

Models

Series AMEOF1-JZ

1 Watt | AC-DC Converter

FEATURES:



- Input: 85-305VAC, 47-63Hz or 70-430VDC
- Operating temperature -40°C to +85°C
- Low power consumption ≤ 0.3W
- Continuous short circuit protection
- I/O Isolation 3000VAC
- Ultra slim open frame SIP
- Over current protection

100

Class II power supply



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5	Single output						C THE US ROHS
	Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (mA)	Maximum capacitive load (μF)	Efficiency (%)
	AMEOF1-5SJZ	85-305/47-63	70-400	5	200	220	66
	AMEOF1-9SJZ	85-305/47-63	70-400	9	111	100	67
	AMEOF1-12SJZ	85-305/47-63	70-400	12	83	100	70
	AMEOF1-15SJZ	85-305/47-63	70-400	15	67	100	69
	AMEOF1-24SJZ	85-305/47-63	70-400	24	42	100	68
	AMEOF1-5SLJZ	85-305/47-63	70-400	5	200	220	66
	AMEOF1-9SLJZ	85-305/47-63	70-400	9	111	100	67
	AMEOF1-12SLJZ	85-305/47-63	70-400	12	83	100	70
	AMEOF1-15SLJZ	85-305/47-63	70-400	15	67	100	69

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

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70-400

Input Specifications

AMEOF1-24SLJZ

85-305/47-63

Parameters	Conditions	Typical	Maximum	Units
Current	115VAC		120	mA
Current	230VAC		60	mA
Inrush surrent 2mg	115VAC	9		Α
Inrush current <2ms	230VAC	15		Α
External fuse	Recommended slow blow type	1		Α
Input dissipation	No Load		0.3	W

Output Specifications

output opositionio					
Parameters	Conditions	Typical	Maximum	Units	
Voltage accuracy	Full load, 5V output Full load, others		±8 ±5	%	
Line regulation	Full load	±1.5		%	
Load regulation	5% - 100% load	±2.5		%	
Ripple & Noise	20MHz Bandwidth		120	mV p-p	
Hold up time (min)	115VAC	40		ms	
Hold-up time (min)	230VAC	180		ms	
Minimum load current		5		% of Max	

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		3000	VAC
Isolation Resistance		>1000		ΜΩ

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		100		KHz
Over current protection	Auto-recovery	110-500		% of I out

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Short circuit protection Continuous

General Specifications (Continued)

Parameters	Conditions	Typical	Maximum	Units
Short circuit restart	Auto-recovery			
Operating temperature	Without derating	-40 to +85		°C
Storage temperature	torage temperature -40 to +105			°C
Temperature coefficient	rature coefficient ±0.15			%/°C
Cooling		Free air convection		
Humidity			85	% RH
Weight	6		g	
Dimensions (L x W x H)	1.38 x 0.71 x 0.43 inches 35 x 18 x 11 mm			
MTBF	>200,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)			

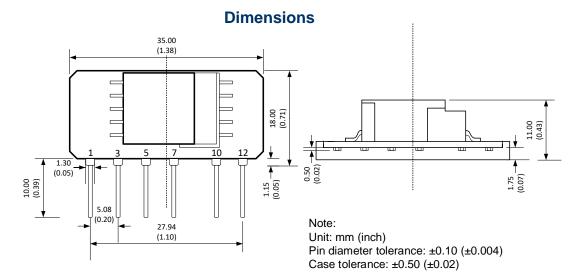
Safety Specifications

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Parameters				
Agency approvals	cULus			
	IEC/UL 60950-1			
	EMI – Conducted and Radiated Emission	EN 55022, Class A or B, with external filter circuits, as referenced		
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact ±4KV, Criteria B		
	RF, Electromagnetic Field Immunity	IEC 61000-4-3, 10V/m, Criteria A, with Class B external filter, as referenced		
Standards	Electrical Fast Transient / Burst Immunity	IEC 61000-4-4, ±2KV/±4KV, Criteria B, with Class A/B external filter referenced		
	Surge Immunity	IEC 61000-4-5, ±1KV/±2KV, Criteria B, with Class A/B external filter referenced		
	RF, Conducted Disturbance Immunity	IEC 61000-4-6, 10Vrms, Criteria A, with Class B external filter, as referenced		
	Power frequency Magnetic Field Immunity	IEC 61000-4-8, 10A/m, Criteria A		
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11, 0-70%, Criteria B		

Pin Out Specifications*

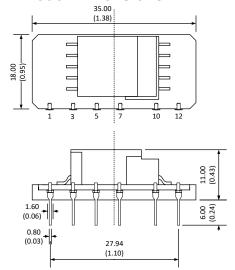
Pin	Single	
1	AC N	
3	AC L	
5	+V sc	
7	-V sc	
10	-V Output	
12	+V Output	

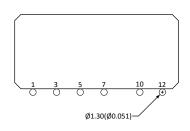
^{*} Add capacitor between pin 5 & 7. Application circuit below.





L Model Dimensions





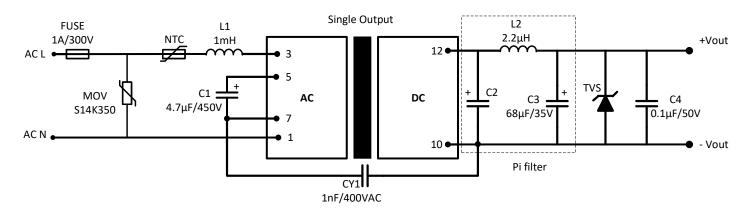
Note:

Unit: mm (inch)

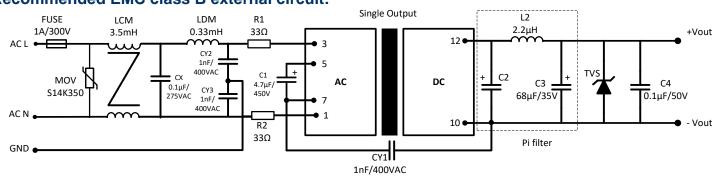
Pin diameter tolerance: ±0.10 (±0.004)

Case tolerance: ±0.50 (±0.02)

Recommended EMC class A external circuit:



Recommended EMC class B external circuit:



Model	C2	TVS
5 Vout	100 μF / 16V	7V
9 Vout	150 μF / 35V	12V
12 & 15 Vout	100 [/ 25)/	20V
24 Vout	100 μF / 35V	30V

Note: For Safety compliance, we recommend minimum PCB trace distance of 3mm, minimum distance between PCB traces of 6mm, primary to secondary circuit traces distance between minimum of 6.4mm.

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