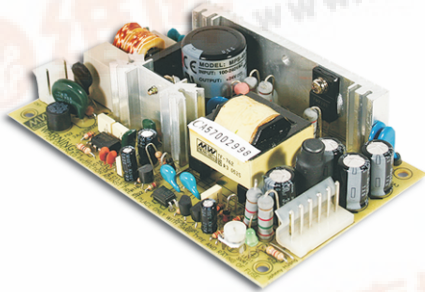




45W Triple Output Medical Type

MPT-45 series



■ 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



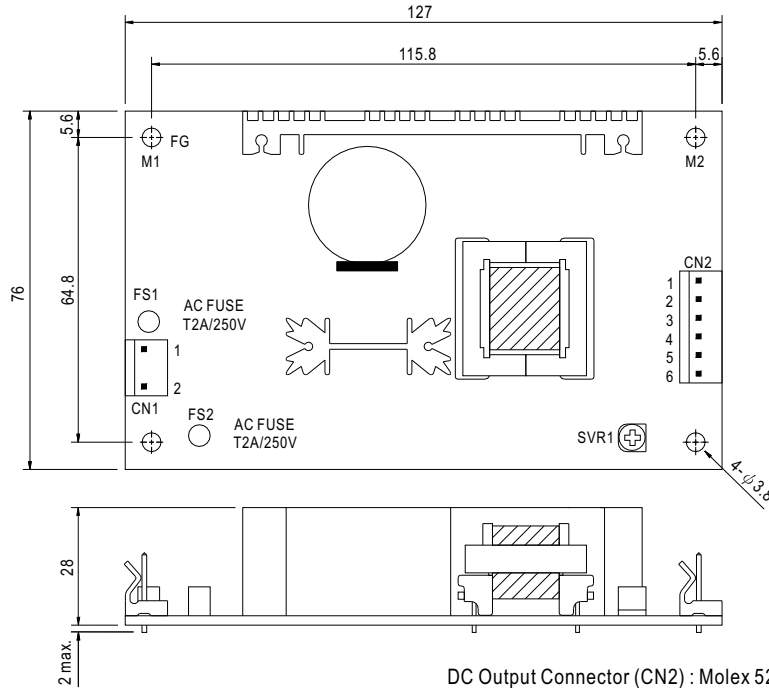
SPECIFICATION

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, IEC60601-1 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	<ol style="list-style-type: none"> 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



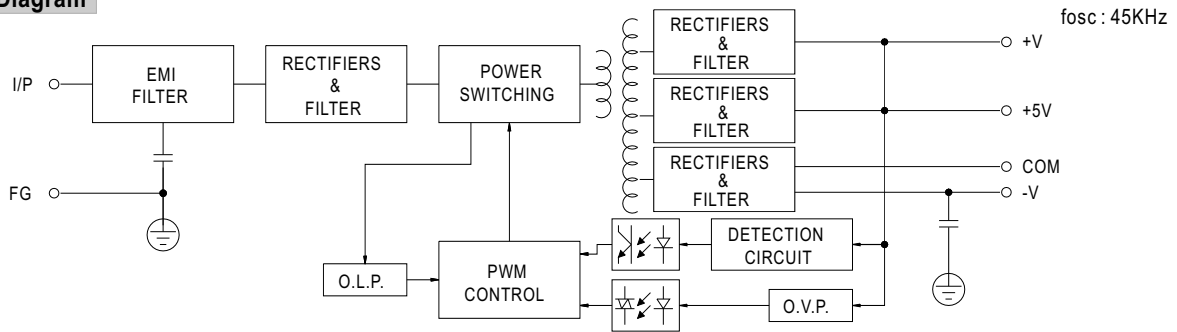
AC Input Connector (CN1) : Molex 5277-02 or equivalent

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

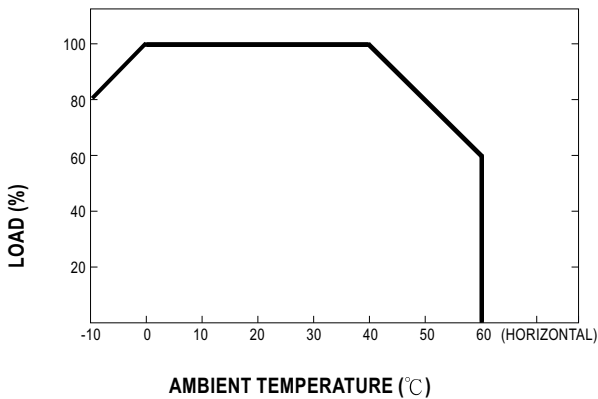
DC Output Connector (CN2) : Molex 5273-06 or equivalent

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

