

**Professionally approved products.**

## Datasheet

# RS 321.6W, 1 Output, Embedded Switch Mode Power Supply (SMPS), 24V dc, 13.4A

RS Stock number 777-2850



### ■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan with fan speed control function
- 1U low profile 30mm
- Optional conformal coating models (RSP-320-□CC)
- LED indicator for power on

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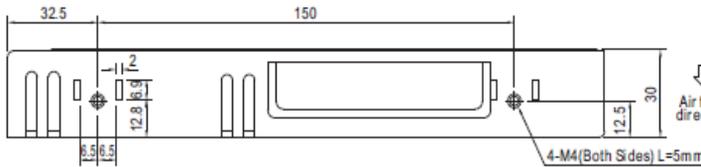
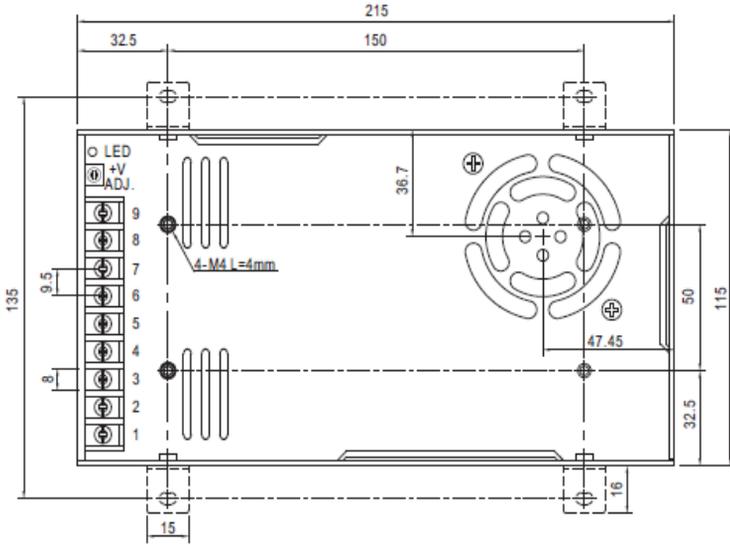
## Datasheet

MODEL	RSP-320-2.5	RSP-320-3.3	RSP-320-4	RSP-320-5	RSP-320-7.5	RSP-320-12	
OUTPUT	DC VOLTAGE	2.5V	3.3V	4V	5V	7.5V	12V
	RATED CURRENT	60A	60A	60A	60A	40A	26.7A
	CURRENT RANGE	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 40A	0 ~ 26.7A
	RATED POWER	150W	198W	240W	300W	300W	320.4W
	RIPPLE & NOISE (max.) <small>Nota.2</small>	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	2.35 ~ 2.85V	2.97 ~ 3.8V	3.7 ~ 4.3V	4.5 ~ 5.5V	6 ~ 9V	10 ~ 13.2V
	VOLTAGE TOLERANCE <small>Nota.3</small>	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.3%
	LOAD REGULATION	±1.5%	±1.5%	±1.0%	±1.0%	±1.0%	±0.5%
	SETUP, RISE TIME	1500ms, 50ms/230VAC    3000ms, 50ms/115VAC at full load					
HOLD UP TIME (Typ.)	8ms at full load    230VAC/115VAC						
INPUT	VOLTAGE RANGE <small>Nota.4</small>	88 ~ 264VAC		124 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC		PF>0.98/115VAC at full load			
	EFFICIENCY (Typ.)	79.5%	82%	84.5%	85%	88%	88%
	AC CURRENT (Typ.)	2.7A/115VAC	1.5 A/230VAC		5A/115VAC	2.5A/230VAC	
	INRUSH CURRENT (Typ.)	20A/115VAC		40A/230VAC			
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	2.88 ~ 3.38V	3.8 ~ 4.5V	4.5 ~ 5.3V	5.75 ~ 6.75V	9.4 ~ 10.9V	13.8 ~ 16.2V
	OVER TEMPERATURE	80°C±5°C (TSW1) detect on heatsink of power transistor					85°C±5°C (TSW1)
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC <small>(Note 5)</small>	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3					
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A					
	MTBF	206.5K hrs min.    MIL-HDBK-217F (25°C)					
	DIMENSION	215*115*30mm (L*W*H)					
	PACKING	0.9Kg; 15pcs/14.5Kg/0.78CUFT					

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## Mechanical Specification

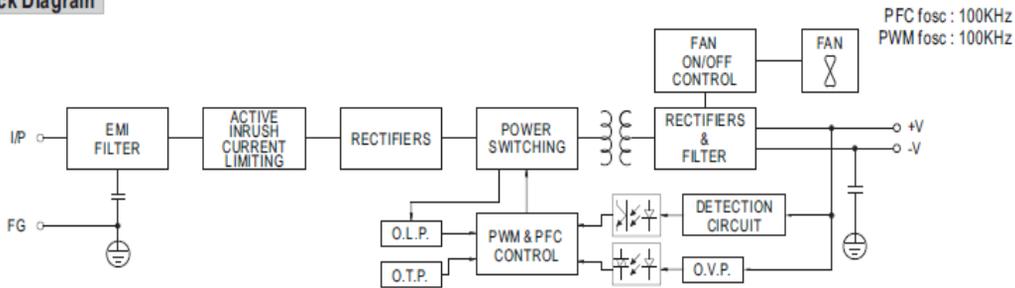
Case No.207A Unit:mm



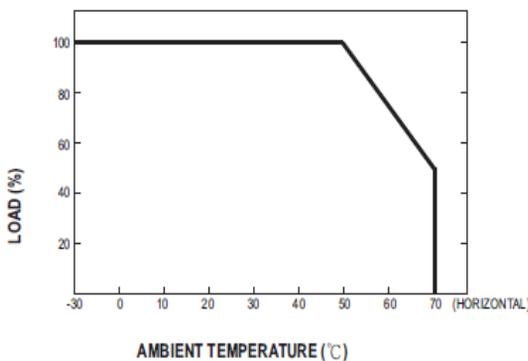
Terminal Pin No. Assignment:

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4-6	DC OUTPUT -V
2	AC/N	7-9	DC OUTPUT +V
3	FG		

## Block Diagram



## Derating Curve



## Static Characteristics

