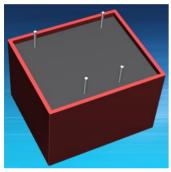


2.5 TO 5W SERIES







MAIN FEATURES:

- 2.5 to 5W Small Compact Size PCB Mount
- Single Output Primary Side Regulated
- Output Range: 5.0VDC 24VDC
- Input Range: 85VAC 265VAC/47 63Hz or 120VDC 370VDC
- Very Low Standby Power Consumption < 0.3W
- Better Energetic Efficiency: Meets the requirements of Energy Star and the EC Code of Conduct
- Encapsulated Design and the same footprint as an EI30 transformer. Upgrade your application without a PCB redesign.
- Safety: IEC/EN61558-2-16, IEC/EN60950, IEC/EN60335, IEC/EN62368, UL/CUL60950, CE, VDE, ENEC Mark
- Materials: Uses UL 94-V0 Plastic and Resin
- EMC: Conducted and Radiated Emissions conform to EN55032, EN55014 CLASS B
- Immunity conforms to EN61000-3-2 CLASS A, EN61000-3-3, IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC610004-11











DATA SHEET

Part No	Power Rating Watts	Output Voltage (VDC)	Output Current (mA)	Ambient Temp. (℃)	Efficiency Typical	Input Range
47114	2.4	12	200	70	>70%@230VAC	
47132	2.5	5	500	70	>65%@230VAC	
47133	3.2	9	360	70	>68%@230VAC	
47134	3.2	12	270	70	>70%@230VAC	
47135	3.2	18	180	70	>72%@230VAC	0EVAC 26EVAC
47136	3.2	24	130	70	>74%@230VAC	85VAC-265VAC (120VDC-370VDC)
						(120000-370000)
47162	4.5	5	900	50	>68%@230VAC	
47163	5	9	560	50	>70%@230VAC	
47164	5	12	420	50	>74%@230VAC	
47165	5	18	280	50	>74%@230VAC	
47166	5	24	210	50	>76%@230VAC	

Note: Other output voltages are available upon request.

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



2.5 TO 5W SERIES

Model: 2.5 to 5 Watt		Specifications	
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	0.2A Max@85Vac~265Vac, at full load	
	Standby Power	0.3W Max (Meets the requirements of Energy Star and the EC Code Of Conduct)	
	Output Voltage Accuracy	± 5 %	
	Output Voltage Line Regulation	± 3 %	
	Output Voltage Load Regulation	± 5 %	
	Ripple & Noise	Max 200mVp-p@ Rated AC input, at nominal line (The measuring will be terminated with a 47uF AL E-Cap and a 0.1uF Ceramic-Cap. An oscilloscope set at 20MHz bandwidth)	
DC Output Characteristics	Dynamic Response	The output voltage shall not exceed ±10% rated output voltage @ 50%←→100% Load change, 1A/μS, 1KHz 50% duty cycle	
	Hold Up Time	5mS min@ 100Vac ~240Vac, DC output with full load	
	Turn On Delay	3S max @ 100Vac 2 40Vac input and DC output with full load	
	Rise Time	50ms max @ 85 Vac 2 265Vac input and DC 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 -10% rated output voltage @ Power off and 85Vac~265Vac input and DC output with full load	

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



2.5 TO 5W SERIES

Power Supplies

	Efficiency	See table (Meets Requirements of Energy Star and the 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 with no safety hazard during the fault	
	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 with no safety hazard	
Environmental	Operation Temperature	-25°C ~+ (see table)	
	Operation Humidity	10~ 90% RH (Non condensing) @ full load	
	Storage Temperature	-10°C to +35°C	
	Storage Humidity	< 75%RH	
	Cooling Method	Ordinary or thermostat	
Safety & EMC Requirement	Dielectric Strength	Primary to Secondary: 4000Vac 5mA, 3 secs.	
	Radiation	Meets EN55032, EN55014, Class B. under 3dB margin	
	Conduction	Meets EN55032, EN55014, Class B. under 3dB margin	
	Harmonic Current Disturbance	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 ±4KV, Air Discharge ±8KV	
	RF Field Strength Susceptibility	Meets IEC61000-4-3:2006+A1:2007+A2:2010	
	Electrical Fast Transient	Meets IEC61000-4-4:2012, ±1KV	



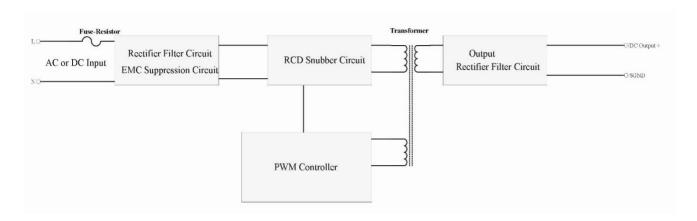
2.5 TO 5W SERIES

Safety & EMC Requirement	Lightning Surge	Meets IEC61000-4-5:2014, +1KV (line to line) Note: surge level can 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	
	Voltage Dips and Interruptions	Meets IEC61000-4-11:2004	
	Safety Standards	Meets all requirements of: UL/CUL60950 UL/CUL62368 IEC/EN60950 IEC/EN60335 IEC/EN61558-2-16 IEC/EN62368 CE, VDE, ENEC Mark VDE Approval No.40034334 UL Approval No. E345767	
Reliability Requirement	МТВҒ	>200K Hours @230VAC input at max operation temperature >550K Hours @230VAC input at 25deg.C Calculated in accordance with 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	
Net Weight	Approximately30 grams per product unit		
Guarantee	This product is in accordance with the European RoHS & REACH directives		

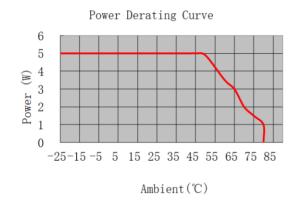


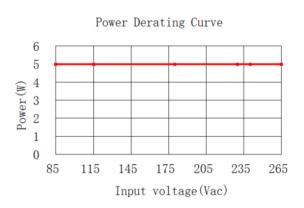
SCHEMATIC





DERATING GRAPH (TYPICALLY 47164)



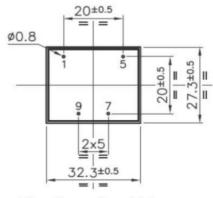


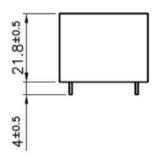
DIMENSIONS AND PINOUT 4 PINS

Pins 1&5 - AC or DC Input

Pin 7 - DC Output: +V

Pin 9 - DC Output: 0V





(view from pins side):