-264 | ±15 | ±300 | 74 | ±2000µF |

*add suffix "-E" for extended temperature range, e.g. RAC10-05SA-E

*add suffix "-ST" for screw terminal module e.g. RAC10-05SA-ST, RAC010-05DA-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 | 10 Watts max. | |
| Input Frequency Range (for AC Input) | 47-440Hz | |
| Input Current (full load) | 115VAC/230VAC | 200mA / 130mA max. |
| No Load Power Consumption | 115VAC/230VAC | 1.65W 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) | Noise | 0.5% Vout + 50mVp-p max. |
| | Ripple | <0.2% Vout + 40mVp-p max. |
| Operating Frequency | 100kHz typ. | |
| Efficiency at Full Load | see table | |
| RMS Isolation Voltage (input to output) | 3kVAC / 1minute | |
| Temperature Coefficient | ±0.02%/°C typ. | |
| Isolation Resistance | 100 MΩ min. | |
| 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 | 92g | |
| Packing Quantity | 5 pcs (-ST Version: 1 pc) | |
| EMC | EN 55022 Class B / EN 50082-1 | |
| MTBF (+25°C) | using MIL-HDBK-217F | 250 x 10 ³ hours |

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

10 Watt Single/Dual Output

PREFERRED ALTERNATIVES

Please consider these alternatives:

RAC20-K Series

RAC10-K/277 Series



UL-60950-1 Certified

RAC10-A

Derating-Graph (Ambient Temperature)



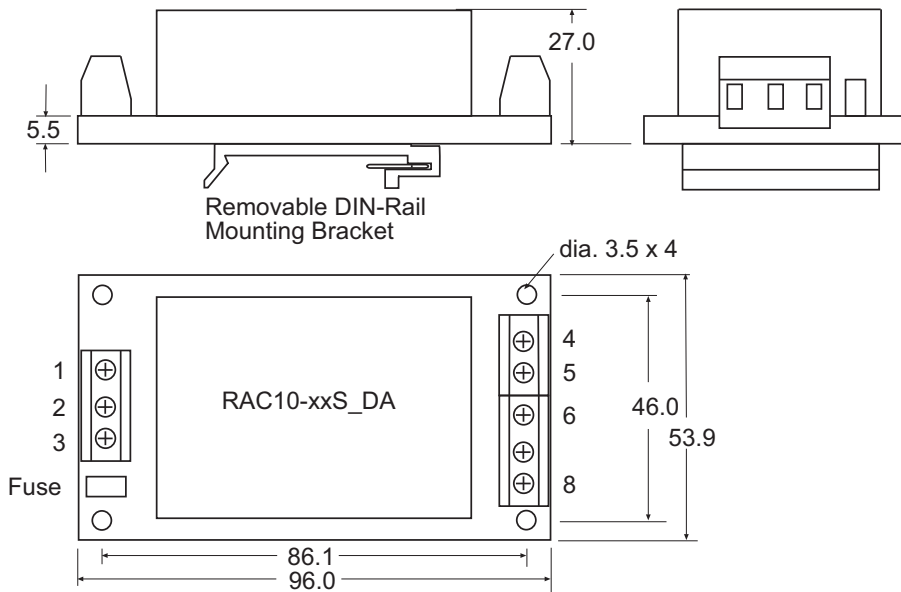
Refer to Application Notes

POWERLINE

AC/DC-Converter

RAC10-S_DA Series

Screw Terminal Module Option (suffix -ST)

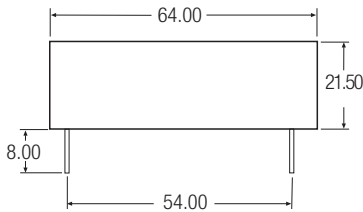


Pin Connections

| 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



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 | -VDC out | -VDC out |
| 5 | No Pin | Com |
| 6 | +VDC out | +VDC out |

XX.X ± 0.5 mm

XX.XX ± 0.25 mm

RAC10-A



Standard Application Circuit

Suggested fuse rating
2A Slow Blow



The product information and specifications may be subject to changes even without prior written notice. The product has been designed for various applications; its suitability lies in the responsibility of each customer. The products are not authorized for use in safety-critical applications without RECOM's explicit written consent. A safety-critical application is an application where a failure may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The applicant shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9