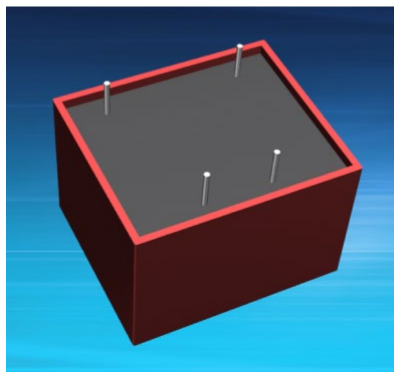
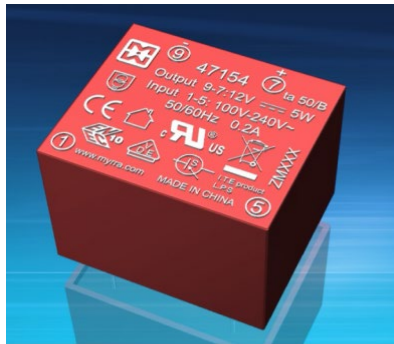


# AC/DC CONVERTER - 7.5W REGULATED



Power Supplies

## 7.5W SERIES



## 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
- High Energetic Efficiency: Meets Requirements Of Energy Star and EC Code Of Conduct
- Encapsulated Design and same Footprint as an EI38 Transformer : Upgrade Your Application without redesigning the PCB
- Safety : Meets All Requirements of IEC/EN61558-2-16, IEC/EN60335, IEC/EN62368, UL/CUL60950, CE, VDE, ENEC
- Mark Materials : Uses UL 94-VO Plastic And Resin
- EMC: Conducted And Radiated Emission conform To EN55032 And FCC Part 15, CLASS B
- Immunity Conform To EN61000-3-2 CLASS A, EN61000-3-3, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-11



## DATA SHEET

Part No	Power Rating Watts	Output Voltage (VDC)	Output Current (mA)	Ambient Temp. (°C)	Efficiency Typical	Input Range
47206	7.5	3.3	2270	50	>74%@230VAC	85VAC-265VAC (120VDC-370VDC)
47200	7.5	5.0	1500	70	>77%@230VAC	
47201	7.5	9.0	830	70	>80%@230VAC	
47202	7.5	12	635	70	>82%@230VAC	
47203	7.5	15	500	70		
47204	7.5	18	420	70		
47205	7.5	24	310	70		

**NOTE : Other output voltage are available upon request.**

Please refer to MYRRA's website and catalogue for MYRRA SMPS application notes.

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# AC/DC CONVERTER - 7.5W REGULATED



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## 7.5W SERIES

Model : 7.5 Watt		Specifications
AC Input Characteristics	Rated Input Voltage	100~240 VAC or 140VDC-340VDC
	Input Voltage Range	85~265VAC or 120VDC-370VDC
	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(Meets the Requirements of Energy Star and EC Code Of Conduct)
DC Output Characteristics	Output Voltage Accuracy	± 2% (5V,9V,12V,18V,24V Types) ± 3% (3.3V Types)
	Output Voltage Line Regulation	± 0.5%
	Output Voltage Load Regulation	± 1% (5V,9V,12V,18V,24V Types) ± 3% (3.3V Types)
	Ripple & Noise	Max 180mVp-p@ Rated AC input, at nominal line (The measuring will be terminated with a 47µF AL E-Cap and 0.1µF Ceramic-Cap. An oscilloscope set at 20MHz bandwidth)
	Dynamic Response	The output voltage shall not exceed ± 10% rated output voltage @ 10% → 90 % Load change, 1A/µS, 1KHz 50% duty cycle
	Hold Up Time	5mS min@ 100 VAC~240VAC, DC output with full load
	Turn On Delay	3S max @ 85VAC~265VAC input and output with full load
	Rise Time	50ms max @ 85VAC~265VAC input and output with full load
	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 -15% rated output voltage @ Power off and 85VAC~265VAC input and DC output with full load

