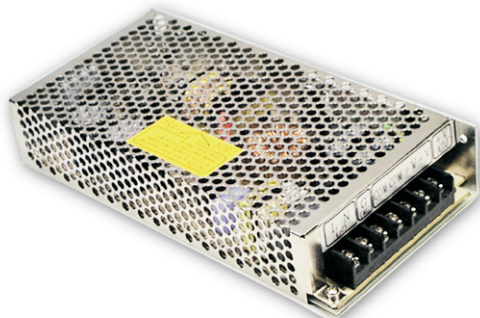




100W Single Output Switching Power Supply

S-100F series



■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- 2 years warranty



SPECIFICATION

| MODEL | S-100F-5 | S-100F-7.5 | S-100F-12 | S-100F-15 | S-100F-24 | S-100F-48 | |
|-----------------------|---|---|---------------|----------------|----------------|----------------|--------------|
| OUTPUT | DC VOLTAGE | 5V | 7.5V | 12V | 15V | 24V | 48V |
| | RATED CURRENT | 20A | 13.5A | 8.5A | 6.7A | 4.5A | 2.2A |
| | CURRENT RANGE | 0 ~ 20A | 0 ~ 13.5A | 0 ~ 8.5A | 0 ~ 6.7A | 0 ~ 4.5A | 0 ~ 2.2A |
| | RATED POWER | 100W | 101W | 102W | 100.5W | 108W | 105.6W |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 125mVp-p | 125mVp-p | 125mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE ADJ. RANGE | 4.5 ~ 5.5V | 6.75 ~ 8.25V | 10.8 ~ 13.2V | 13.5 ~ 16.5V | 21.6 ~ 26.4V | 43.2 ~ 52.8V |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | SETUP, RISE TIME | 1000ms, 30ms at full load | | | | | |
| HOLD UP TIME (Typ.) | 20ms at full load | | | | | | |
| INPUT | VOLTAGE RANGE | 88 ~ 132VAC/176 ~ 264VAC selected by jumper or switch | | | 248 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | EFFICIENCY (Typ.) | 76% | 78% | 80% | 81% | 83% | 84% |
| | AC CURRENT (Typ.) | 3.15A/115VAC | | 1.5A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC | | 40A/230VAC | | | |
| | LEAKAGE CURRENT | <1mA/ 240VAC | | | | | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75V | 8.63 ~ 10.13V | 13.8 ~ 16.2V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 55.2 ~ 64.8V |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to output load derating curve) | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | CSA60950-1 (for 24V only), UL1012, UL60950-1, TUV EN60950-1, CCC GB4943 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, light industry level, criteria A | | | | | |
| OTHERS | MTBF | 314.9K hrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 199*98*38mm (L*W*H) | | | | | |
| | PACKING | 0.65Kg; 20pcs/14.2Kg/0.8CUFT | | | | | |
| NOTE | <ol style="list-style-type: none"> 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. | | | | | | |

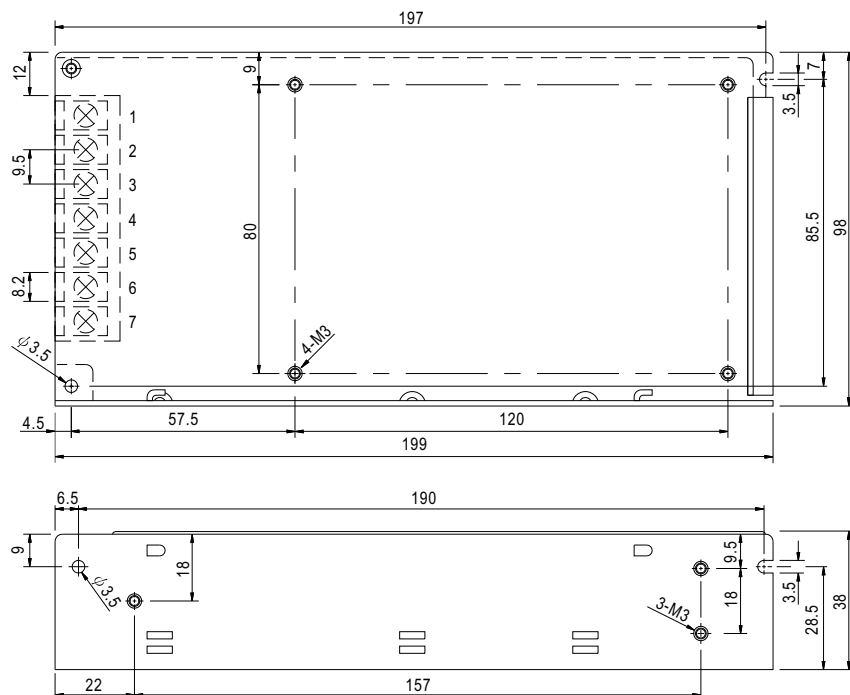


100W Single Output Switching Power Supply

S-100F series

Mechanical Specification

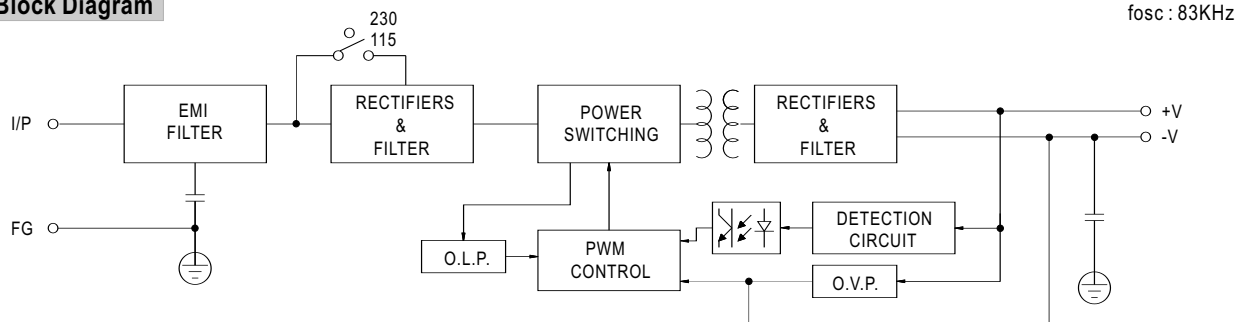
Case No. 902 Unit:mm



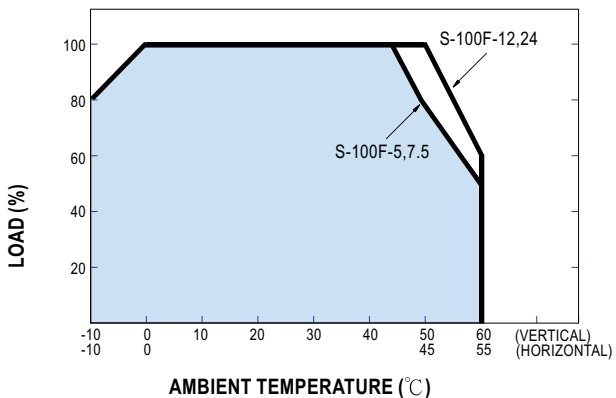
Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|--------------|
| 1 | AC/L | 4,5 | DC OUTPUT -V |
| 2 | AC/N | 6,7 | DC OUTPUT +V |
| 3 | FG \perp | | |

Block Diagram



Derating Curve



Static Characteristics (24V)

