

15 Watt Embedded Power Supply

Features

- No load power consumption < 0.5W
- Universal AC input range
- 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 temperature (-25°C ~ 70°C), full load up to 70°C
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 year warranty



Specifications

PD-15-3.3

PD-15-5

PD-15-12

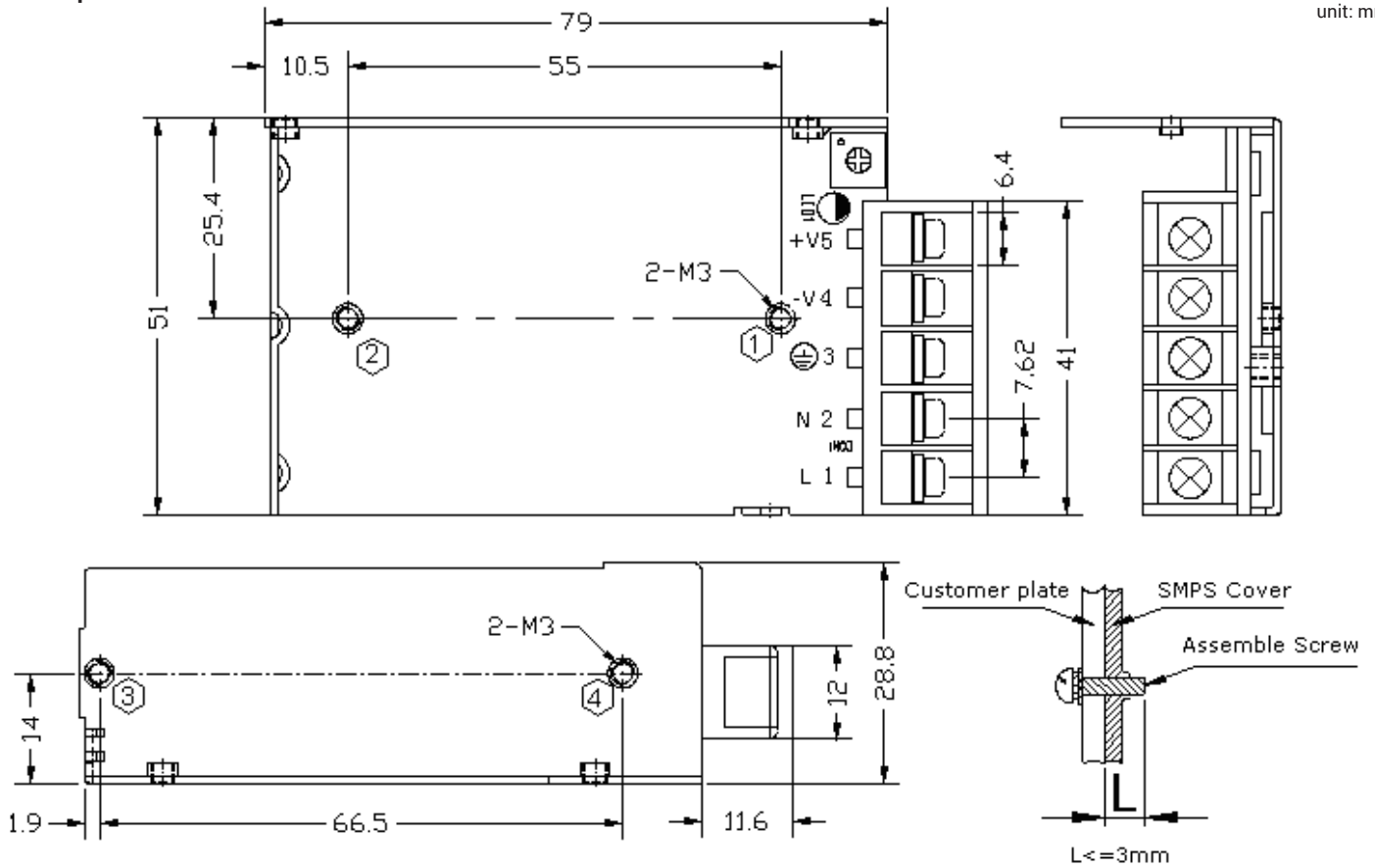
PD-15-15

PD-15-24

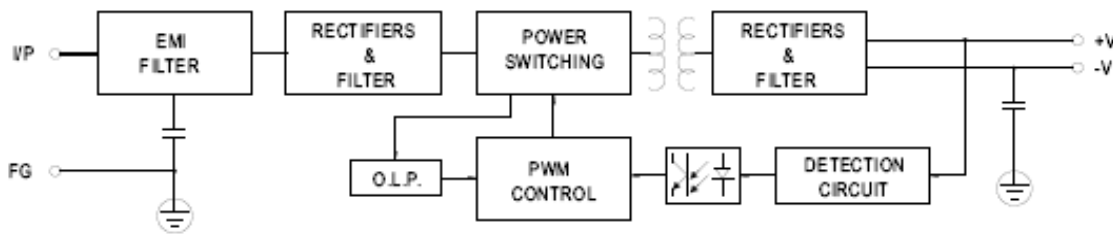
| | | PD-15-3.3 | PD-15-5 | PD-15-12 | PD-15-15 | PD-15-24 | |
|--------------------------|--|---|------------|---------------|----------|----------|---------|
| OUTPUT | DC Output | 3.3V | 5V | 12V | 15V | 24V | |
| | Rated Current | 4A | 3A | 1.3A | 1A | 0.7A | |
| | Current Range (NOTE 1) | 0 ~ 4A | 0 ~ 3A | 0 ~ 1.3A | 0 ~ 1.0A | 0 ~ 0.7A | |
| | Ripple and Noise (NOTE 2) | -25°C ~ 70°C | < 50mV | < 50mV | < 120mV | < 120mV | < 120mV |
| | Voltage ADJ. Range | -5% ~ +10% of rated output voltage | | | | | |
| | Voltage Accuracy | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | Line Regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | Load Regulation | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | Set-up Time | < 2.0S (115Vac input, Full load); < 1.0S (230Vac input, Full load) | | | | | |
| | Hold up Time | > 10mS (115Vac input, Full load); > 20mS (230Vac input, Full load) | | | | | |
| | Temperature Coefficient | ±0.03%/°C | | | | | |
| Overshoot and Undershoot | < 5.0% | | | | | | |
| INPUT | Voltage Range | 88Vac ~ 264Vac, 124 ~ 370Vdc | | | | | |
| | Frequency Range | 47Hz ~ 63Hz | | | | | |
| | Efficiency (Typical) | 115Vac input | 70% | 76% | 80% | 82% | 84% |
