



- 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

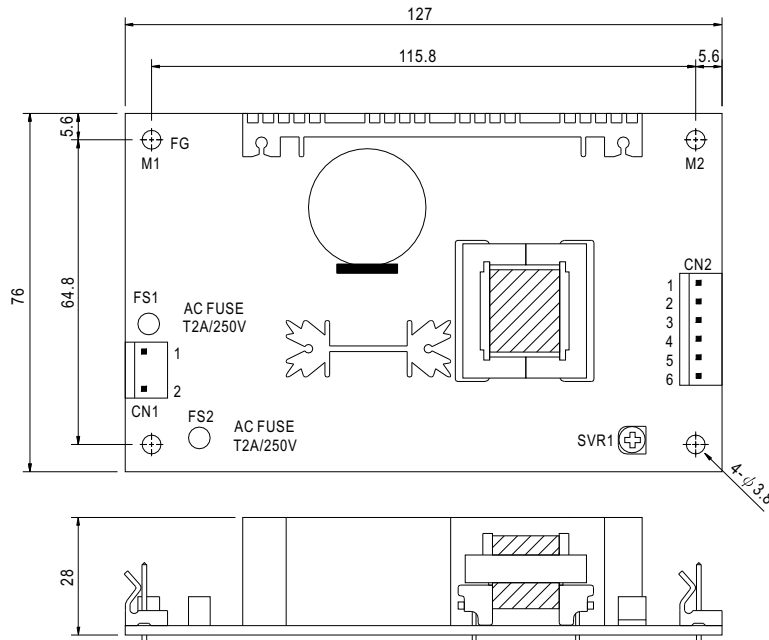


**SPECIFICATION**

MODEL		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	$\pm 4.0\%$	$\pm 7.0\%$	$\pm 5.0\%$	$\pm 4.0\%$	$\pm 7.0\%$	$\pm 5.0\%$	$\pm 4.0\%$	$\pm 7.0\%$	$\pm 5.0\%$
	LINE REGULATION	$\pm 1.0\%$	$\pm 2.0\%$	$\pm 1.0\%$	$\pm 1.0\%$	$\pm 2.0\%$	$\pm 1.0\%$	$\pm 1.0\%$	$\pm 2.0\%$	$\pm 1.0\%$
	LOAD REGULATION	$\pm 3.0\%$	$\pm 4.0\%$	$\pm 1.0\%$	$\pm 3.0\%$	$\pm 4.0\%$	$\pm 1.0\%$	$\pm 3.0\%$	$\pm 4.0\%$	$\pm 1.0\%$
	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	<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 ~ 6.75VDC 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, IEC601-1 Approved								
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.								
	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	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. The final equipment must be re-confirmed that it still meets EMC directives. 5. Mounting holes M1 and M2 should be grounded for EMI purposes.									

**Mechanical Specification**

Unit:mm



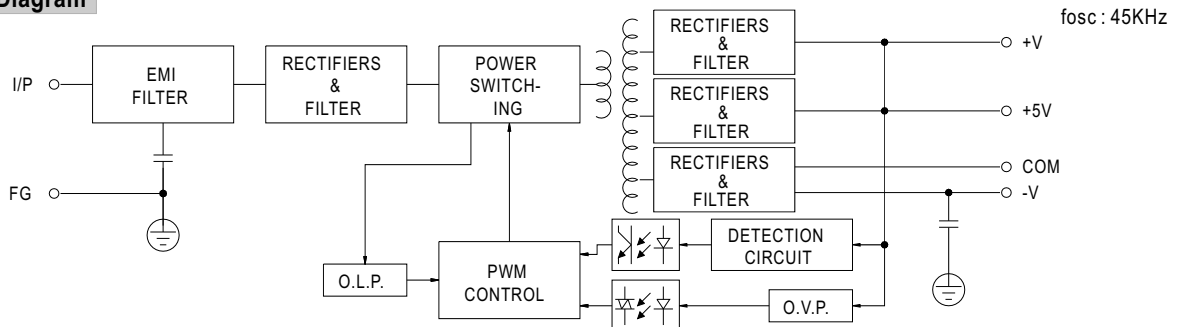
AC Input Connector (CN1) : Molex 5277-02 or equivalent

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

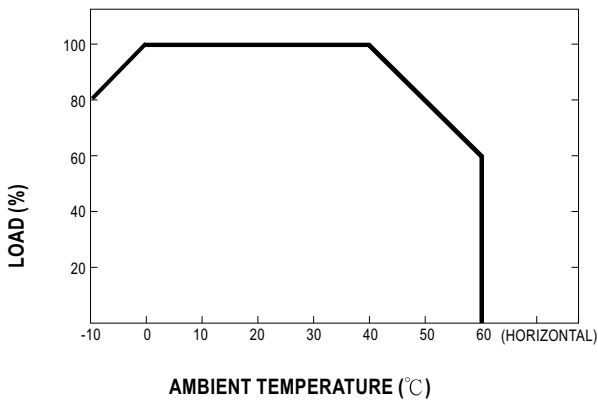
DC Output Connector (CN2) : Molex 5273-06 or equivalent

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

**Block Diagram**



**Derating Curve**



**Static Characteristics**

