NOT RECOMMENDED FOR NEW DESIGNS

LAST TIME BUY: 30TH OCT 2020, 3.3SA, 05SA, 15SA, 24SA, 05DA, 12DA, 15DA LAST TIME BUY: 30TH OCT 2020, "-E" & "-ST" VERSION

Features

- AC-DC Power Supply • 5 Watt PCB Mount Package Universal Input Voltage Range
 - **3000VAC Isolation**

Regulated **Converters**

- Low Output Ripple and Noise
- Short Circuit Protected
- UL Approved, CE Marked

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max Capacitive Load
RAC05-12SA	90-264	12	416	70	4000µF
NRND (Last ti	me buy: 30	th Oct 2020)			
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
RAC05-15SA	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 sr

opecifications (typical at 20 0 and a	inter warm up time unless	ourierwise 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) $\pm 0.3\%$ t				
Load Voltage Regulation (5% to 100% full	l 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 / 1minute		
Temperature Coefficient		±0.02%/°C typ		
Isolation Resistance		100 M Ω 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		



AC/DC-Converter with 3 year Warranty



5 Watt Single/Dual Output

FERRED ALTERNATIVES consider these alternatives:
RAC10-K/277 Series
RAC05-K/277 Series

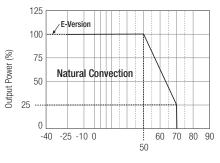


UL-60950-1 Certified



Derating-Graph

(Ambient Temperature)



Ambient Temperature Range (°C)

Refer to Application Notes

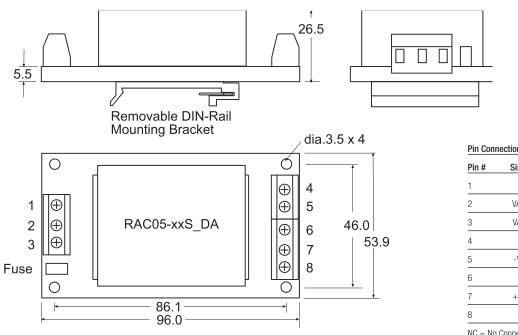
Series

RAC05-S_DA

POWERLINE

AC/DC-Converter

Screw Terminal Module Option (suffix -ST)



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

Standard Package Style and Pinning

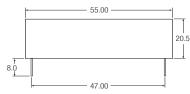
н

1 FG

∘2 N

17.5

17.5

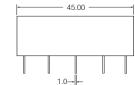


Bottom View

10.0

10.0

1



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	

Pin Connections-

Standard Application Circuit

Suggested fuse rating	L O Fuse	VACin (L)	Vout+	Load	- — —
1A Slow Blow	e O	— FG	(Com)		Load
	N O	VACin (N)	Vout	Load	
				Dual	Single

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