| | | 230Vac input | 71% | 78% | 82% | 83% | 85% |
| | AC Current (Max.) | 0.7A | 0.7A | 0.7A | 0.7A | 0.7A | |
| | Inrush Current (Typical) | 20A@115Vac | 40A@230Vac | Cold Start | | | |
| Leakage Current | Input – output: < 0.25mA Input – PG: < 3.5mA | | | | | | |
| PROTECTION | Over Load | 105% ~ 150% of rated output current, hiccup mode, auto recovery | | | | | |
| | Over Voltage | 105% ~ 150% of rated output voltage, Constant voltage | | | | | |
| | Shorted Circuit | Long-term mode, auto recovery | | | | | |
| ENVIRONMENT | Operating amb. Temp. & Hum. | -25°C ~ 70°C; 20% ~ 90%RH | | No Condensing | | | |
| | 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: 0.5kVac; ≤10mA | | | | | |
| | Isolation Resistance | ≥100M ohms | | | | | |
| | EMC Emission | Compliance to EN55022, EN55024 Class B | | | | | |
| | Harmonic Current | Compliance to EN61000-3-2, -3 | | | | | |
| | EMC Immunity | Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, EN61000-6-2 heavy industry level | | | | | |
| OTHERS | MTBF (MIL-HDBK-217F) | More than 200,000Hrs (25°C, Full load) | | | | | |
| | Dimension (L*W*H) | 79 x 51 x 28 mm | | | | | |
| | Packing | 48PCS/CTN, 10.4KGS, 0.03CBM | | | | | |
| | Cooling Method | Cooling by free air convection | | | | | |
| NOTE | <ol style="list-style-type: none"> 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 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives 4. HDP Power offers accessories for Din-35 rail bar. Please contact sales for details. | | | | | | |

Mechanical Specification

unit: mm



Block Diagram



Derating Curve

