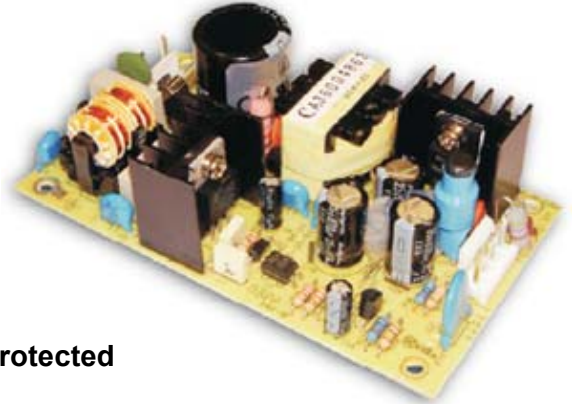


**FEATURES**

- Low Cost
- High Reliability
- 2 Year Warranty
- 100% Full Load Burn-In Test
- Low Leakage Current < 0.5mA
- Universal AC Input/ Full Range
- Cooling by Free Air Convection
- Fixed Switching Frequency at 100KHz
- Short Circuit, Overload, Over Voltage, and Over Temperature Protected



**SPECIFICATIONS: PSPS25 Series**

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
We reserve the right to change specifications based on technological advances.

**INPUT SPECIFICATIONS**

Input Voltage	85 – 264VAC (120 – 370VDC)
Input Frequency	47 ~ 63Hz
AC Current (typical)	0.6A @ 115VAC    0.4A @ 230VAC
Inrush Current (typical)	36A cold start
Leakage Current	< 0.5mA @ 240VAC

**OUTPUT SPECIFICATIONS**

Output Voltage	See Table
Output Voltage Tolerance (See Note 3)	PSPS-25-3.3: ±3.0%    ±2.0% for all other models
Output Power	See Table
Line Regulation	3.3, 5, 7.5V outputs: ±0.5%; 12, 13.5, 15V outputs: ±0.3%; 24, 27, 48V outputs: ±0.2
Load Regulation	3.3V output: ±2.5%; 5 & 7.5V outputs: ±2.0%; 12, 13.5, 15V outputs: ±1.0%; 24, 27, 48V outputs: ±0.5%
Output Current	See Table
Ripple & Noise (See Note 2)	See Table
Setup, Rise Time	200ms, 20ms @ 230VAC    200ms, 30ms @ 115VAC and full load
Hold Up Time	100ms @ 230VAC    20ms @ 115VAC and full load
Temperature Coefficient	±0.03%/°C (0~50°C)

**PROTECTION**

Over Voltage Protection	See Table Protection Type: Shutoff output voltage, clamping by Zener diode.
Overload Protection	Above 105% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature	Tj 135°C typically (U1) detect on main control IC. Protection Type: Shutdown output voltage, recovers automatically after temperature goes down.

**GENERAL SPECIFICATIONS**

Switching Frequency (fixed)	100KHz
Efficiency (typical)	See Table
Withstand Voltage	3KVAC (input to output), 1.5KVAC (input to FG), 0.5KVAC (output to FG).
Isolation Resistance	100MQ / 500VDC (input to output, input to FG, output to FG)

**ENVIRONMENTAL SPECIFICATIONS**

Working Temperature	-10°C to +60°C (refer to output load derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity (non-condensing)	20% ~ 90% RH non-condensing
Storage Humidity (non-condensing)	10% ~ 95% RH
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60 minutes each along X, Y, and Z axes.
MTBF	576,400 hours min.    MIL-HDBK-217 (25°C)

**PHYSICAL SPECIFICATIONS**

Weight	18 oz.
Dimensions	107(L) x 61(W) x 28(H) mm
Warranty	2 years

**SAFETY & EMC (See Note 4)**

Safety Standards	UL60950-1, TUV EN60950-1 Approved
EMI Conduction and 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, light industry level, criteria A.

