



- 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

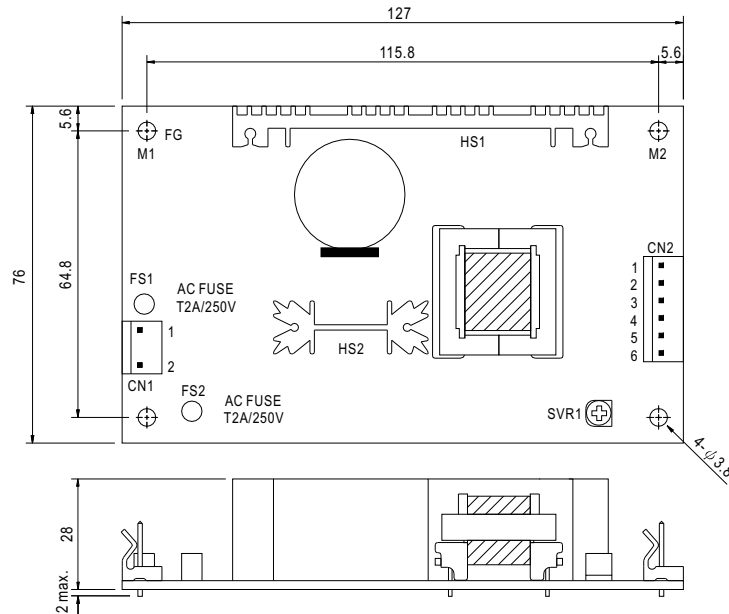


## SPECIFICATION

MODEL	MPD-45A		MPD-45B		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	3.2A	2A	3.2A	1.2A
	CURRENT RANGE	0.4 ~ 5A	0.2 ~ 2.5A	0.4 ~ 5A	0.2 ~ 1.8A
	RATED POWER	40W		44.8W	
	OUTPUT POWER (max.)	52W with 18CFM min. Forced air convection			
	RIPPLE & NOISE (max.) Note.2	60mVp-p	120mVp-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.)	50ms/230VAC      16ms/115VAC at full load				
INPUT	VOLTAGE RANGE	90 ~ 264VAC      127 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 440Hz			
	EFFICIENCY (Typ.)	76%		78%	
	AC CURRENT (Typ.)	1.2A/115VAC      0.7A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 15A/115VAC      30A/230VAC			
LEAKAGE CURRENT	<0.3mA/ 264VAC				
PROTECTION	OVERLOAD	53 ~ 75W rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V on CH1 Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°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, IEC60601-1 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 / 25°C / 70% RH			
	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*28mm (L*W*H)			
	PACKING	0.2Kg; 72pcs/17.4Kg/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. 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. Mounting holes M1 and M2 should be grounded for EMI purposes.</p> <p>6. Heat Sink HS1,HS2 can not be shorted.</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		

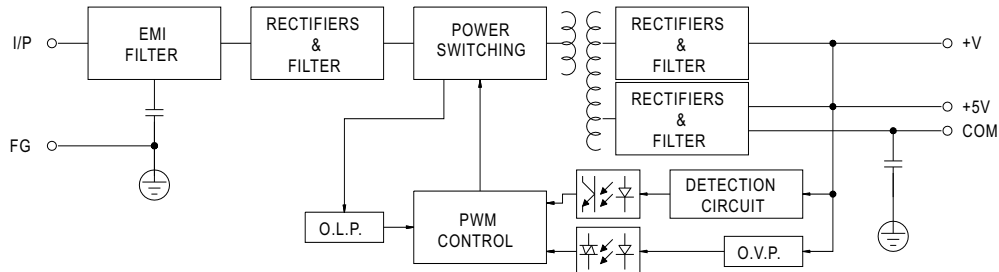
⚠ HS1,HS2 can not be shorted

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

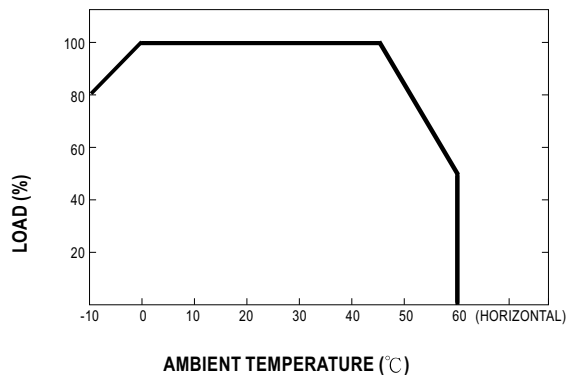
Pin No.	Assignment	Mating Housing	Terminal
1	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
2,3	+5V		
4,5	COM		
6	NC		

### Block Diagram

fosc : 45KHz



### Derating Curve



### Static Characteristics

