

## 15W Single Output Switching Power Supply

## RS-15 series



Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- No load power consumption<0.5W</li>
- \* All using 105  $^\circ\!\mathrm{C}$  long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to  $70^\circ C$
- Withstand 5G vibration test
- High efficiency, long life and high reliability

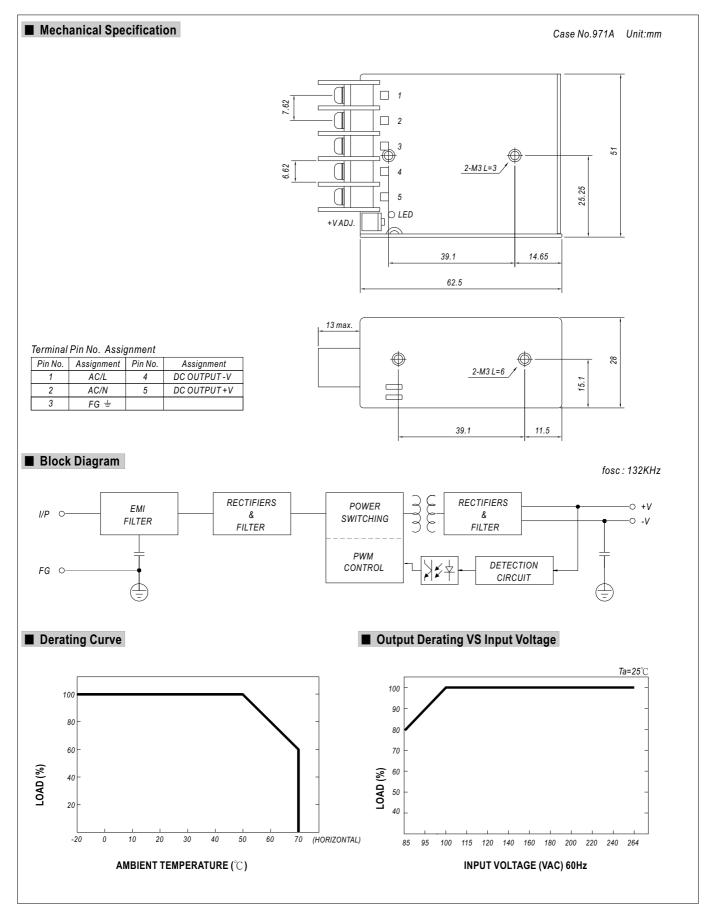


## SPECIFICATION

MODEL		RS-15-3.3	RS-15-5	RS-15-12	RS-15-15	RS-15-24	RS-15-48	
	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V	
OUTPUT	RATED CURRENT	3A	3A	1.3A	1A	0.625A	0.313A	
	CURRENT RANGE	0 ~ 3A	0 ~ 3A	0~1.3A	0~1A	0~0.625A	0~0.313A	
	RATED POWER	9.9W	15W	15.6W	15W	15W	15W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-p	200mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	2.9 ~ 3.6V	4.75~5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	22~27.6V	43.2 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION Note.5	±2.0%	±1.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load						
	HOLD UP TIME (Typ.)	70ms/230VAC 15ms/115VAC at full load						
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	EFFICIENCY (Typ.)	72%	77%	81%	81%	82%	82%	
	AC CURRENT (Typ.)	0.35A/115VAC 0.25A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 65A / 230VAC						
	LEAKAGE CURRENT	<2mA/240VAC						
PROTECTION		Above 105% rated output power						
	OVERLOAD	Protection type : Hiccup mode, recovers automatically after fault condition is removed						
		3.8 ~ 4.45V	5.75 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	28.4 ~ 32.4V	55.2 ~ 64.8V	
	OVER VOLTAGE	Protection type : Sh	ut off o/p voltage, cla	mping by zener diod				
		U1 Tj 140°C typically (U1) detect on main control IC						
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
ENVIRONMENT	WORKING TEMP.	-20 ~ +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, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 6)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC 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						
	EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8,11, EN55024, EN61000-6-1, light industry level, criteria A						
OTHERS	MTBF	1608.8Khrs min. MIL-HDBK-217F (25℃)						
	DIMENSION	62.5*51*28mm (L*W*H)						
	PACKING	0.13Kg; 108pcs/15K	g/0.71CUFT					
NOTE	<ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> <li>Line regulation is measured</li> <li>Load regulation is measure</li> <li>The power supply is consid EMC directives. For guidan</li> </ol>	neters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. e : includes set up tolerance, line regulation and load regulation. Jlation is measured from low line to high line at rated load. Iulation is measured from 0% to 100% rated load. er supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets ectives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."						



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