

## 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
- All using  $105^{\circ}$  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
- 3 years warranty



## **SPECIFICATION**

MODEL		RS-15-3.3	RS-15-5	RS-15-12	RS-15-15	RS-15-24	RS-15-48
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V	48V
	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/230V	/AC 1000ms, 3	0ms/115VAC at full lo	ad		
	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					
	OVER VOLTAGE	3.8~4.45V	5.75~6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	28.4 ~ 32.4V	55.2 ~ 64.8V
		Protection type : Shut off o/p voltage, clamping by zener diode					
		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 output load derating curve)					
		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					
	EMI CONDUCTION & RADIATION						
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-1, light industry level, criteria A					
OTHERS	MTBF	1608.8Khrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	62.5*51*28mm (L*W*H)					
	PACKING	0.13Kg; 108pcs/15Kg/0.71CUFT					
NOTE	<ol> <li>Ripple &amp; noise are measured</li> <li>Tolerance : includes set up</li> <li>Line regulation is measured</li> <li>Load regulation is measured</li> </ol>	Ity mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. ed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. tolerance, line regulation and load regulation. If from low line to high line at rated load. d from 0% to 100% rated load. lered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets					



## RS-15 series

