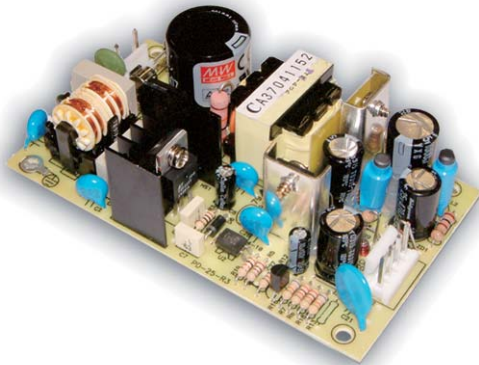




#### ■ Features :

- 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



(for PD-25A only)

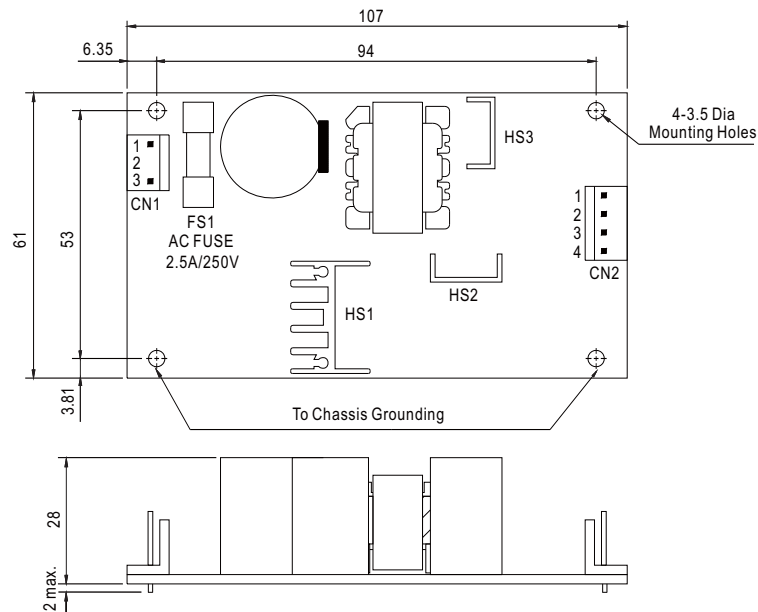


#### SPECIFICATION

| MODEL                 | PD-25A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PD-25B                                                                                                                                  | PD-2505                         | PD-2512             | PD-2515               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------|-----------------------|
| OUTPUT                | OUTPUT NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | CH1 CH2                                                                                                                                 | CH1 CH2                         | CH1 CH2             | CH1 CH2               |
|                       | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5V 12V                                                                                                                                  | 5V 24V                          | 5V -5V              | 12V -12V              |
|                       | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2.1A 1.2A                                                                                                                               | 1.2A 0.8A                       | 2.5A 2.5A           | 1A 1A                 |
|                       | 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 |
|                       | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 24.9W                                                                                                                                   | 25.2W                           | 25W                 | 24W                   |
|                       | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50mVp-p 150mVp-p                                                                                                                        | 50mVp-p 200mVp-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%           |
|                       | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ±0.5% ±2.0%                                                                                                                             | ±0.5% ±2.0%                     | ±1.0% ±1.0%         | ±0.5% ±0.5%           |
|                       | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ±1.0% ±4.0%                                                                                                                             | ±1.0% ±4.0%                     | ±4.0% ±4.0%         | ±3.0% ±3.0%           |
|                       | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 250ms, 50ms/230VAC                                                                                                                      | 250ms, 30ms/115VAC at full load |                     |                       |
| INPUT                 | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 100ms/230VAC                                                                                                                            | 16ms/115VAC at full load        |                     |                       |
|                       | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 85 ~ 264VAC 120 ~ 370VDC                                                                                                                |                                 |                     |                       |
|                       | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 47 ~ 63Hz                                                                                                                               |                                 |                     |                       |
|                       | EFFICIENCY(Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 71%                                                                                                                                     | 77%                             | 73%                 | 74%                   |
|                       | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.65A/115VAC 0.4A/230VAC                                                                                                                |                                 |                     |                       |
|                       | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | COLD START 32A                                                                                                                          |                                 |                     |                       |
| PROTECTION            | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <0.5mA / 240VAC                                                                                                                         |                                 |                     |                       |
|                       | 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 |                                 |                     |                       |
| ENVIRONMENT           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Protection type : Shut off o/p voltage, clamping by zener diode                                                                         |                                 |                     |                       |
|                       | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Shut down o/p voltage, re-power on to recover                                                                                           |                                 |                     |                       |
|                       | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | -10 ~ +60°C (Refer to "Derating Curve")                                                                                                 |                                 |                     |                       |
|                       | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20 ~ 90% RH non-condensing                                                                                                              |                                 |                     |                       |
|                       | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | -20 ~ +85°C, 10 ~ 95% RH                                                                                                                |                                 |                     |                       |
|                       | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ±0.03%/°C (0 ~ 50°C) ON CH1 output                                                                                                      |                                 |                     |                       |
| SAFETY & EMC (Note 4) | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                 |                                 |                     |                       |
|                       | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | UL60950-1, TUV EN60950-1, EAC TP TC 004, CCC GB4943.1(for PD-25A only) approved                                                         |                                 |                     |                       |
|                       | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC                                                                                               |                                 |                     |                       |
|                       | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                                              |                                 |                     |                       |
|                       | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020, GB9254 Class B, GB17625.1                                       |                                 |                     |                       |
| OTHERS                | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Compliance to EN61000-4-2,3,4,5, light industry level, criteria A, EAC TP TC 020                                                        |                                 |                     |                       |
|                       | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 507.9Khrs min. MIL-HDBK-217F (25°C)                                                                                                     |                                 |                     |                       |
|                       | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 107*61*28mm (L*W*H)                                                                                                                     |                                 |                     |                       |
|                       | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.15Kg; 96pcs/15.9Kg/1.3CUFT                                                                                                            |                                 |                     |                       |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. Heat Sink HS1,HS2,HS3 can not be shorted.</p> <p>6. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> |                                                                                                                                         |                                 |                     |                       |

