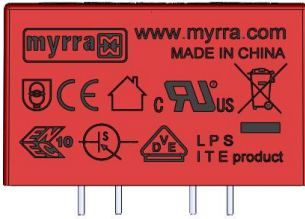




# 7.5 Watt AC-DC Switch Power Supply

## MAIN FEATURES:



- 7.5W Small Compact Size - PCB Mount
- Single Output - Regulated
- Output Range : 3.3VDC - 24VDC
- Input Range : 85VAC - 265VAC/47 - 63Hz Or 120VDC - 370VDC
- Very Low Standby Power Consumption < 0.15W
- Better Energetic Efficiency : Meets the Requirements Of Energy Star and EC Code Of Conduct
- Encapsulated Design And Same Footprint As EI38 Transformer: Upgrade your application without redesign the PCB
- Safety : EN61558-2-16,EN60950,EN60335,UL/CUL60950,CE, VDE,ENEC
- Materials : Uses UL 94-V0 Plastic and Resin
- EMC : Conducted And Radiated Emissions conform To EN55014 CLASS B , EN55022 CLASS B And FCC Part 15
- Immunity Conform to EN61000-4-5,EN61000-3-3,EN61000-4-4

Part No	Power Rating Watts	Output Voltage (VDC)	Output Current (mA)	Ambient Temp. (°C)	Efficiency Typical	Input Range
47206	7.5	3.3	2270	70	>74%@230VAC	85VAC-265VAC (120VDC-370VDC)
47200	7.5	5	1500	70	>76%@230VAC	
47201	7.5	9	830	70	>80%@230VAC	
47202	7.5	12	625	70	>82%@230VAC	
47203	7.5	15	500	70		
47204	7.5	18	420	70		
47205	7.5	24	310	70		

Note: Other Output Voltages Are Available Upon Request



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Model: 7.5 Watt		Specification
AC Input Characteristics	Rated AC input Voltage	100~240Vac Or 140VDC-340VDC
	AC Input Voltage Range	85~265Vac Or 120VDC-370VDC
	AC Input Frequency Range	47Hz~63Hz
	Rated AC Input Frequency	50/60Hz
	Input Current	0.3A Max@85Vac~265Vac, at full load
	Input Inrush Current	40A Max @85Vac~265Vac input, cold start, full load
	Standby Power	0.15W Max(meet COC level V, stage I)
DC Output Characteristics	Output Voltage Accuracy	± 2% (5V,9V,12V,15V,18V,24V Types) ± 3%(3.3V Type)
	Output Voltage Line Regulation	± 0.5%
	Output Voltage Load Regulation	± 1%(5V,9V,12V,15V,18V,24V Types) ± 3%(3.3V Type)
	Ripple & Noise	Max 180mVp-p at nominal line (The measuring will be terminated with a 47uF AL E-Cap and a 0.1uF Cer-Cap. An oscilloscope set at 20MHz bandwidth)
	Dynamic Response	The output voltage shall not exceed +10% rated output voltage @ 10%←→90% Load change, 1A/uS , 1KHz 50% duty cycle
	Overshoot	The output voltage shall not exceed +10% rated output voltage @ Power on and 85Vac~265Vac input, and DC with full load
	Undershoot	The output voltage shall not exceed -10% rated output voltage @ Power off and 85Vac~265Vac input and DC output with full load
	Hold Up Time	5mS Min@ 100Vac ~240Vac, DC output with full load
	Turn On Delay	3S max @ 85Vac~265Vac input and DC output with full load



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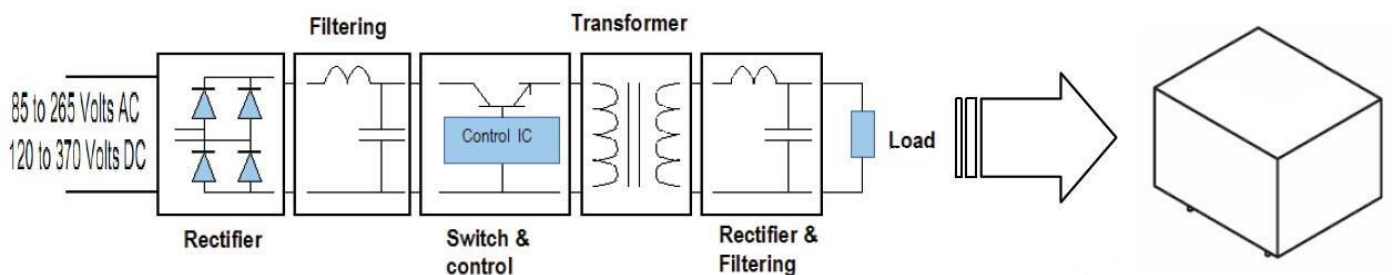
	Rise Time	50ms Max @ 85Vac~265Vac input and DC output with full load
	Efficiency	Average efficiency meets Energy Star level VI and COC level V stage I
Protection Characteristics	Over Current Protection	The power supply shall automatic protect. The power supply shall auto-recover normal operation after the deformation is removed. No excessive heat, odor, or plastic deformation shall occur, no safety hazard
	Output Short Circuit Protection	The power supply shall withstand a continuous output short without damage in 24 hours; The short may be applied before power on, or after power on; The power supply shall resume normal operation after the short is removed, no excessive heat, odor, or plastic deformation shall occur, no safety hazard
	Over Temperature Protection	The power supply shall shut down when the junction temperature of PWM controller exceeds the thermal shutdown temperature, typically 150±10°C
Environmental	Operation Temperature	-20°C ~ 70°C.
	Operation Humidity	10~ 90% RH(No Condensing) @ full load
	Storage Temperature	-40°C~ +85°C
	Storage Humidity	5%~95%
	Cooling Method	Ordinary or thermostat
Safety & EMC Requirement	Dielectric Strength	Primary to Secondary: 4000Vac 5mA, 3 sec .
	Radiation	Meets EN55022,EN55014,FCC, part 15, Class B. under 3dB margin
	Conduction	Meets EN55022,EN55014, FCC, part 15,Class B. under 3dB margin
	Power Clamp Radiation	Meets EN 55014-1: 2006+A1: 2009+A2:2011
	Lightning Surge	EN61000-4-5:2006, Level II. 1KV



