

50W Single Output Switching Power Supply HF50W-SSM M2 Series



FEATURES

- Universal AC input / full range
- Miniature size, high power density
- Japanese brand components for key parts
- Electrolytic capacitors all 105°C
- 100% full load burn-in test
- Protections: overload/ over voltage/ short circuit
- 5 years limited warranty
- F605SM 99 x 97 x 36mm

SPECIFICATIONS

| | |
|--------------------------------|--|
| Input Voltage | 88~264VAC (124~370VDC) |
| Input Current | 1.6A |
| Input Frequency | 47~63Hz |
| Inrush Current | cold start, 20A/115V, 40A/230V |
| Input Leakage Current | < 1mA/230VAC |
| Line Regulation (full load) | ± 0.5% |
| Voltage Adjust Range | ± 10% |
| Output Overload Protection | 105~150%, hiccup mode, auto recovery |
| Output Over Voltage Protection | 115~150%, shut off, re-power on to recover |
| Short Circuit Protection | hiccup mode, auto recovery |
| Rise Time | 50ms @full load (typical) |
| Hold up Time | 20ms @full load (typical) |
| Mechanical Feature | enclosed |
| Dimensions | 99 x 97 x 36mm (L x W x H) |

| | |
|-----------------------|---|
| Operating Temperature | -20°C ~+70°C(ref. derating curve) |
| Storage Temperature | -20°C ~+85°C |
| Operating Humidity | 20%~93%RH(non condensing) |
| Storage Humidity | 20%~95%RH(non condensing) |
| MTBF | >100,000 hours |
| Cooling | convection |
| Safety Standards | GB4943, UL60950, EN60950 |
| EMC Standards | GB9254, EN55022 Class B EN55024, EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11 |
| Withstand Voltage | I/P -O/P: 3.0KVAC/1min I/P - PE: 1.5KVAC/1min O/P-PE: 0.5KVAC/1min |
| Vibration | 10~150Hz, 2G 10min/1cycle, 30min each along X, Y, Z axes |
| Connection | 5P/9.5mm screw terminal block |
| Packing | 0.28kgs, 42pcs/14kgs/0.026CBM per carton |

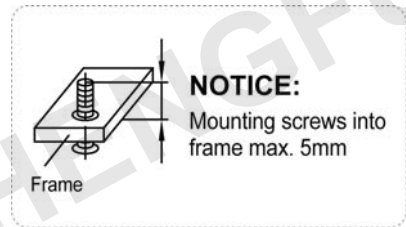
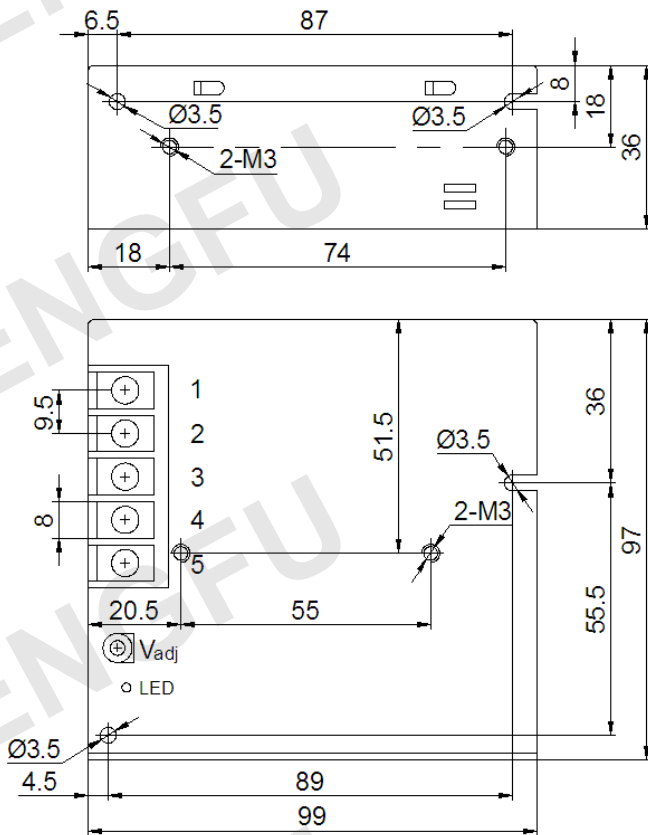
| Model No. | DC Output | Rated Power | Load Regulation | Voltage Tolerance | Ripple & Noise (max.) | Efficiency |
|---------------|------------|-------------|-----------------|-------------------|-----------------------|------------|
| HF50W-SSM-3.3 | 3.3V 10.0A | 33.0W | 0.5% | ± 3% | 80mVp-p | 72% |
| HF50W-SSM-5 | 5V 10.0A | 50.0W | 0.5% | ± 2% | 80mVp-p | 80% |
| HF50W-SSM-12 | 12V 4.2A | 50.4W | 0.5% | ± 1% | 120mVp-p | 82% |
| HF50W-SSM-24 | 24V 2.2A | 52.8W | 0.5% | ± 1% | 150mVp-p | 85% |
| HF50W-SSM-48 | 48V 1.1A | 52.8W | 0.5% | ± 1% | 150mVp-p | 86% |

* 3.3~48VDC output all available

NOTE

1. All parameters are measured at 230VAC input, rated load and 25°C ambient temperature.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 0% to 100% of rated load for single output models. For multi-output models, it is measured from 20% to 100% of rated load, and other output at 60% rated load.
4. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
5. The power supply is regarded as a component which will be installed into the final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

Drawing



Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|--------------|
| 1 | AC/L | 4 | DC OUTPUT -V |
| 2 | AC/N | 5 | DC OUTPUT +V |
| 3 | PE | | |

Block Diagram