## 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       |                          |                          |

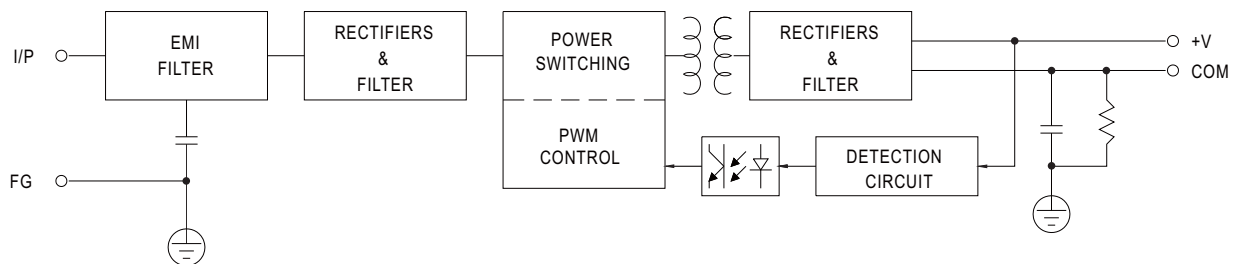
DC Output Connector (CN2) : Molex 41791-04 or equivalent

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

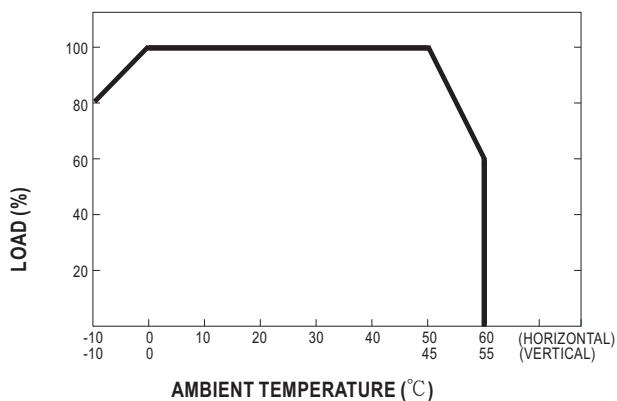
⚠ HS1,HS2,HS3 can not be shorted

## Block Diagram

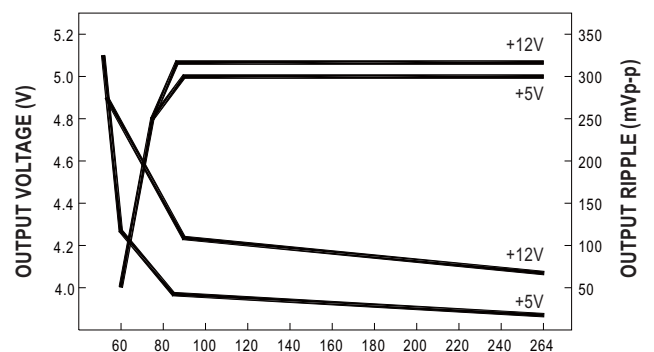
fosc : 100KHz



## Derating Curve



## Static Characteristics (A)



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