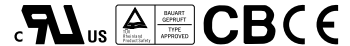


- Features :
  - Universal AC input / Full range
  - Protections:Short circuit/Over load/Over voltage
  - Cooling by free air convection
  - 100% full load burn-in test
  - Fixed switching frequency at 65KHz
  - 2 years warranty



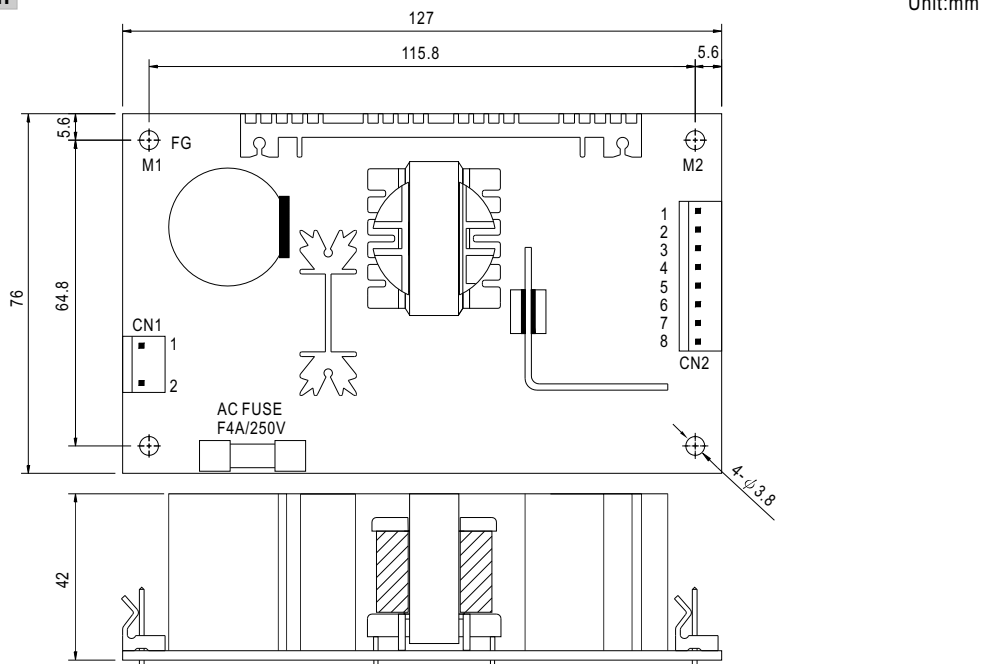
### SPECIFICATION

<b>MODEL</b>		<b>PT-6503</b>		
<b>OUTPUT</b>	<b>OUTPUT NUMBER</b>	CH1	CH2	CH3
	<b>DC VOLTAGE</b>	3.3V	5V	12V
	<b>RATED CURRENT</b>	6A	6A	1A
	<b>CURRENT RANGE</b>	0 ~ 7A	0.2 ~ 10A	0 ~ 1.2A
	<b>RATED POWER</b>	Total power max. 61.8W(CH1+CH2 max. 54W)		
	<b>RIPPLE &amp; NOISE (max.) Note.2</b>	50mVp-p	50mVp-p	100mVp-p
	<b>VOLTAGE ADJ. RANGE</b>	CH1: 3 ~ 3.6V		
	<b>VOLTAGE TOLERANCE Note.3</b>	±3.0%	+4,-2%	±8.0%
	<b>LINE REGULATION</b>	±1.0%	±1.0%	±2.0%
	<b>LOAD REGULATION</b>	±3.0%	±3.0%	±8.0%
	<b>SETUP, RISE TIME</b>	800ms, 50ms at full load		
<b>HOLD TIME (Typ.)</b>	60ms at full load			
<b>INPUT</b>	<b>VOLTAGE RANGE</b>	90 ~ 264VAC	127 ~ 370VDC	
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz		
	<b>EFFICIENCY (Typ.)</b>	72%		
	<b>AC CURRENT (Typ.)</b>	1.8A/115VAC	0.9A/230VAC	
	<b>INRUSH CURRENT (Typ.)</b>	COLD START 20A/115V	40A/230V	
	<b>LEAKAGE CURRENT</b>	<1mA / 240VAC		
<b>PROTECTION</b>	<b>OVER LOAD</b>	120 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	<b>OVER VOLTAGE</b>	5.75 ~ 6.75V on +5V Protection type : Hiccup mode, recovers automatically after fault condition is removed		
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-10 ~ +60°C (Refer to output load derating curve)		
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing		
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH		
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)		
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes		
<b>SAFETY &amp; EMC (Note 4)</b>	<b>SAFETY STANDARDS</b>	UL60950-1, TUV EN60950-1 Approved		
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.		
	<b>ISOLATION RESISTANCE</b>	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC		
	<b>EMI CONDUCTION &amp; RADIATION</b>	Compliance to EN55022 (CISPR22) Class B		
	<b>HARMONIC CURRENT</b>	Compliance to EN61000-3-2,-3		
	<b>EMS IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,11 Light industry level, criteria A		
<b>OTHERS</b>	<b>MTBF</b>	222Khrs min. MIL-HDBK-217F (25°C)		
	<b>DIMENSION</b>	127*76*42mm (L*W*H)		
	<b>PACKING</b>	0.28Kg; 54pcs/16.2Kg/1.35CUFT		
<b>NOTE</b>	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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.</li> <li>Mounting holes M1 and M2 should be grounded for EMI purposes.</li> </ol>			



