



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

- 35mW max of No Load Power Consumption
- Output CV/CC Control
- Isolated Output 3kVAC / 1 min
- Short Circuit Protection
- Overvoltage Protection
- Meet EN55022 and FCC Class B
- Built-In Fusible Resistor

Selection Guide

Part Number	Output Voltage (VDC)	Max. Current (Io, max)	Total Regulation(1)	Ripple & Noise(2)	Efficiency (Typ.)	Max. Capacitive Load
RAC02-3.3SC/277	3.3	600mA	±6%	300mV	67%	24000µF
RAC02-05SC/277	5	400mA	±6%	200mV	71%	7500µF
RAC02-12SC/277	12	167mA	±6%	200mV	74%	1200µF
RAC02-24SC/277	24	83mA	±6%	200mV	76%	200µF

Specifications (measured at TA 25°C, full load after warm-up)

Input Voltage Range	85-305VAC or 120-430VDC	
Input Frequency	47-440Hz	
Input Current (full load)	115VAC/230VAC	47mA / 30mA typ.
Inrush Current	115VAC/230VAC	15A / 30A max.
No Load Power Consumption	85-305VAC	35mW max.
Output Voltage (Vout nom.)	3.3V-24V	
Output Voltage Tolerance	±6% max.	
Minimum Load	2%	
Line Voltage Regulation	LL-HL at full Load	±1.5% max.
Load Voltage Regulation	2-100% Load	see Selection Guide
Switching Frequency	at full Load	45kHz typ.
Isolation Voltage	Input-Output	3kVAC / 1 minute
Leakage Current	85-305VAC	10uA max.
Isolation Resistance	1G Ω min	
Short Circuit Protection	Continuous, Auto Restart	
Over-Voltage Protection	Zener clamp, set at 4.4~5.0V for 3.3V and 110~140% of its nominal output voltage for others.	
Operating Temperature Range	natural convection, without derating	-25°C ~ +75°C
	natural air convection, with derating	-25°C ~ +85°C
Storage Temperature Range	-40°C ~ +85°C	
Case Material	UL94V-0 black plastic	
Potting Material	Silicon	
Relative Humidity	95% RH max.	
Package Weight	24.5g typ.	
Package Quantity	22 pcs	
MTBF	TA = 25°C	> 1300x10 ³ hours
(using MIL-HDBK217F)	TA = 75°C	> 165x10 ³ hours
Physical	Dimension (LxWxH)	33.7 x 22.2 x 17.75 mm
EMI	EN55022, Class B	
Safety Standard		
EN General Safety	EN-60950-1	
UL General Safety	UL-60950-1	

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

2 Watt Single Output



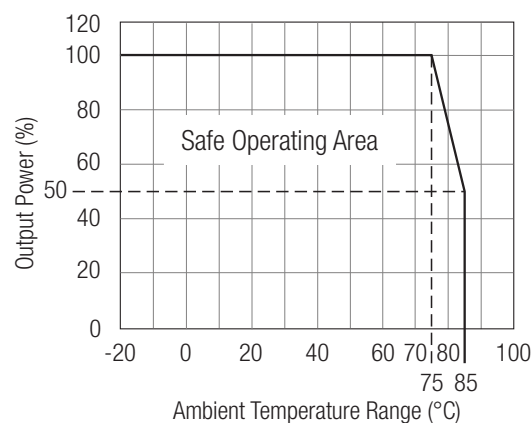
EN-60950-1 (pending)

UL-60950-1 (pending)

RAC02-SC/277

Derating Graph

(Ambient Temperature)



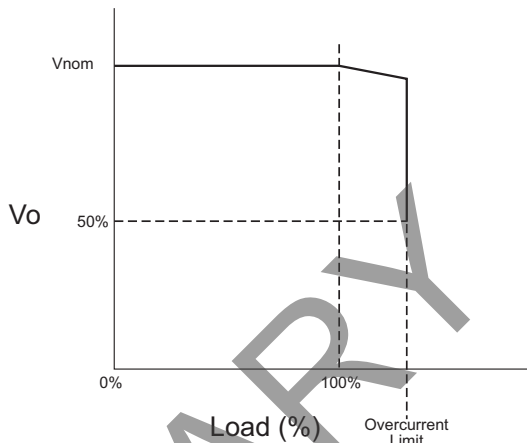
Specifications (measured at TA 25°C, full load after warm-up)

Notes:

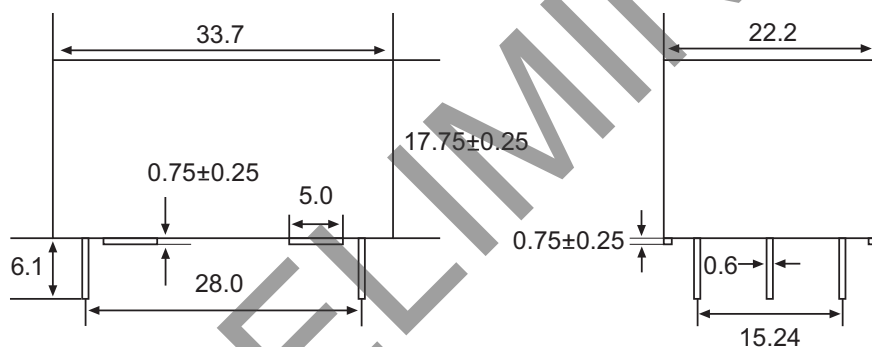
1. „Total Regulation“ is the output voltage tolerance which includes initial voltage accuracy, thermal drift, line regulation and load regulation at rated input voltage and load condition.

2. „Ripple & Noise“ is maximum peak-to-peak voltage value measured at output within 20MHz bandwidth at rated line voltage and output load ranges, and with a 47 µF low-ESR electrolytic capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

Output V-I Characteristic



Package Style and Pinning



3rd angle projection

Pin Connections

Pin #	Single Out
1	VAC in (N)
2	VAC in (L)
3	-VDC out
4	+VDC out

Tolerance ±0.5mm unless otherwise specified