



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°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty

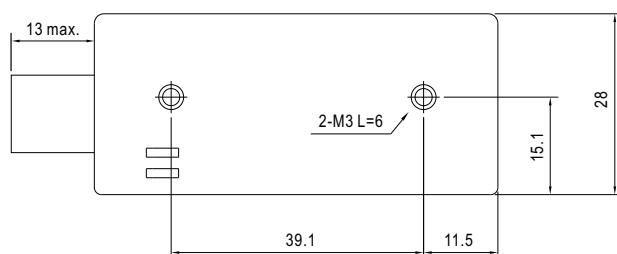
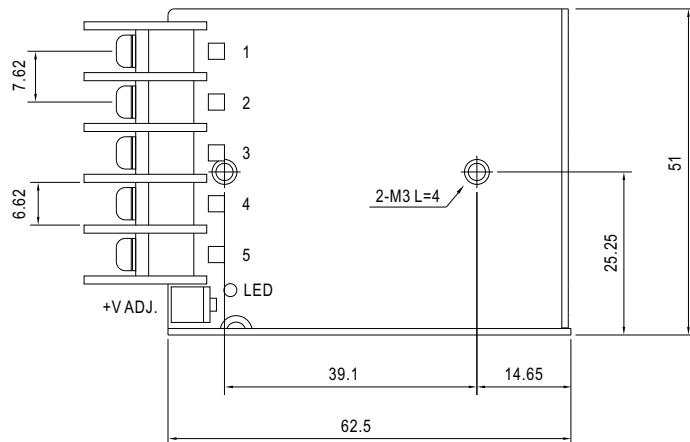


SPECIFICATION

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
	RATED CURRENT	3A	3A	1.3A	1A	0.625A
	CURRENT RANGE	0 ~ 3A	0 ~ 3A	0 ~ 1.3A	0 ~ 1A	0 ~ 0.625A
	RATED POWER	9.9W	15W	15.6W	15W	15W
	RIPLPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	120mVp-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
	VOLTAGE TOLERANCE Note.3	3.0%	2.0%	1.0%	1.0%	1.0%
	LINE REGULATION Note.4	0.5%	0.5%	0.5%	0.5%	0.5%
	LOAD REGULATION Note.5	2.0%	1.5%	0.5%	0.5%	0.5%
	SETUP, RISE TIME	1000ms, 30ms/230VAC	1000ms, 30ms/115VAC at full load			
INPUT	HOLD UP TIME (Typ.)	70ms/230VAC	15ms/115VAC at full load			
	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	72%	77%	81%	81%	82%
	AC CURRENT (Typ.)	0.35A/115VAC	0.25A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 65A / 230VAC				
PROTECTION	LEAKAGE CURRENT	<2mA / 240VAC				
	OVERLOAD	Above 105% rated output power				
		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
ENVIRONMENT		Protection type : Shut off o/p voltage, clamping by zener diode				
	OVER TEMPERATURE	U1 Tj 140°C typically (U1) detect on main control IC				
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down				
SAFETY & EMC (Note 6)	WORKING TEMP.	-20 ~ +70°C (Refer to output load 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				
OTHERS	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	Compliance to EN55022 (CISPR22) Class B				
	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				
NOTE	MTBF	1608.8Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	62.5*51*28mm (L*W*H)				
	PACKING	0.13Kg; 108pcs/15Kg/0.71CUFT				
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Line regulation is measured from low line to high line at rated load. 5. Load regulation is measured from 0% to 100% rated load. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.						

■ Mechanical Specification

Case No.971A Unit:mm

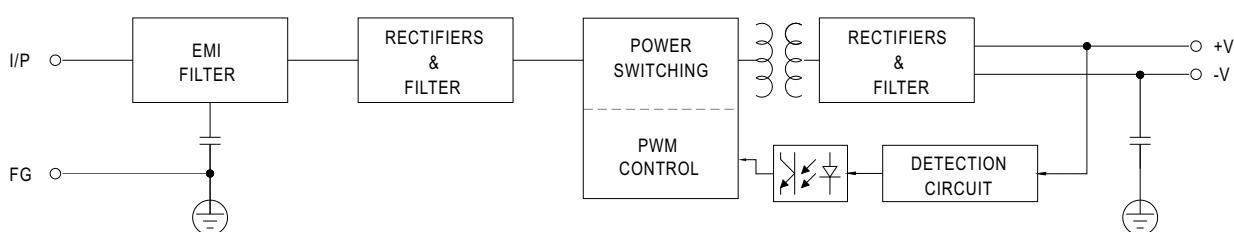


Terminal Pin No. Assignment

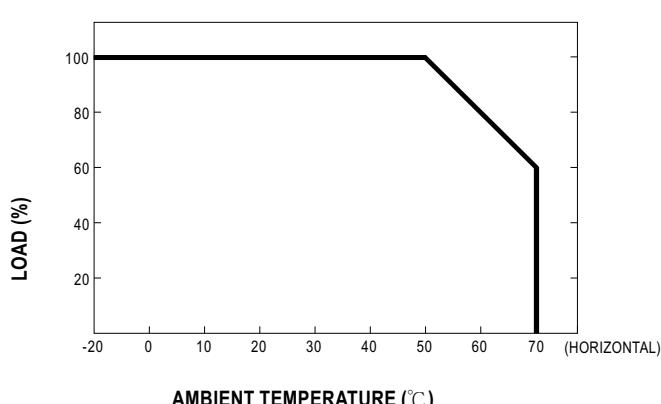
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4	DC OUTPUT -V
2	AC/N	5	DC OUTPUT +V
3	FG \pm		

■ Block Diagram

fosc : 132KHz



■ Derating Curve



■ Output Derating VS Input Voltage

