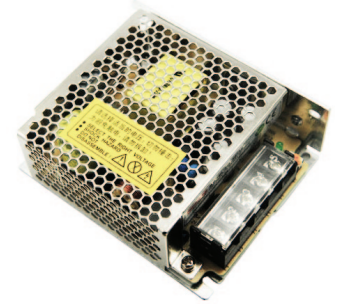


50 Watt Embedded Power Supply

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
- All using 105°C long life electrolytic capacitors
- Operating altitude up to 5000M
- Wide operating ambient temperature (-25°C ~ 70°C) 100% @ 50°C, 70% @ 70°C
- 100% full load burn-in test
- Easy assembling from top side
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 year warranty

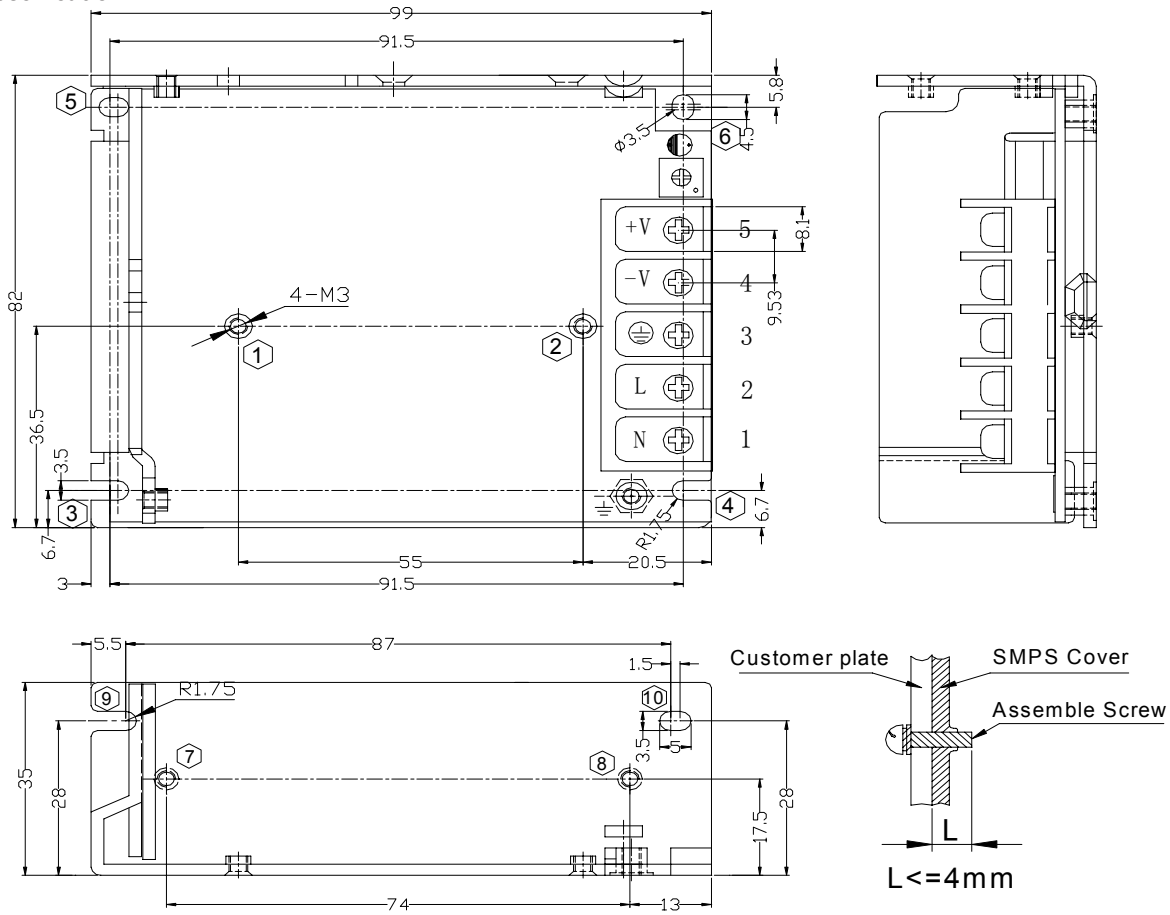


Specifications

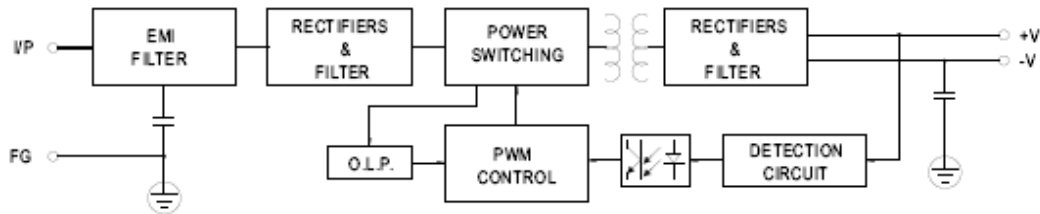
		PD-50-5	PD-50-12	PD-50-15	PD-50-24	PD-50-48	
OUTPUT	DC Output	5V	12V	15V	24V	48V	
	Rated Current	8A	4.2A	3.4A	2.2A	1.12A	
	Current Range	0 ~ 8A	0 ~ 4.2A	0 ~ 3.4A	0 ~ 2.2A	0 ~ 1.12A	
	Ripple and Noise (NOTE 2)	-25 ~ 70°C	< 80mV	< 120mV	< 120mV	< 200mV	< 200mV
	Voltage ADJ. Range	-5% ~ +10% of rated output voltage					
	Voltage Accuracy	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	Set-up Time	< 2.0S (115Vac input, Full load); < 1.5S (230Vac input, Full load)					
	Hold up Time	>20mS (115Vac input, Full load); > 50mS (230Vac input, Full load);					
	Temperature Coefficient	±0.03%/°C					
Overshoot and Undershoot	< 5.0%						
INPUT	Voltage Range	90Vac ~ 264Vac, 127 ~ 370Vdc					
	Frequency Range	47Hz ~ 63Hz					
	Efficiency (Typical)	115Vac input	79%	84%	85%	86%	88%
		230Vac input	80%	85%	86%	87%	89%
	AC Current (Max.)	< 1.5A					
	Inrush Current (Typical)	< 20A@115Vac < 40A@230Vac Cold Start					
Leakage Current	Input – output: < 0.25mA Input – PG: < 0.75mA						
PROTECTION	Over Load	105% ~ 150% of rated output current, constant power					
	Over Voltage	105% ~ 150% of rated output voltage, Constant voltage					
	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: 3.0KVdc; ≤10mA Primary – PG: 1.5KVdc; ≤10mA Secondary – PG: 0.5KVDC; ≤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)	99 x 82 x 35 mm					
	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 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

