



■ Features :

- Universal AC input / Full range
- Low leakage current  $\leq 0.3\text{mA}$
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 3 years warranty

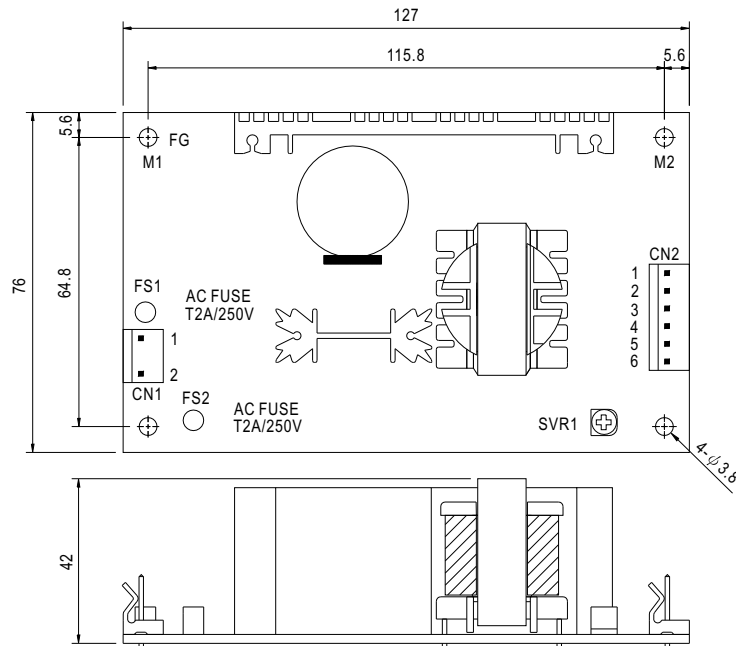


SPECIFICATION

| MODEL                 |  | MPD-65A  |              | MPD-65B                         |             |
|-----------------------|--|--|--------------|---------------------------------|-------------|
| OUTPUT                | OUTPUT NUMBER  | CH1  | CH2          | CH1                             | CH2         |
|                       | DC VOLTAGE   | 5V   | 12V          | 5V                              | 24V         |
|                       | RATED CURRENT  | 5.5A   | 2.8A         | 3.5A                            | 2A          |
|                       | CURRENT RANGE  | 0.4 ~ 7A   | 0.2 ~ 3.2A   | 0.4 ~ 6A                        | 0.2 ~ 2.6A  |
|                       | RATED POWER  | 61.1W  |              | 65.5W                           |             |
|                       | OUTPUT POWER (max.)  | 72W with 18CFM min. Forced air convection  |              |                                 |             |
|                       | RIPPLE & NOISE (max.) Note.2   | 60mVp-p  | 150mVp-p     | 60mVp-p                         | 150mVp-p    |
|                       | VOLTAGE ADJ. RANGE   | CH1:4.5 ~ 5.5V   |              | CH1:4.5 ~ 5.5V                  |             |
|                       | VOLTAGE TOLERANCE Note.3   | $\pm 4.0\%$  | $\pm 7.0\%$  | $\pm 4.0\%$                     | $\pm 7.0\%$ |
|                       | LINE REGULATION  | $\pm 1.0\%$  | $\pm 2.0\%$  | $\pm 1.0\%$                     | $\pm 2.0\%$ |
|                       | LOAD REGULATION  | $\pm 3.0\%$  | $\pm 4.0\%$  | $\pm 3.0\%$                     | $\pm 4.0\%$ |
|                       | SETUP, RISE TIME   | 800ms, 20ms/230VAC   |              | 800ms, 20ms/115VAC at full load |             |
| HOLD UP TIME (Typ.)   | 80ms/230VAC  | 12ms/115VAC at full load   |              |                                 |             |
| INPUT                 | VOLTAGE RANGE  | 90 ~ 264VAC  | 127 ~ 370VDC |                                 |             |
|                       | FREQUENCY RANGE  | 47 ~ 440Hz   |              |                                 |             |
|                       | EFFICIENCY(Typ.)   | 75%  |              | 78%                             |             |
|                       | AC CURRENT (Typ.)  | 1.6A/115VAC  | 1A/230VAC    |                                 |             |
|                       | INRUSH CURRENT (Typ.)  | COLD START 20A/115VAC  | 40A/230VAC   |                                 |             |
| LEAKAGE CURRENT       | <0.3mA / 264VAC  |  |              |                                 |             |
| PROTECTION            | OVERLOAD   | 73 ~ 105W rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |                                 |             |
|                       | OVER VOLTAGE   | 5.75 ~ 6.75VDC on CH1<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed        |              |                                 |             |
| ENVIRONMENT           | WORKING TEMP.  | -10 ~ +55°C (Refer to output load derating curve)  |              |                                 |             |
|                       | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |              |                                 |             |
|                       | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH   |              |                                 |             |
|                       | TEMP. COEFFICIENT  | $\pm 0.04\%/^{\circ}\text{C}$ (0 ~ 50°C) on +5V output   |              |                                 |             |
| VIBRATION             | 10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes   |  |              |                                 |             |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS   | UL2601-1, TUV EN60601-1, IEC601-1 Approved   |              |                                 |             |
|                       | WITHSTAND VOLTAGE  | I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC  |              |                                 |             |
|                       | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG:100M Ohms/500VDC   |              |                                 |             |
|                       | EMI CONDUCTION & RADIATION   | Compliance to EN55011 (CISPR11) Class B  |              |                                 |             |
|                       | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3   |              |                                 |             |
| EMS IMMUNITY          | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN60601-1-2 Medical level, criteria A  |  |              |                                 |             |
| OTHERS                | MTBF   | 291.3Khrs min. MIL-HDBK-217F (25°C)  |              |                                 |             |
|                       | DIMENSION  | 127*76*42mm (L*W*H)  |              |                                 |             |
|                       | PACKING  | 0.25Kg; 54pcs/16Kg/1.35CUFT  |              |                                 |             |
| 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. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>5. Mounting holes M1 and M2 should be grounded for EMI purposes.</p> |  |              |                                 |             |

### Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

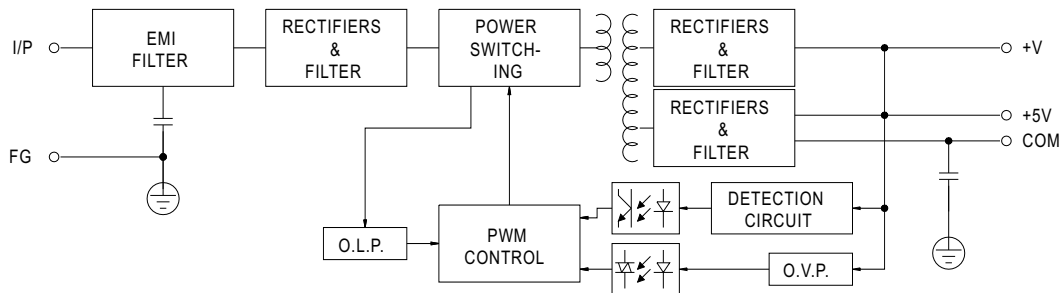
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | AC/N       | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2       | AC/L       |                          |                          |

DC Output Connector (CN2) : Molex 5273-06 or equivalent

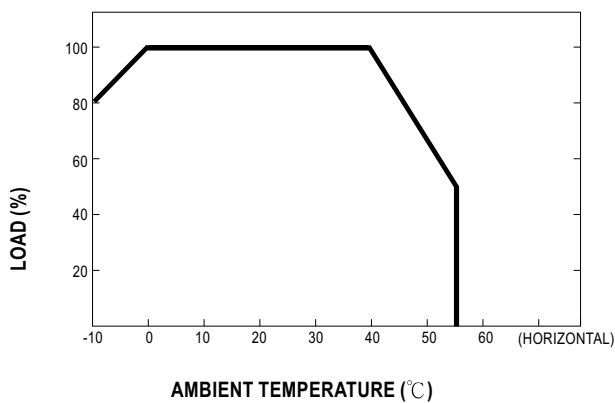
| Pin No. | Assignment | Mating Housing           | Terminal                 |
|---------|------------|--------------------------|--------------------------|
| 1       | +V         | Molex 5195 or equivalent | Molex 5194 or equivalent |
| 2,3     | +5V        |                          |                          |
| 4,5     | COM        |                          |                          |
| 6       | NC         |                          |                          |

### Block Diagram

fosc : 45KHz



### Derating Curve



### Static Characteristics