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Power Supplies

## 7.5W SERIES

	Efficiency	See table (Meets the Requirements Of Energy Star And EC Code Of Conduct)
Protection Characteristics	Over Current Protection	The power supply shall automatically protect against over current. The power supply shall auto-recover normal operation after the fault condition is removed. No excessive heat, odour, or plastic deformation shall occur and with no safety hazard during the fault
	Output Short Circuit Protection	The power supply shall withstand a continuous output short without damage; 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, odour, or plastic deformation shall occur with no safety hazard during the fault.
Environmental	Operation Temperature	-20°C~+Ta ( see page 1 Table)
	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 EN55032,EN55014, FCC part 15 Class B. under 3dB margin
	Conduction	Meets EN55032,EN55014, FCC part 15 Class B. under 3dB margin
	Harmonic Current Distance	Meets EN61000-3-2:2014, Class A
	Voltage Fluctuation and Flicker	Meets EN61000-3-3:2013
	Electrostatic Discharge	Meets IEC61000-4-2 : 2008, Contact Discharge $\pm$ 4KV, Air Discharges $\pm$ 8KV
	RF Field Strength Susceptibility	Meets IEC61000-4-3:2006+A1:2007+A2:2010
	Electrical Fast Transient	Meets IEC61000-4-4:2012, $\pm$ 1KV

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Power Supplies

## 7.5W SERIES

Safety & EMC Requirements	Lightning Surge	Meets IEC61000-4-5:2014, $\pm 1$ KV (surge level be extended to 6KV with an external circuit – please refer to MYRRA’s website and catalogue for MYRRA SMPS application notes)
	Conducted Susceptibility	Meets IEC61000-4-6:2013
	Power Frequency Magnetic Field Susceptibility	Meets IEC61000-4-8:2009
	Voltage Dips and interruptions	Meets IEC61000-4-11:2004
	Safety Standards	Meets all requirements of : UL/CUL60950 IEC/EN62368 IEC/EN60335 IEC/EN61558-2-16 CE, VDE, And ENEC Mark VDE Approval No. 4001563 UL Approval No. E345767
Reliability Requirement	MTBF	5V,9V,12V,15V,24V Types : 200K Hours Min. @230VAC input, 70deg.C 3.3V Type : 200K Hours Min. @230VAC input, 50deg.C <i>Calculated in accordance with MIL-HDBK-217-F2</i>
	Burn-in-Test	The unit shall be burned in 2~5hours under 230VAC input and DC with full load at and 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)24.4 $\pm$ 0.5mm (see appearance drawing)
	Net Weight	Approximately 56 grams per product unit
Guarantee	This product is in accordance with the European RoHS & REACH directives	

