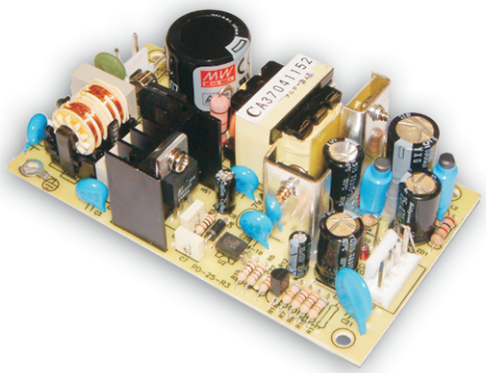
# 25W Dual Output Switching Power Supply

# PD-25 series



## Features :

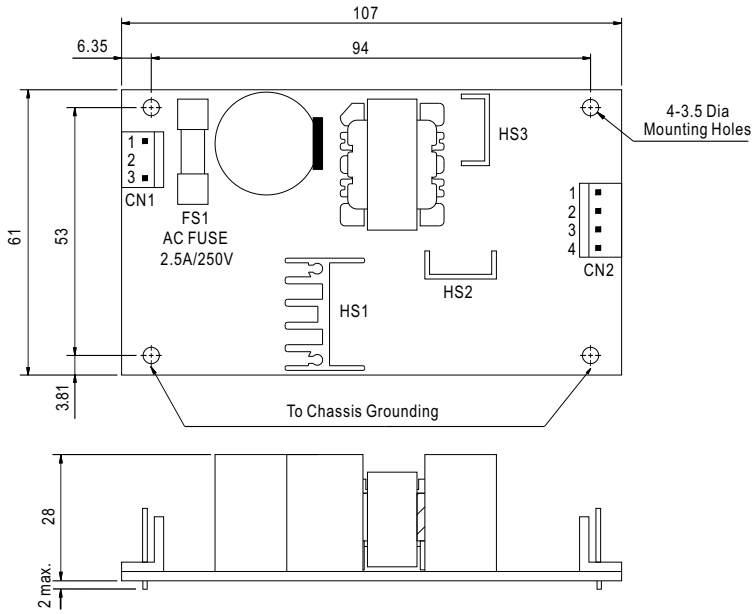
- Universal AC input / Full range
- Low leakage current<0.5mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- Low cost
- High reliability
- 2 years warranty

## SPECIFICATION

| MODEL | | PD-25A | | PD-25B | | PD-2505 | | PD-2512 | | PD-2515 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH1 | CH2 | CH1 | CH2 | CH1 | CH2 | CH1 | CH2 |
| | DC VOLTAGE | 5V | 12V | 5V | 24V | 5V | -5V | 12V | -12V | 15V | -15V |
| | RATED CURRENT | 2.1A | 1.2A | 1.2A | 0.8A | 2.5A | 2.5A | 1A | 1A | 0.8A | 0.8A |
| | CURRENT RANGE | 0.2 ~ 2.5A | 0.1 ~ 1.5A | 0.2 ~ 2A | 0.1 ~ 1A | 0.1 ~ 3A | 0.1 ~ 2.5A | 0.1 ~ 1.2A | 0.1 ~ 1.2A | 0.1 ~ 1A | 0.1 ~ 1A |
| | RATED POWER | 25W | | 25.2W | | 25W | | 24W | | 24W | |
| | RIPPLE & NOISE (max.) Note.2 | 50mVp-p | 150mVp-p | 50mVp-p | 200mVp-p | 50mVp-p | 50mVp-p | 50mVp-p | 50mVp-p | 50mVp-p | 50mVp-p |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±6.0% | ±2.0% | ±6.0% | ±6.0% | ±6.0% | ±4.0% | ±4.0% | ±4.0% | ±4.0% |
| | LINE REGULATION | ±0.5% | ±2.0% | ±0.5% | ±2.0% | ±1.0% | ±1.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1.0% | ±4.0% | ±1.0% | ±4.0% | ±4.0% | ±4.0% | ±3.0% | ±3.0% | ±3.0% | ±3.0% |
| | SETUP, RISE TIME | 250ms, 50ms/230VAC 250ms, 30ms/115VAC at full load | | | | | | | | | |
| | HOLD UP TIME (Typ.) | 100ms/230VAC 16ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 85 ~ 264VAC 120 ~ 370VDC | | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | | |
| | EFFICIENCY(Typ.) | 71% | | 77% | | 73% | | 74% | | 75% | |
| | AC CURRENT (Typ.) | 0.65A/115VAC 0.4A/230VAC | | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 32A | | | | | | | | | |
| | LEAKAGE CURRENT | <0.5mA / 240VAC | | | | | | | | | |
| PROTECTION | OVERLOAD | Above 105% rated output power | | | | | | | | | |
| | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75V | 13.8 ~ 16.2V | 5.75 ~ 6.75V | 27.6 ~ 32.4V | 5.75 ~ 6.75V | -5.75 ~ -6.75V | 13.8 ~ 16.2V | -13.8 ~ -16.2V | 17.3 ~ 20.3V | -17.3 ~ -20.3V |
| | | Protection type : Shut off o/p voltage, clamping by zener diode | | | | | | | | | |
| | OVER TEMPERATURE | Tj 135℃ typically (U1) detect on main control IC | | | | | | | | | |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60℃ (Refer to output load derating curve) | | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85℃, 10 ~ 95% RH | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/℃ (0 ~ 50℃) ON CH1 output | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 approved | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH | | | | | | | | | |
| | 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, light industry level, criteria A | | | | | | | | | |
| OTHERS | MTBF | 507.9Khrs min. MIL-HDBK-217F (25℃) | | | | | | | | | |
| | DIMENSION | 107*61*28mm (L*W*H) | | | | | | | | | |
| | PACKING | 0.15Kg; 96pcs/15.9Kg/1.3CUFT | | | | | | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)<br>5. Heat Sink HS1,HS2,HS3 can not be shorted. | | | | | | | | | | |