65W Triple Output with 3.3V output

### Mechanical Specification



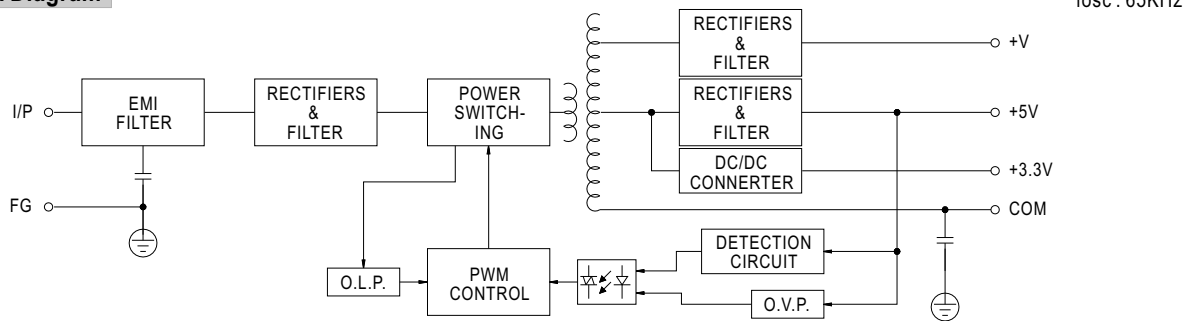
AC Input Connector (CN1) : Molex 5277-02 or equivalent

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

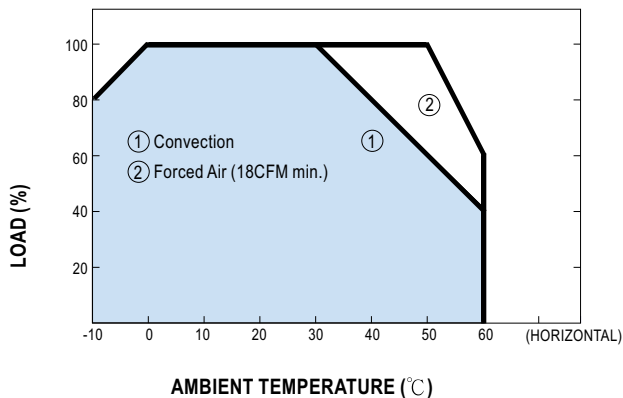
DC Output Connector (CN2) : Molex 5273-08 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	+5V	Molex 5195 or equivalent	Molex 5194 or equivalent
3,4,5	COM		
6	+V		
7,8	+3.3V		

