

50W Triple Output Switching Power Supply

RT-50 series



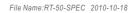
Features :

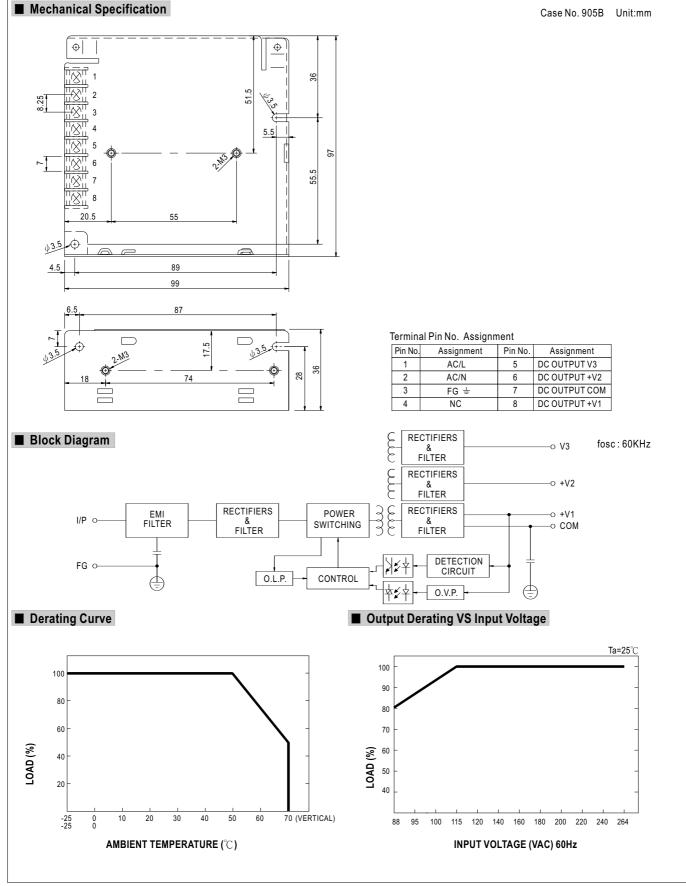
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105 $^\circ\!\!\mathbb{C}$ long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to $70^\circ\!\mathrm{C}$
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty



SPECIFICATION

| MODEL | | RT-50A | | | RT-50B | | | RT-50C | | | RT-50D | | |
|-----------------------------|--|--|------------|-------------|------------------|------------|-------------|------------------|------------|-------------|------------------|------------|----------|
| | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 |
| OUTPUT | DC VOLTAGE | 5V | 12V | -5V | 5V | 12V | -12V | 5V | 15V | -15V | 5V | 24V | 12V |
| | RATED CURRENT | 4A | 2A | 0.5A | 4A | 2A | 0.5A | 4A | 1.5A | 0.5A | 3A | 1A | 1A |
| | CURRENT RANGE | 0.5~5A | 0.2 ~ 2.5A | 0.1 ~ 1A | 0.5~5A | 0.2 ~ 2.5A | 0.1~1A | 0.5~5A | 0.2~2A | 0.1 ~ 1A | 0.5 ~ 5A | 0.2 ~ 1.5A | 0.1 ~ 1A |
| | RATED POWER | 46.5W | | | 50W | | | 50W | | | 51W | | |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 120mVp-p | 100mVp-p | 80mVp-p | 120mVp-p | 120mVp-p | 80mVp-p | 120mVp-p | 120mVp-p | 80mVp-p | 150mVp-p | 120mVp- |
| | VOLTAGE ADJ. RANGE | CH1: 4.75 ~ 5.5V | | | CH1: 4.75 ~ 5.5V | | | CH1: 4.75 ~ 5.5V | | | CH1: 4.75 ~ 5.5V | | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±6.0% | ±2.0% | ±2.0% | ±6.0% | ±2.0% | ±2.0% | +8,-4% | ±2.0% | ±2.0% | + 8,-4% | ±6.0% |
| | LINE REGULATION Note.4 | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±1.5% | ±0.5% | ±0.5% | ±2.0% | ±2.0% |
| | LOAD REGULATION Note.5 | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±1.0% | ±1.0% | ±3.0% | ±4.0% |
| | SETUP, RISE TIME | 500ms, 20 | ms/230VA | C 120 | 0ms, 30ms | /115VAC a | t full load | | | 1 | | | |
| | HOLD UP TIME (Typ.) | 60ms/230VAC 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.) | 77% | | | 77% | | | 78% | | | 80% | | |
| | AC CURRENT (Typ.) | 1.3A/115VAC 0.8A/230VAC | | | | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 36A/230VAC | | | | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | | | |
| PROTECTION | | 110 ~ 150% rated output power | | | | | | | | | | | |
| | OVERLOAD | 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., 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 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 | Compliance to EN55022 (CISPR22) Class B | | | | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | | | | |
| | EMS IMMUNITY | Compliand | ce to EN61 | 000-4-2,3,4 | 1,5,6,8,11; | ENV50204, | EN61000-0 | 6-2 (EN500 | 82-2), hea | vy industry | level, criter | ria A | |
| OTHERS | MTBF | 169.2Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | 99*97*36mm (L*W*H) | | | | | | | | | | | |
| | PACKING | | • | g/0.9CUFT | | | | | | | | | |
| NOTE | All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Line regulation is measured from low line to high line at rated load. Load regulation is measured from 0% to 100% rated load. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) | | | | | | | | | | | | |





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