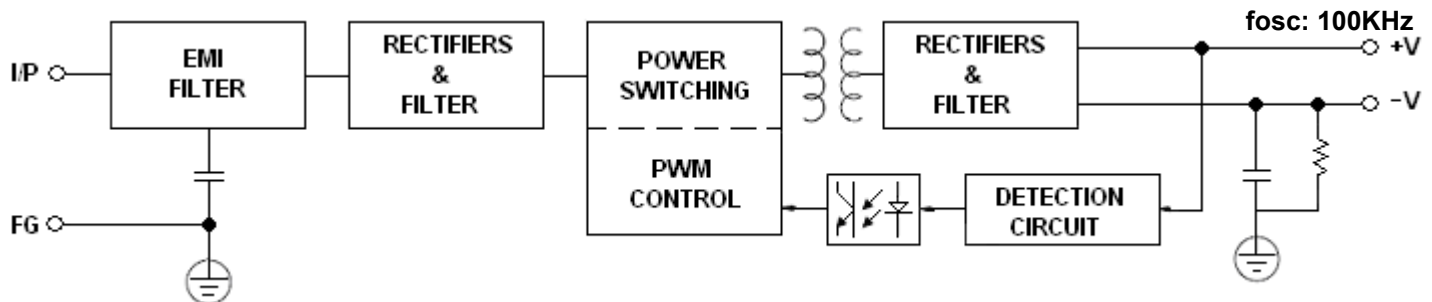
**OUTPUT VOLTAGE / CURRENT RATING CHART**

Model	Input Voltage	Output Voltage	Output Current Range	Ripple & Noise	Output Power	Over Voltage Protection	Efficiency
PSPS-25-3.3	85 ~ 264 VAC (120 ~ 370 VDC)	3.3 VDC	0 ~ 5A	80mVp-p	16.5W	3.8 ~ 4.46V	66%
PSPS-25-5		5 VDC	0 ~ 5A	80mVp-p	25W	5.75 ~ 6.75V	74%
PSPS-25-7.5		7.5 VDC	0 ~ 3.3A	80mVp-p	24.8W	8.6 ~ 10.1V	76%
PSPS-25-12		12 VDC	0 ~ 2.1A	100mVp-p	25.2W	13.8 ~ 16.2V	78%
PSPS-25-13.5		13.5 VDC	0 ~ 1.9A	100mVp-p	25.7W	15.5 ~ 18.2V	78%
PSPS-25-15		15 VDC	0 ~ 1.7A	100mVp-p	25.5W	17.3 ~ 20.3V	78%
PSPS-25-24		24 VDC	0 ~ 1A	240mVp-p	24W	27.6 ~ 32.4V	79%
PSPS-25-27		27 VDC	0 ~ 0.9A	240mVp-p	24.3W	31 ~ 36.5V	79%
PSPS-25-48		48 VDC	0 ~ 0.5A	350mVp-p	24W	55.2 ~ 64.8V	79%

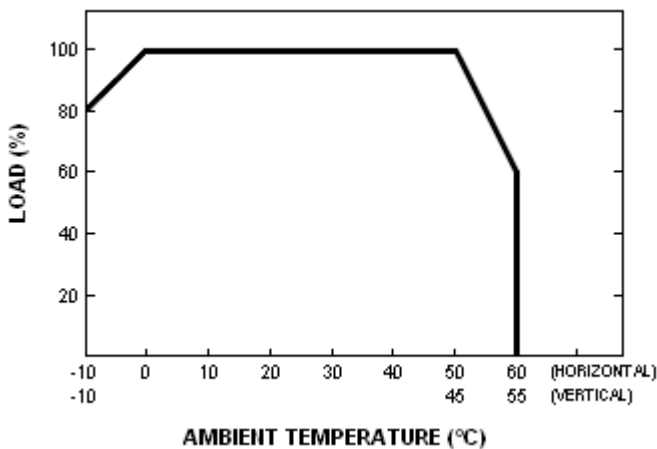
**NOTES**

1. All parameters not specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz using a 12" twisted pair-wire terminated with 0.1uF & 47uF capacitors in parallel.
3. Tolerance: includes set up tolerance, line regulation, and load regulation.
4. The power supply is considered a component, which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives.

