



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

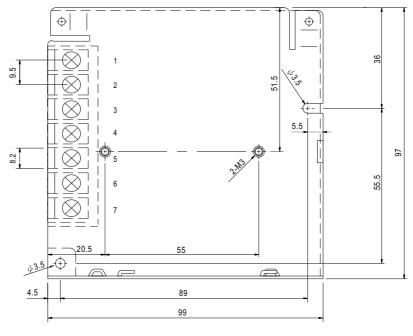


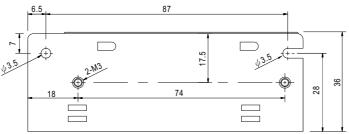
| MODEL       |  | RD-50A  | RD-50A                            |                  | RD-50B                                  |  |  |
|-------------|--|---|-----------------------------------|------------------|---|--|--|
| ОИТРИТ      | OUTPUT NUMBER  | CH1   | CH2                               | CH1              | CH2                                     |  |  |
|             | 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.) No   | te.2 80mVp-p  | 120mVp-p                          | 80mVp-p          | 150mVp-p                                |  |  |
|             | VOLTAGE ADJ. RANGE   | CH1: 4.75 ~ 5.5V  |                                   | CH1: 4.75 ~ 5.5V |   |  |  |
|             | VOLTAGE TOLERANCE No   | e.3 ±2.0%   | ±7.0%                             | ±2.0%            | -4,+8%                                  |  |  |
|             | LINE REGULATION No   | e.4 ±0.5%   | ±1.5%                             | ±0.5%            | ±1.5%                                   |  |  |
|             |  | e.5 ±0.5%   | ±3.0%                             | ±0.5%            | ±3.0%                                   |  |  |
|             | SETUP, RISE TIME   |   | 1200ms, 30ms/115VAC at            |                  | 1 |  |  |
|             | HOLD TIME (Typ.)   | 60ms/230VAC 14ms/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%   |                                   |                  |   |  |  |
|             | AC CURRENT (Typ.)  | 1.3A/115VAC 0.8A/230VAC   |                                   |                  |   |  |  |
|             | INRUSH CURRENT (Typ.)  | COLD START 33A/230VAC   |                                   |                  |   |  |  |
|             | LEAKAGE CURRENT  | <2mA / 240VAC   |                                   |                  |   |  |  |
| PROTECTION  |  | 110 ~ 150% rated output power   |                                   |                  |   |  |  |
|             | OVER LOAD  | Protection type: Hiccup mode, recovers automatically after fault condition is removed   |                                   |                  |   |  |  |
|             |  | CH1: 5.75 ~ 6.75V   |                                   |                  |   |  |  |
|             | OVER VOLTAGE   | 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., HUMIDIT   | 20 ~ 90 % RYT Hoth-Condensing   |                                   |                  |   |  |  |
|             | 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 STANDARDS   |   | UL60950-1, TUV EN60950-1 Approved |                  |   |  |  |
|             | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC   |                                   |                  |   |  |  |
| SAFETY &    | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC  |                                   |                  |   |  |  |
| EMC         | EMI CONDUCTION & RADIATI   |   |                                   |                  |   |  |  |
| (Note 6)    | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3  |                                   |                  |   |  |  |
|             | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-6-2 (EN50082-2) heavy industry level, criteria A  |                                   |                  |   |  |  |
| OTHERS      | MTBF   | 172.6Khrs min. MIL-HDBK-217F (25°C)   |                                   |                  |   |  |  |
|             | DIMENSION  | 99*97*36mm (L*W*H)  |                                   |                  |   |  |  |
|             | PACKING  | 0.41Kg; 45pcs/19.5Kg/0.9CUFT  |                                   |                  |   |  |  |
| NOTE        | All parameters NOT spe     Ripple & noise are mea     Tolerance : includes sei     Line regulation is meas     Load regulation is meas | ially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.  Indeed at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  Indeed from low line to high line at rated load.  Indeed from 0% to 100% rated load. |                                   |                  |   |  |  |



## **■** Mechanical Specification

Case No. 905B 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 ±       | 7       | DC OUTPUT +V1 |

### ■ Derating Curve

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AMBIENT TEMPERATURE ( $^{\circ}$ C)

## ■ Output Derating VS Input Voltage

