

125 Watt Embedded Power Supply

Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High power density, high efficiency and reliability
- Output protections: OLP/OVP/SCP
- Wide operating ambient temperature (-20°C ~ 70°C)
- Built-in remote sense function
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test
- 3 year warranty

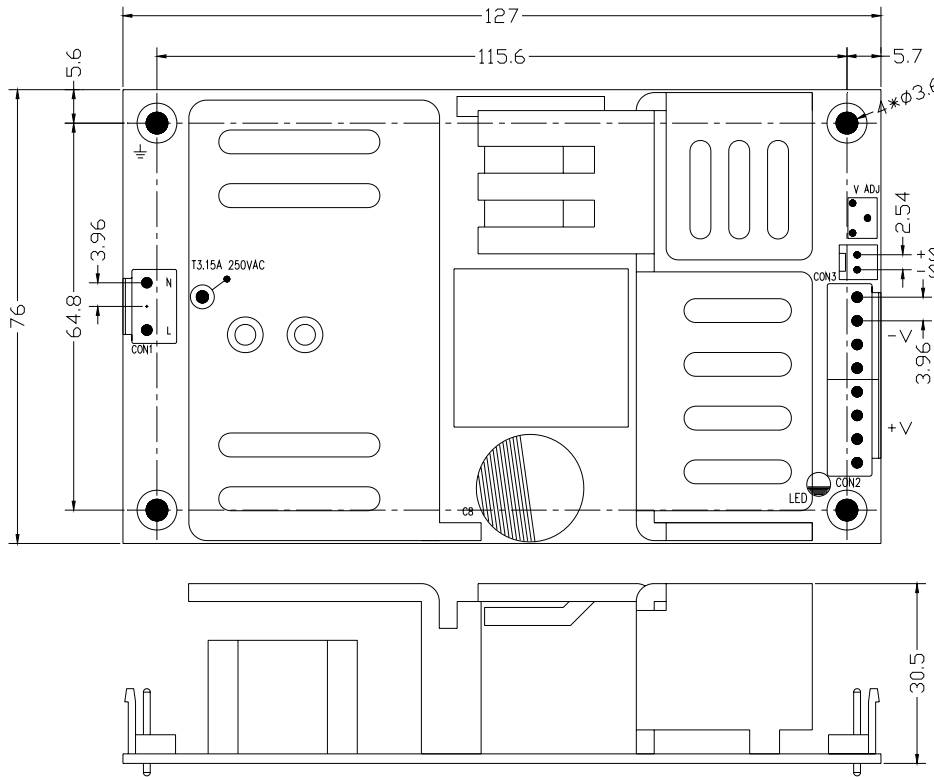


Specifications

		PSF-125-5	PSF-125-12	PSF-125-15	PSF-125-24	PSF-125-48	
OUTPUT	DC Output	5.0V	12.0V	15.0V	24.0V	48.0V	
	Rated Current	20A	10.5A	8.4A	5.2A	2.6A	
	Current Range	0 ~ 20A	0 ~ 10.5A	0 ~ 8.4A	0 ~ 5.2A	0 ~ 2.6A	
	Ripple and Noise (NOTE 1)	< 100mV	< 100mV	< 100mV	< 100mV	< 150mV	
	Voltage ADJ. Range	4.5 ~ 5.7V	10.6 ~ 13.4V	12.9 ~ 17.0V	24.7 ~ 27.0V	43.0 ~ 53.7V	
	Voltage Accuracy	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	
	Set-up Time	≤ 1.2S (230Vac input, Full load) < 2.5S (115Vac input, Full load)					
	Hold up Time	≥ 20mS (115/230Vac input, Full load)					
	Temperature Coefficient	±0.03%/°C					
	Overshoot and Undershoot	< 5.0%					
INPUT	Voltage Range	90Vac ~ 264Vac, 127Vdc ~ 370Vdc					
	Frequency Range	47Hz ~ 63Hz					
	Power Factor (Typical)	PF > 0.98@115VAC PC > 0.95@230VAC					
	Efficiency (Typical)	115Vac input	83%	85%	85%	86%	86%
		230Vac input	85%	87%	87%	88%	88%
	AC Current (Max)	< 1.5A					
	Inrush Current (Typical)	< 60A@230Vac	< 30A@115Vac	Cold Start			
Leakage Current	< 3.5mA						
PROTECTION	Over Current	105% ~ 150% of rated output current, hiccup mode, auto recovery					
	Over Voltage	120% ~ 150% of rated output voltage, hiccup mode					
	Shorted Circuit	Long-term mode, auto recovery					
ENVIRONMENT	Operating Ambient 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; EN60950-1: 2006					
	Withstand Voltage	Primary – Secondary: 3.0KVdc; ≤10mA Primary – PG:1.5KVdc; ≤10mA Secondary – PG:0.5KVDC; ≤10mA					
	Isolation Resistance	≥100M ohms					
	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, light industry level, criteria A					
OTHERS	MTBF (MIL-HDBK-217F)	More than 100,000Hrs (25°C, Full load)					
	Dimension (L*W*H)	127 x 76 x 30.5 mm					
	Packing	21PCS/CTN, 8.4KGS, 0.015CBM					
	Cooling Method	Cooling by free air convection					
NOTE	1. All parameters NOT specially mentioned are measured at 230Vac 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 & 47uF 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						

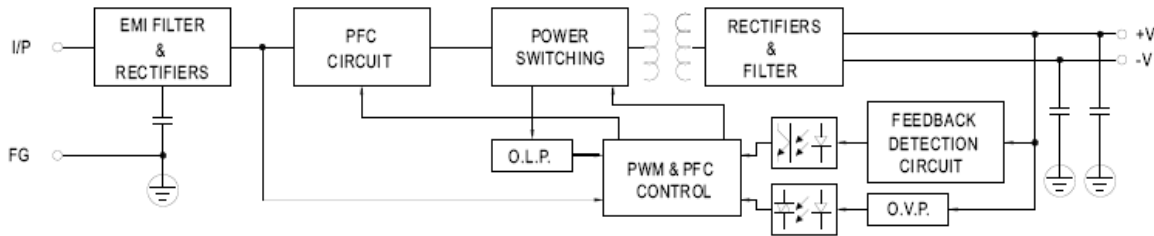
Mechanical Specification

unit: mm



ITEM	Connectors	Mating Housing	Contacts
AC IN(CON1)	LANDWIN3961P0300T= Molex53520-0320(Central Pin removed)		
Sense(CON3)	LANDWIN 2541P0200T	LANDWIN 2510S or MOLEX 5051	LANDWIN 2563T011X or MOLEX 4809

Block Diagram



Derating Curve

