



# 50W Dual Output Switching Power Supply

# RD-50 series



### Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- 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		RD-50A		RD-50B	
OUTPUT	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	6A	2A	4A	1.4A
	CURRENT RANGE	0.3 ~ 6A	0.3 ~ 3A	0.3 ~ 6A	0.2 ~ 2A
	RATED POWER	54W		53.6W	
	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	80mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	CH1: 4.75 ~ 5.5V		CH1: 4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±7.0%	±2.0%	-4, +8%
	LINE REGULATION	±0.5%	±1.5%	±0.5%	±1.5%
	LOAD REGULATION	±0.5%	±3.0%	±0.5%	±3.0%
SETUP, RISE, HOLD TIME	500ms, 20ms, 50ms/230VAC      1200ms, 30ms, 10ms/115VAC at full load				
INPUT	VOLTAGE RANGE	88 ~ 264VAC      125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage)			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	79%		80%	
	AC CURRENT	1.3A/115VAC      0.8A/230VAC			
	INRUSH CURRENT(max.)	COLD START 36A/230VAC			
	LEAKAGE CURRENT	<2mA / 240VAC			
PROTECTION	OVER LOAD	110 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-25 ~ +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) on +5V output			
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	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			
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B			
	HARMONIC CURRENT	Compliance to EN61000-3-2, -3			
OTHERS	EMM IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN61000-6-2 (EN50082-2) heavy industry level, criteria A			
	MTBF	172.6Khrs min.    MIL-HDBK-217F (25°C)			
	DIMENSION	99*97*36mm (L*W*H)			
NOTE	PACKING	0.41Kg; 45pcs/19.5Kg/0.9CUFT			
	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. 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.				

**勝特力材料 886-3-5753170**  
**勝特力电子(上海) 86-21-54151736**  
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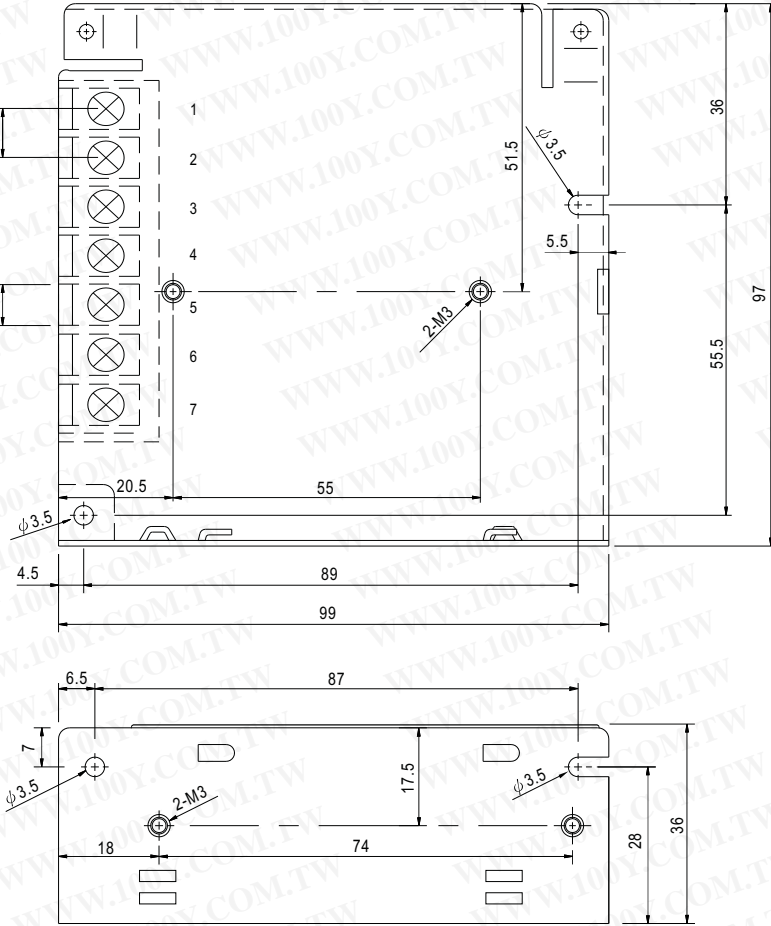


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**Mechanical Specification**

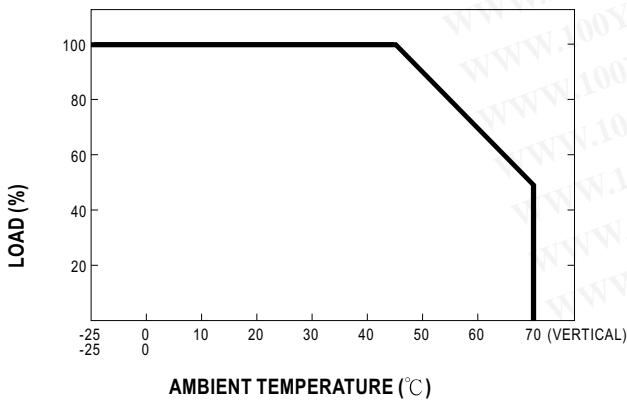
Case No. 905 Unit:mm



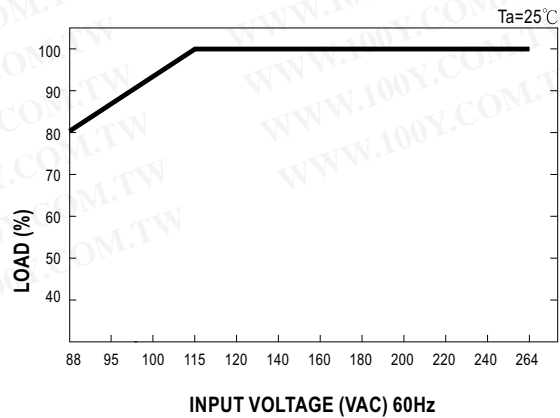
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,6	DC OUTPUT COM
2	AC/N	5	DC OUTPUT +V2
3	FG $\perp$	7	DC OUTPUT +V1

**Derating Curve**



**Output Derating VS Input Voltage**



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