## **ONE OUTPUT 1W to 3W - Small Compact Size**



## **MAIN FEATURES:**

- Small Compact Size PCB Mount
- Single Output
- Output Range: 3.3VDC 24VDC
- Input Range: 85VAC 265VAC/47 63Hz Or 120VDC - 370VDC
- Very Low Standby Power Consumption < 0.15W</li>
- Better Energetic Efficiency: Meet Requirements Of Energy Star And EC Code Of Conduct
- Encapsulated Design And Same Footprint As EE20 Transformer: Upgrade Your Application Without Redesign Of PCB

- Safety: IEC/EN61558-2-16, IEC/EN60950, IEC/EN60335, UL/CUL60950, CE, VDE, ENEC Mark
- Materials: Uses UL 94-V0 Plastic And Resin
- EMC: Conducted And Radiated Emissions Conform To EN55014 CLASS B, EN55032 CLASS B And FCC Part 15
- Immunity Conform To EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11

Part	Power	Output	Output	Output Load	Max. Operating	Minimum Part
Number	Output(W)	Voltage (Vdc)	Current (mA)	Regulation (%)	Ambient (°C)	Efficiency(%)
48021	1	3.3	300	±5	80	60
	2.5		750		60	63
	2.75		830		50	
	1	5	200		80	60
48022	2.5		500		60	65
	3		600		50	
48023	1	9	110		80	67
	2.5		280		70	70
	3		330		60	
48024	1	12	84		80	67
	2.5		210		70	72
	3		250		60	
48025	1	15	67		80	67
	2.5		170		70	72
	3		200		60	
48026	1	18	56		80	67
	2.5		140		70	72
	3		170		60	
48027	1	24	42		80	70
	2.5		105		70	74
	3		125		60	





## **DIMENSIONS and PINOUT**

4 pins

PRI:

Pins 1 - 5: AC or DC Input

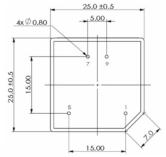
4

2

Power (W)

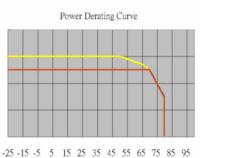
SEC:

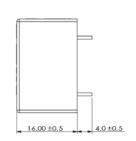
Pin 7: DC Output +V Pin 9: DC Output 0V

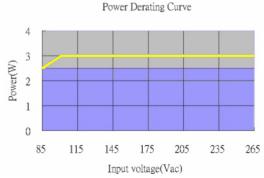


Power Derating Curve

Ambient(°C)













Model: 1 To 3 Watt		Specification		
AC Input	Rated AC input Voltage	100~240Vac or 140VDC-340VDC		
	AC Input Voltage Range	85~265Vac or 120VDC-370VDC		
	AC Input Frequency Range	47Hz~63Hz		
Characteristics	Rated AC Input Frequency	50/60Hz		
	Input Current	0.15A Max@85Vac~265Vac, at full load		
	Standby Power	0.15W Max(Meet Requirements Of Energy Star And EC Code Of Conduct)		
DC Output Characteristics	Output Voltage Accuracy	± 5%		
	Output Voltage Line Regulation	± 2 %		
	Output Voltage Load Regulation	± 5%		
	Ripple & Noise	Max 180mVp-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)		
	Dynamic Response	The output voltage shall not exceed ±10% rated output voltage @ 10% ←→90% Load change, 1A/uS , 1KHz 50% duty cycle		
	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		
	Rise Time	50ms max @ 85Vac~265Vac input and DC output with full load		
	Overshoot	The output voltage shall not exceed +10% rated output voltage @ Power on and 85V ac~265Vac input, and DC with full load		
	Undershoot	The output voltage shall not exceed -10% rated output voltage @ Power off and 85V ac~265Vac input and DC output with full lo		
	Efficiency	See table (Meets Requirements Of Energy Star And EC Code Of Conduct)		
	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 with no safety hazard		
Protection Characteristics	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		
	Over temperature Protection	The power supply shall shut down when the junction temperature of PWM controller exceeds the thermal shutdown temperature, typically $140^{\circ}\text{C} \pm 10^{\circ}\text{C}$ .		
	Operation Temperature	-25°C ~+ (see table)		
Environmental	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 secs.		
	Radiation	Meet EN55032,EN55014,FCC, part 15, Class B. under 3dB margin		
	Conduction	Meet EN55032,EN55014, FCC, part 15,Class B. under 3dB margin		
	Lightning Surge	EN61000-4-5:2014,±1KV (surge level can be extended to 6KV with an external circuit - please refer to MYRRA's website and catalogue for 47 series application notes).		
	Safety Standards	Meet all requirements of UL/CUL60950, IEC/EN60950, IEC/EN60335, IEC/EN61558-2-16, CE,VDE, ENEC Mark		
Reliability Requirement	МТВБ	Calculated by MIL-HDBK-217-F2 > 200K Hours @230VAC input at max operation temperature; > 550K Hours @230VAC input at 25deg.C		
	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	About 16 grams per product unit			
Guarantee	This product meets RoHS Standard			

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