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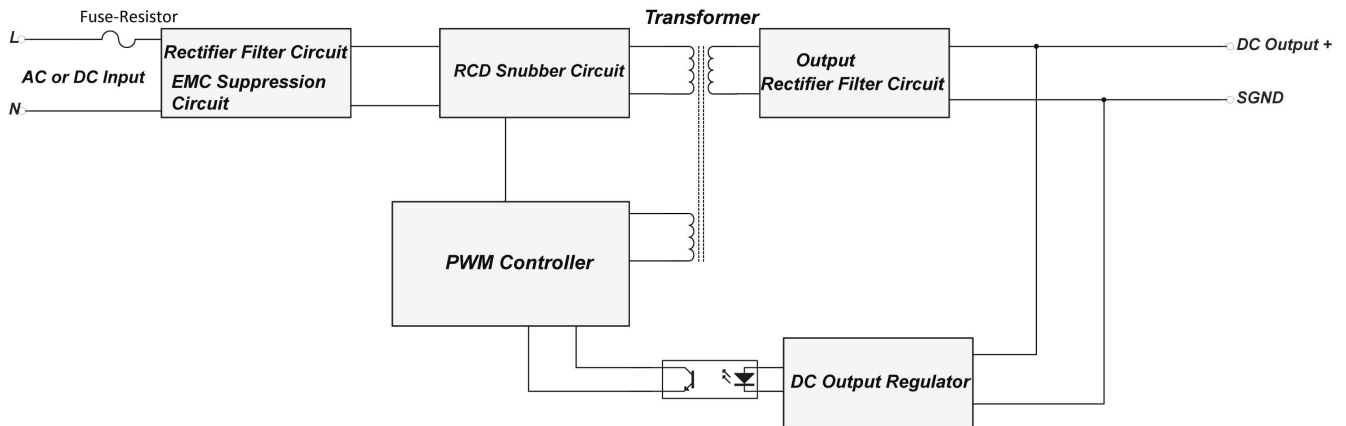
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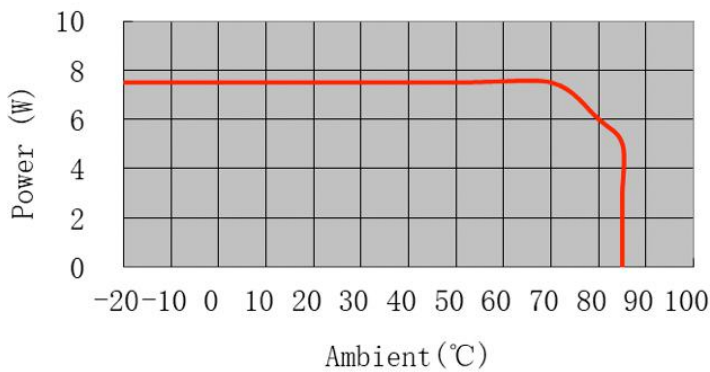
Power Supplies

## SCHEMATIC

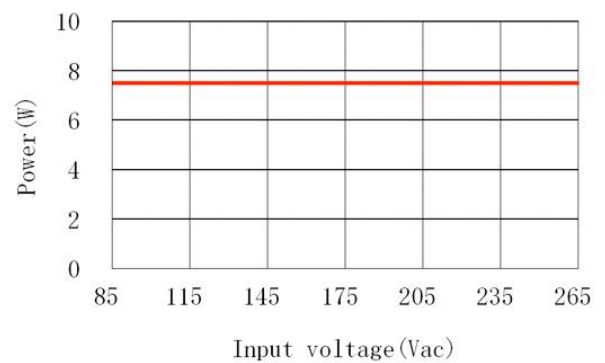


## DERATING GRAPH (TYPICALLY 12V TYPE)

Power Derating Curve

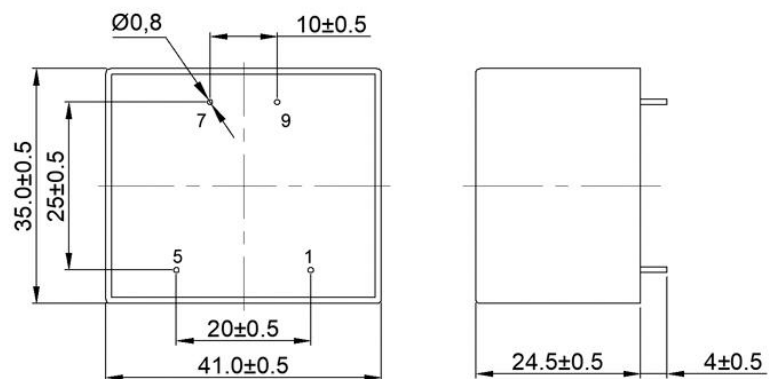


Power Derating Curve



## DIMENSIONS AND PINOUT 4 PINS

- PRI:
- Pins 1-5: AC or DC Input
- Input SEC:
- Pin 7 : DC Output +V
- Pin 9 : DC Output 0V



View From Pins Side

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