# 7.5 Watt AC-DC Switch Power Supply

	Electric Fast Transient	Meets EN61000-4-4:2012, 2KV
	Voltage Dips And Interruptions	Meets EN61000-4-11:2004
	Voltage Fluctuation And Flicker	Meets EN61000-3-3:2013
	Safety Standards	Meets all requirements of UL/CUL60950 EN60950 EN60335 EN61558-2-16 CE,VDE,And ENEC Mark
Reliability Requirement	MTBF	200K Hours Min. @230VAC input, 70deg.C 350K Hours Min. @230VAC input, 25deg.C calculated by MIL-HDBK-217-F2
	Burn-In Test	The unit shall be burned in for 2~ 5hours under 230Vac input and DC with full load at an ambient temperature of 30~45 degrees C
Mechanical	Physical Size	The units do not including PINs of input and output, and dimension is (L)41.0*(W)35.0*(H)24.5± 0.5mm (see appearance drawing)
	Net Weight	About 40 grams per product unit
Guarantee	This product meet to RoHS standard	

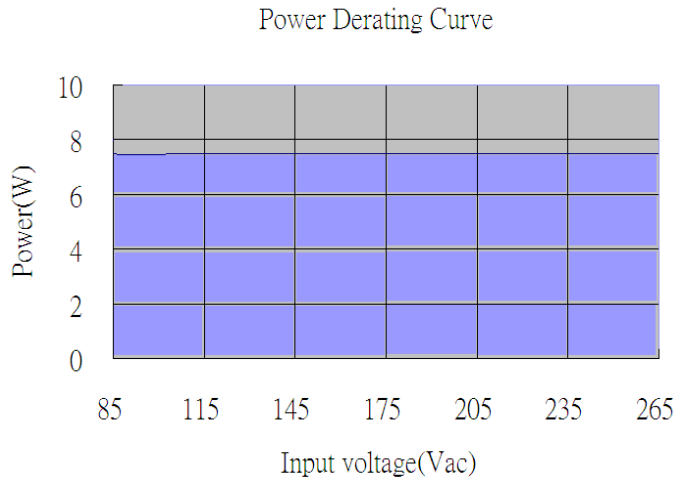
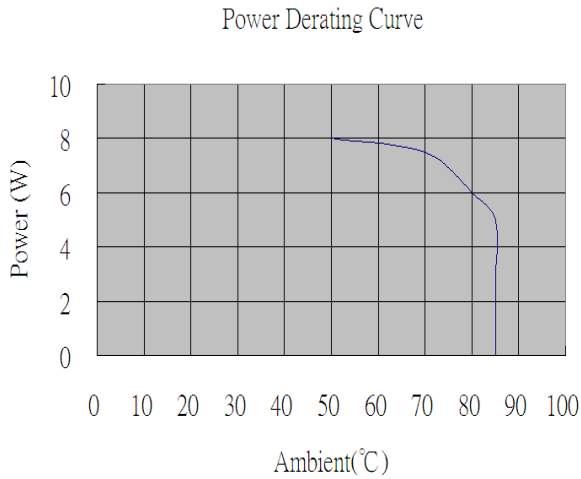
## SCHEMATIC





# 7.5 Watt AC-DC Switch Power Supply

## DERATING GRAPH



## DIMENSIONS And PINOUT

### 4 PINS

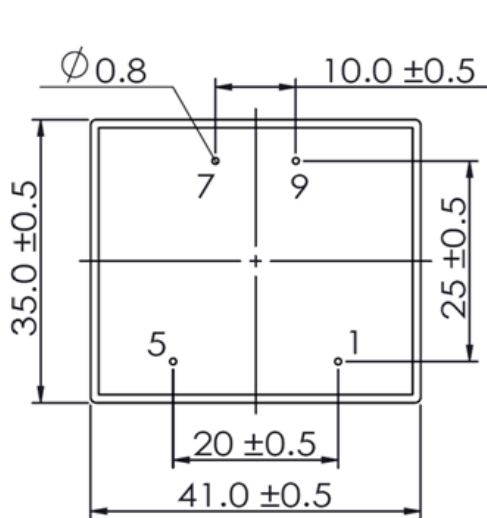
**PRI:**

**Pins 1 – 5: AC Or DC Input**

**SEC:**

**Pin 7 : DC Output +V**

**Pin 9 : DC Output 0V**



(View From Pins Side)