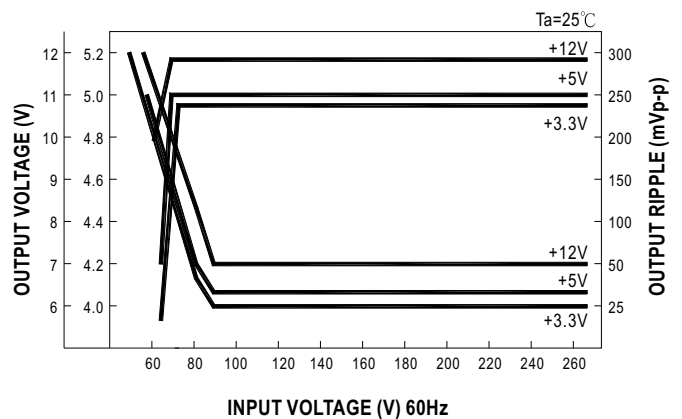
### Block Diagram



### Output Derating



### Static Characteristics





NO	TEST ITEM	TEST CONDITION/SPECIFICATION	RESULT	VERDICT																																																																						
19	ENVIRONMENT TEST	1.LOW TEMPERATURE TEST I/P:230VAC O/P:FULL LOAD AMBIENT TEMPERATURE:-9.8°C	AFTER2.5hrs POWER ON OK	P																																																																						
		2.HIGH AMBIENT TEMPERATURE FULL LOAD TEST I/P:230 VAC O/P:FULL LOAD AMBIENT TEMPERATURE:32.1°C	AFTER 12 hrs NON BREAK																																																																							
		3.ACCELERATED LIFE TEST I/P:272 VAC O/P:FULL LOAD POWER ON POWER OFF AMBIENT TEMPERATURE:25°C AMBIENT HUMIDITY:95%	AFTER12.5hrs NON BREAK																																																																							
20	TEMPERATURE RISE Trise OF PARTS	I/P :230VAC O/P :FULL LOAD AFTER 4hrs BURN-IN TA:25.5°C	<table border="1"> <thead> <tr> <th></th> <th>POSITION</th> <th>P/N</th> <th>TEMP</th> <th>Trise</th> </tr> </thead> <tbody> <tr> <td></td> <td>BD1</td> <td>BRIDGE DIODE</td> <td>64.5°C</td> <td>39.0°C</td> </tr> <tr> <td></td> <td>Q1</td> <td>MAIN TRANSISTER</td> <td>66.4°C</td> <td>40.9°C</td> </tr> <tr> <td></td> <td>T1</td> <td>MAIN TRANSFORMER COIL</td> <td>82.9°C</td> <td>57.4°C</td> </tr> <tr> <td></td> <td>T1</td> <td>MAIN TRANSFORMER CORE</td> <td>59.5°C</td> <td>34.0°C</td> </tr> <tr> <td></td> <td>D4</td> <td>O/P DIODE</td> <td>92.7°C</td> <td>67.2°C</td> </tr> <tr> <td></td> <td>D6</td> <td>O/P DIODE</td> <td>77.7°C</td> <td>52.2°C</td> </tr> <tr> <td></td> <td>D5</td> <td>O/P DIODE</td> <td>89.8°C</td> <td>64.3°C</td> </tr> <tr> <td></td> <td>D1</td> <td>CLAMP DIODE</td> <td>83.6°C</td> <td>58.1°C</td> </tr> <tr> <td></td> <td>L1</td> <td>O/P CHOKE</td> <td>73.1°C</td> <td>47.6°C</td> </tr> <tr> <td></td> <td>R6</td> <td>DAYME R</td> <td>63.9°C</td> <td>38.4°C</td> </tr> <tr> <td></td> <td>C21</td> <td>O/P FILTER CAPACITOR</td> <td>76.8°C</td> <td>51.3°C</td> </tr> <tr> <td></td> <td>C5</td> <td>I/P FILTER CAPACITOR</td> <td>39.6°C</td> <td>14.1°C</td> </tr> <tr> <td></td> <td>LF1</td> <td>LINE FILTER TRANFORMER</td> <td>50.6°C</td> <td>25.1°C</td> </tr> </tbody> </table>		POSITION	P/N	TEMP	Trise		BD1	BRIDGE DIODE	64.5°C	39.0°C		Q1	MAIN TRANSISTER	66.4°C	40.9°C		T1	MAIN TRANSFORMER COIL	82.9°C	57.4°C		T1	MAIN TRANSFORMER CORE	59.5°C	34.0°C		D4	O/P DIODE	92.7°C	67.2°C		D6	O/P DIODE	77.7°C	52.2°C		D5	O/P DIODE	89.8°C	64.3°C		D1	CLAMP DIODE	83.6°C	58.1°C		L1	O/P CHOKE	73.1°C	47.6°C		R6	DAYME R	63.9°C	38.4°C		C21	O/P FILTER CAPACITOR	76.8°C	51.3°C		C5	I/P FILTER CAPACITOR	39.6°C	14.1°C		LF1	LINE FILTER TRANFORMER	50.6°C	25.1°C	P
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21	LIFE CYCLE	SUPPOSE C2 IS THE MOST CRITICAL COMPONENT I/P:230VAC O/P:FULLLOAD Ta:25°C Tc <sub>21</sub> :81.3°C Life time:22952 hrs I/P:230VAC O/P:FULLLOAD Ta:30°C Tc <sub>21</sub> :82.92°C Life time20543hrs		P																																																																						
21	CRITICAL COMPONENT RECORD ( FOR QC INSPECTION REFERENCE ONLY )	FUSE :4AL/250V UL BRIDGE DIODE : D3SB60 LINE FILTER : TF484-R1 ET-20V TRANSFOMER : TF585 POWER SWITCHER :2SK2545 OUTPUT DIODE : D83-004 OUTPUT CAPACITOR : RUBYCON 1200uf/16V 105°C ZL INPUT CAPACITOR : HITACHI 150 uf/400V 85°CCHP P.C.B : PT-6503 CEM-1 20Z SS																																																																								
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL																																																																						
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