

50Watts Single Output

IT-EMC-50S Series



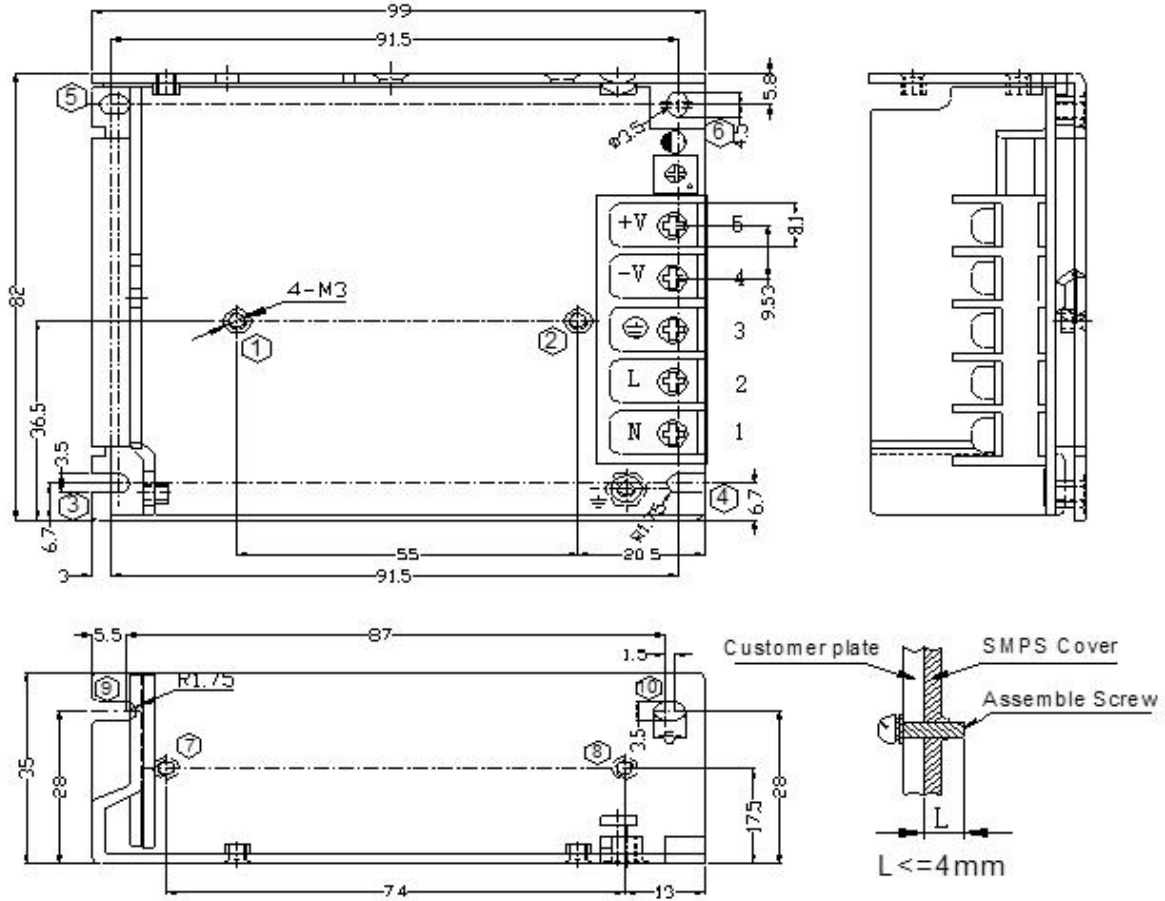
FEATURES:

- No Load power consumption < 0.5W
- Universal AC input range (88~264Vac)
- Miniature size, high power density, high efficiency, long life and high reliability
- Withstand 300VA surge input for 5 sec.
- Output protections: OLP/OVP/SCP
- Wide operating ambient temp (-25°C~70°C)
- All using 105°C long life electrolytic capacitors.
- 100% full load burn-in test
- Easy assembling from top side
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 years warranty

