

# Series AMEOF5-JZ 5 Watt | AC-DC Converter

Picture Coming Soon FEATURES:

## • Input: 85-264VAC, 47-63Hz or 100-400VDC

- Operating temperature -25°C to +85°C
- Low power consumption ≤ 0.5W
- Continuous short circuit protection
- Class II power supply

- I/O Isolation 3000VAC
- Ultra slim open frame SIP
- Over current protection
- Over voltage protection

Models
Single output





Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Full power temperature range (°C)	Output Voltage (V)	Output Current max (mA)	Maximum capacitive load (μF)	Efficiency (%)
AMEOF5-3.3SJZ	85-264/47-63	100-400	0 to +55	3.3	1000	2200	67
AMEOF5-5SJZ	85-264/47-63	100-400	0 to +55	5	1000	1500	74
AMEOF5-9SJZ	85-264/47-63	100-400	0 to +55	9	560	680	75
AMEOF5-12SJZ	85-264/47-63	100-400	0 to +55	12	420	470	76
AMEOF5-15SJZ	85-264/47-63	100-400	0 to +55	15	340	330	77
AMEOF5-24SJZ	85-264/47-63	100-400	0 to +55	24	210	100	79
AMEOF5-5SLJZ	85-264/47-63	100-400	0 to +55	5	1000	1500	74
AMEOF5-12SLJZ	85-264/47-63	100-400	0 to +55	12	420	470	76
AMEOF5-15SLJZ	85-264/47-63	100-400	0 to +55	15	340	330	77
AMEOF5-24SLJZ	85-264/47-63	100-400	0 to +55	24	210	100	79

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.

**Input Specifications** 

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Parameters	Conditions	Typical	Maximum	Units	
Command	115VAC		200	mA	
Current	230VAC		100	mA	
Inrush current <2ms	115VAC	5		Α	
	230VAC	10		Α	
External fuse	Recommended slow blow type	1		Α	
Input dissipation	No Load		0.5	W	
Leakage current	CY(Input to Output) 1nF/400VAC		250	μA	

**Output Specifications** 

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 3.3V output Full load, others		±3 ±2	%
Line regulation	Full load		±0.5	%
Load regulation	10% - 100% load		±1.5	%
Ripple & Noise	20MHz Bandwidth		150	mV p-p
Over current protection	Auto-recovery	≥110		% of I out
Short circuit protection	Continuous			
Short circuit restart	Auto-recovery			
Over Voltage protection	Zener diode clamp			
Hald on Gara	115VAC	20		ms
Hold up time	230VAC	80		ms

**Isolation Specifications** 

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, 5mA leakage current		3000	VAC
Isolation Resistance		>1000		ΜΩ



**General Specifications** 

Parameters	Conditions	Conditions Typical		Units
Switching frequency		100		KHz
Operating temperature	See derating curve	-25 to +85		°C
Storage temperature		-40 to +105		°C
Temperature coefficient		±0.02		%/°C
Cooling	Free air convection			
Humidity			85	% RH
Weight	7 g			
Dimensions (L x W x H)	1.65 x 0.54 x 0.79 inches 42.00 x 13.65 x 20.00 mm			
MTBF	>300,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)			

**Safety Specifications** 

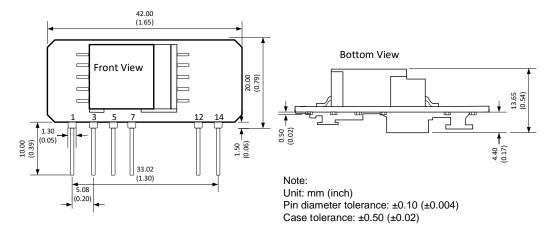
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Parameters				
Agency approvals	cULus			
	IEC/EN/UL60950-1, IEC/EN/UL62368			
	EMI – Conducted and Radiated Emission	EN 55022, Class A & B, with external filter circuits, as referenced		
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact ±4KV, Criteria B		
Standards	RF, Electromagnetic Field Immunity	IEC 61000-4-3, 10V/m, Criteria A, with Class A external filter, as referenced		
	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, 3Vrms, 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	
12	-V Output	
14	+V Output	

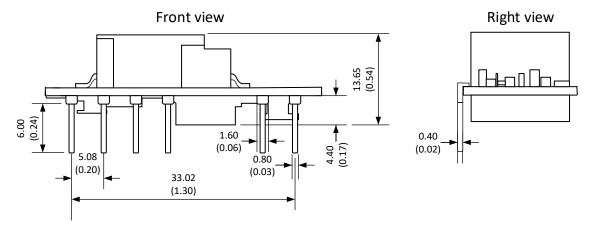
<sup>\*</sup> Add capacitor between pin 5 & 7. Application circuit below.

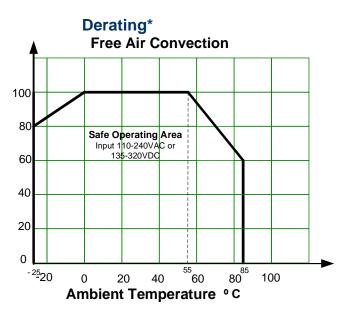
#### **Dimensions**

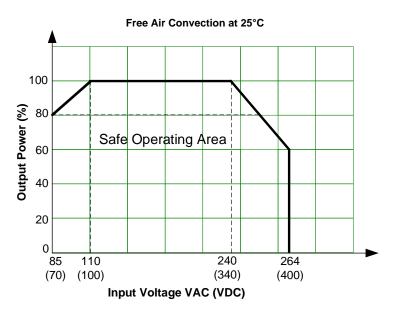




#### L models

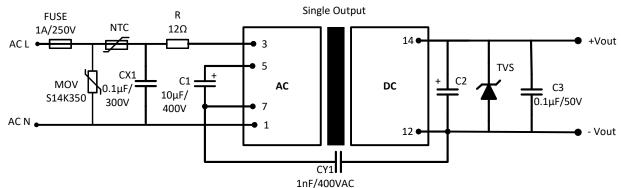






<sup>\*</sup>Power derating: for 85-110VAC and 240-264VAC input supply

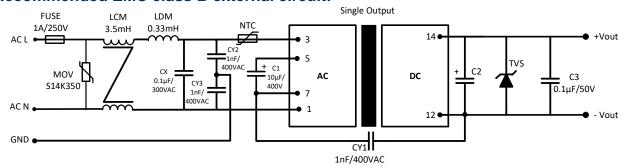
#### Recommended EMC class A external circuit:







#### Recommended EMC class B external circuit:



Model	C2	TVS
3.3 & 5 Vout	220 [ / 25\/	7V
9 Vout	220 μF / 35V	12V
12 & 15 Vout	450 uE / 25V	20V
24 Vout	150 μF / 35V	30V

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

**NOTE: 1.** Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. **2.** Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. **3.** Mechanical drawings and specifications are for reference only. **4.** All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. **5.** Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. **6.** This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. **7.** Warranty is in accordance with Aimtec's standard Terms of Sale available at <a href="https://www.aimtec.com">www.aimtec.com</a>.

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