



- Features :
 - Universal AC input / Full range
 - Low leakage current <250μA
 - Protections: Short circuit / Overload / Over voltage
 - Cooling by free air convection
 - Medical safety approved (2 x MOPP between primary to secondary)
 - 100% full load burn-in test
 - Fixed switching frequency at 45KHz
 - 3 years warranty

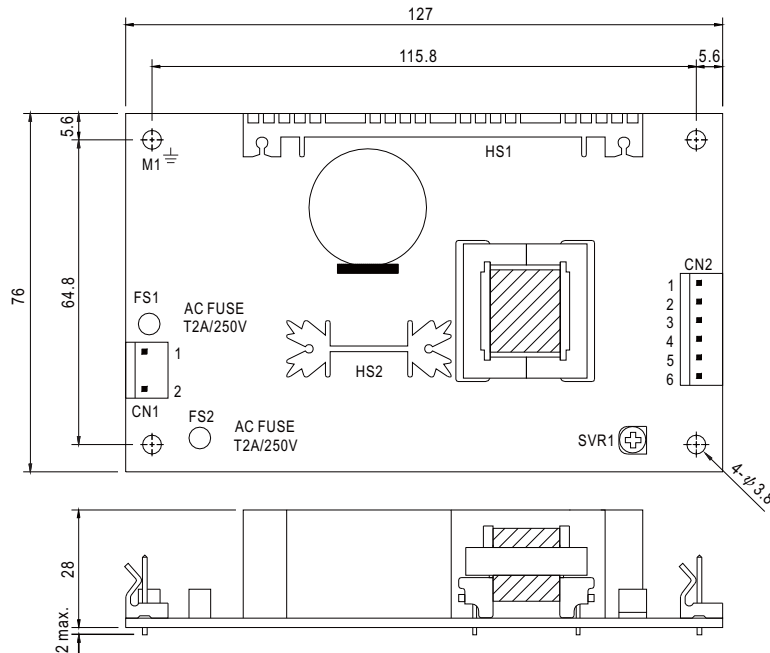


SPECIFICATION

| MODEL | | MPT-45A | | | MPT-45B | | | MPT-45C | | |
|------------------------|--|---|--------------------------|---------------------------------|----------|------------|----------|----------|------------|----------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 |
| | DC VOLTAGE | 5V | 12V | -5V | 5V | 12V | -12V | 5V | 15V | -15V |
| | RATED CURRENT | 3A | 2A | 0.3A | 3A | 2A | 0.3A | 3A | 1.6A | 0.3A |
| | CURRENT RANGE | 0.4 ~ 5A | 0.2 ~ 2.5A | 0 ~ 0.5A | 0.4 ~ 5A | 0.2 ~ 2.5A | 0 ~ 0.5A | 0.4 ~ 5A | 0.2 ~ 2.3A | 0 ~ 0.5A |
| | RATED POWER | 40.5W | | | 42.6W | | | 43.5W | | |
| | OUTPUT POWER (max.) | 52W with 18CFM min. Forced air convection | | | | | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 60mVp-p | 120mVp-p | 60mVp-p | 60mVp-p | 120mVp-p | 100mVp-p | 60mVp-p | 120mVp-p | 100mVp-p |
| | VOLTAGE ADJ. RANGE | CH1:4.5 ~ 5.5V | | | | | | | | |
| | VOLTAGE TOLERANCE Note.3 | ±4.0% | ±7.0% | ±5.0% | ±4.0% | ±7.0% | ±5.0% | ±4.0% | ±7.0% | ±5.0% |
| | LINE REGULATION | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% | ±1.0% | ±2.0% | ±1.0% |
| LOAD REGULATION | ±3.0% | ±4.0% | ±1.0% | ±3.0% | ±4.0% | ±1.0% | ±3.0% | ±4.0% | ±1.0% | |
| 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.) | 73% | | | 75% | | | 75% | | |
| | AC CURRENT (Typ.) | 1.2A/115VAC | | 0.7A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC | | 40A/230VAC | | | | | | |
| LEAKAGE CURRENT Note.7 | Earth leakage current < 250μA/264VAC , Touch current < 60 μA/264VAC | | | | | | | | | |
| PROTECTION | OVERLOAD | 53 ~ 75W rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75VDC on CH1 Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| ENVIRONMENT | 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 | ±0.04%/°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 | ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved | | | | | | | | |
| | ISOLATION LEVEL | Primary-Secondary: 2xMOPP, Primary-Earth:1xMOPP | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC 1min. | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | EMC EMISSION | Compliance to EN55011 (CISPR11) Class B, EN61000-3-2,-3 | | | | | | | | |
| EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN60601-1-2, medical level, criteria A | | | | | | | | | |
| OTHERS | MTBF | 271.5Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 127*76*28mm (L*W*H) | | | | | | | | |
| | PACKING | 0.21Kg; 72pcs/18Kg/1.35CUFT | | | | | | | | |
| NOTE | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 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 http://www.meanwell.com) 5. Mounting holes M1 and M2 should be grounded for EMI purposes. 6. Heat Sink HS1,HS2 can not be shorted. 7. Touch current was measured from primary input to DC output. | | | | | | | | | |

■ Mechanical Specification

Unit:mm



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

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

⚠ HS1,HS2 can not be shorted

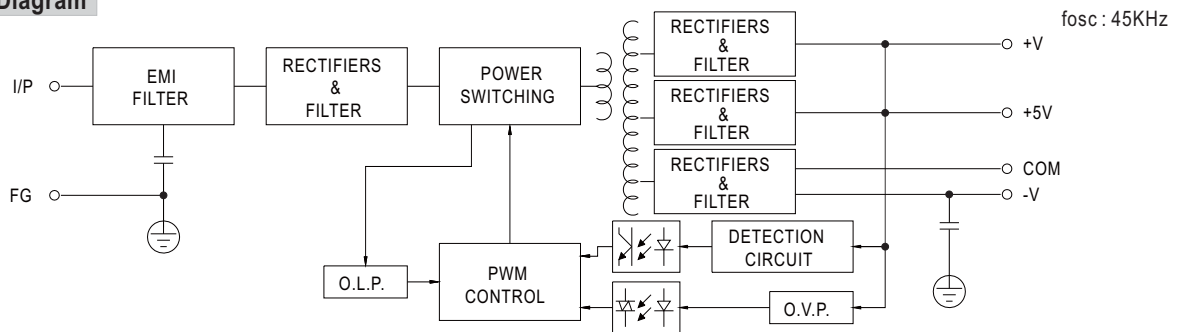
DC Output Connector (CN2) : Molex 5273-06 or equivalent

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

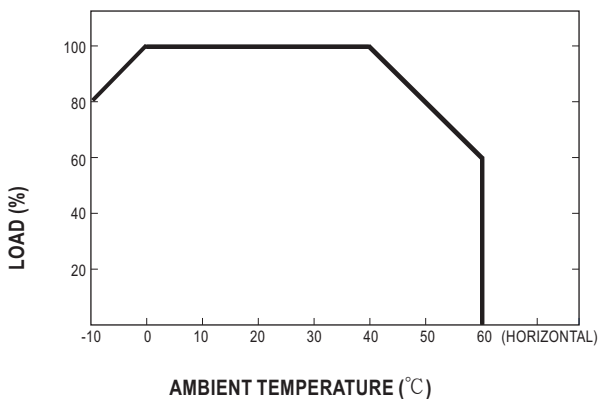
⊥ : Grounding Required

⚠ 1.HS1,HS2 cannot be shorted
2.M1 is safety ground

■ Block Diagram



■ Derating Curve



■ Static Characteristics