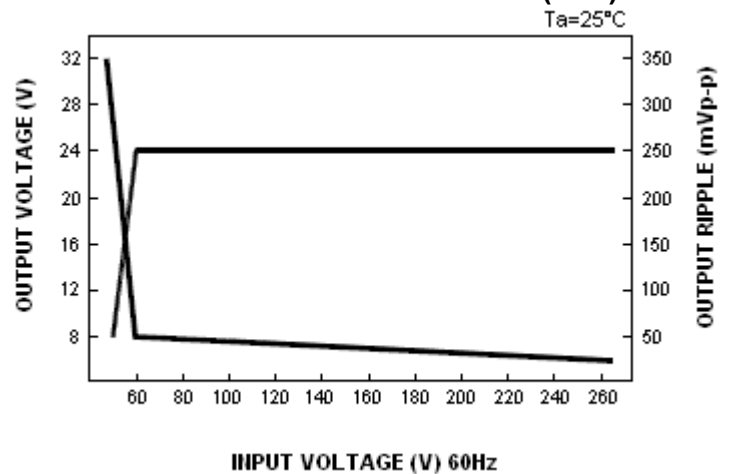
**BLOCK DIAGRAM**



**DERATING CURVE**

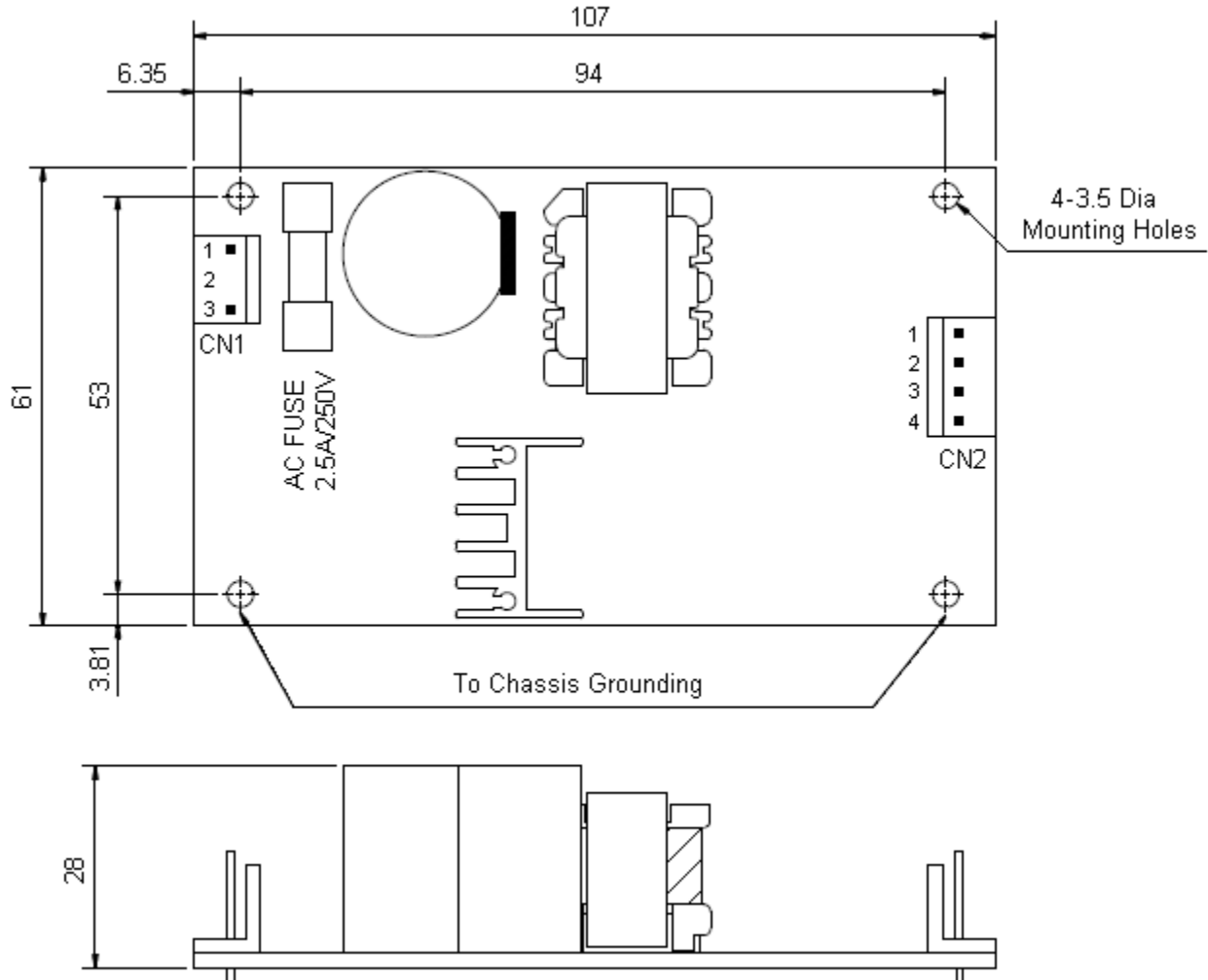


**STATIC CHARACTERISTICS (24V)**



**MECHANICAL DRAWING**

Unit: mm



AC INPUT CONNECTOR (CN1)	
Pin. No	Assignment
1	AC/L
2	No Pin
3	AC/N

DC OUTPUT CONNECTOR (CN2)	
Pin No.	Assignment
1,2	+V
3,4	-V