## ■ Mechanical Specification

Unit:mm




AC Input Connector (CN1) : Molex 41791-03 or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---|---|---|---|
| 1 | AC/L | Molex 2139 or equivalent | Molex 2478 or equivalent |
| 2 | No Pin | | |
| 3 | AC/N | | |

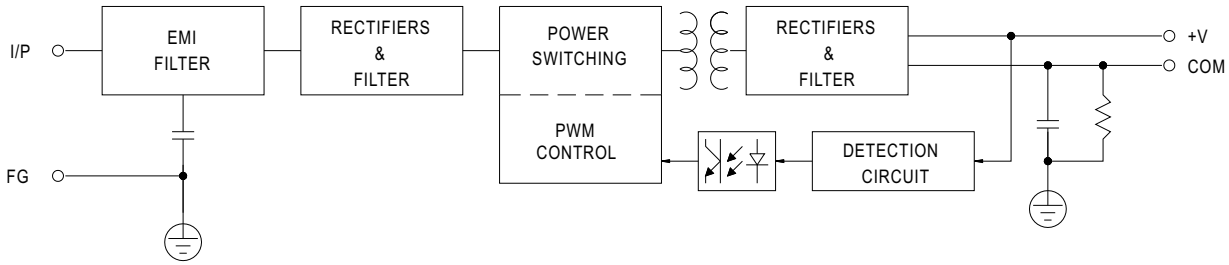
DC Output Connector (CN2) : Molex 41791-04 or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---|---|---|---|
| 1 | V1 | Molex 2139 or equivalent | Molex 2478 or equivalent |
| 2,3 | COM | | |
| 4 | V2 | | |

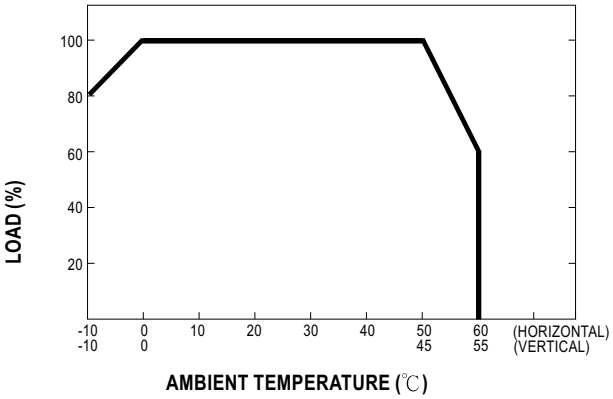
⚠ HS1,HS2,HS3 can not be shorted

## ■ Block Diagram

fosc : 100KHz




## ■ Derating Curve




## ■ Static Characteristics (A)