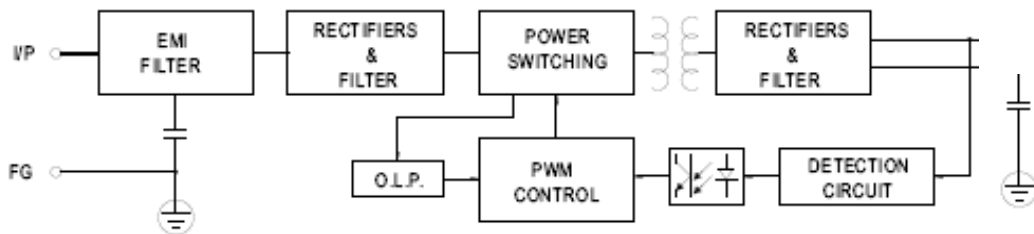
SPECIFICATION

| MODEL | | IT-EMC-50S | -5 | -12 | -15 | -24 | -48 |
|--------------------------|--|--|---------------------------------|-------------|-----------|-------------|------------|
| OUTPUT | DC Output | | 5V | 12V | 15V | 24V | 48V |
| | Rated Current | | 8A | 4.2A | 3.4A | 2.2A | 1.12A |
| | Current Range | | 0~8A | 0~4.2A | 0~3.4A | 0~2.2A | 0~1.12A |
| | Ripple and Noise | 0~70°C | <80mV | <120mV | <120mV | <200mV | <200 mV |
| | Note 2 | -25-0°C | <80mV | <200mV | <200mV | <300mV | <500mV |
| | Voltage ADJ. Range | | 4.75~5.5 | 11.4~13.2V | 14.25~15V | 22.8~26.4V | 45.6~52.8V |
| | Voltage Accuracy | | ±3.0% | | | | |
| | Line Regulation | | ±0.5% | | | | |
| | Load Regulation | | ±1.0% | | | | |
| | Set-up Time | | <1.5S (230Vac input, Full load) | | | | |
| | Hold up Time | | >50mS(230Vac input, Full load) | | | | |
| | Temperature Coefficient | | ±0.03%/°C | | | | |
| Overshoot and Undershoot | | <5.0% | | | | | |
| INPUT | Voltage Range | 88Vac~264Vac, 127~370Vdc | | | | | |
| | Frequency Range | 47Hz~63Hz | | | | | |
| | Efficiency (Typical) | 115Vacinput | 79% | 82.5% | 83.5% | 85% | 86.5% |
| | | 230Vacinput | 80% | 84.5% | 85.5% | 87% | 88.5% |
| | AC Current (max.) | <1.3A | | | | | |
| | Inrush Current (Typical) | <45A@230Vac Cold start | | | | | |
| Leakage Current | Input—output:<0.25mA Input—PG:<3.5mA (input 264Vac, 63Hz) | | | | | | |
| PROTECTION | Over Load | 8.4~12A | 4.41~6.3A | 3.57~5.1A | 2.31~3.3A | 1.155~1.65A | |
| | | Protection type: 5V is hiccup mode, rest are constant power, auto recovery | | | | | |
| | Over Voltage | 5.75~7.5 | 13.8~18V | 17.25~22.5V | 27.6~36V | 55.2~72V | |
| | | Protection type: constant voltage, auto recovery | | | | | |
| Short Circuit | Long-term mode, auto recovery | | | | | | |
| ENVIRONMENT | Operating amb. Temp. & Hum. | -25°C~70°C; 20%~90%RH No condensing (refer to the derating curve) | | | | | |
| | Storage Temp. & Hum. | -40°C~85°C; 10%~95%RH No condensing | | | | | |
| SAFETY & EMC Note 3 | Safety Standards | UL60950-1 2 nd Ed; IEC 60950-1:2005(2 nd Ed) ;EN60950-1:2006 | | | | | |
| | Withstand Voltage | Primary-Secondary: 3.0KVac/10mA .Primary-PG:1.5KVac/10mA. Secondary-PG: 0.5KVDC/10mA. | | | | | |
| | Isolation Resistance | 100M ohms | | | | | |
| | EMC Emission | Compliance to EN55022 Class B / FCC Part15 Class B | | | | | |
| | EMC Immunity | Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level | | | | | |
| OTHERS | MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| | Dimension (L*W*H) | 99×82×35mm | | | | | |
| | Packing | 40PCS/CTN, 12.8KGS, 0.043CBM | | | | | |
| | Cooling method | Cooling by free air convection | | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature. 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor. | | | | | | |

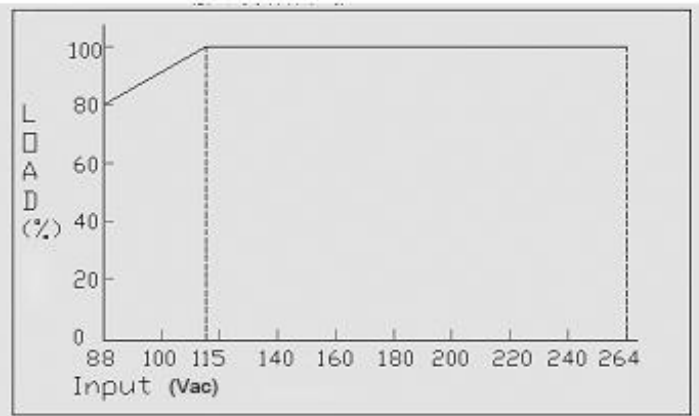
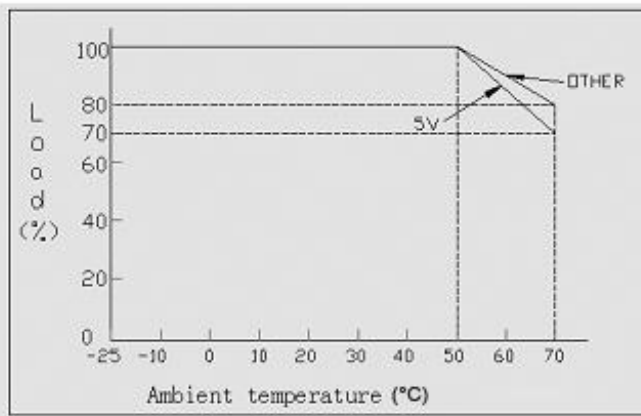
■ **Mechanical Specification** Unit:mm



■ **Block Diagram**



■ Derating Curve



All products, product specifications and data are subject to change without notice.