

FEATURES:

- Input: 85-264VAC, 47-440Hz or 70-400VDC
- Operating temperature -40°C to +85°C
- Low power consumption ≤ 0.5W
- Continuous short circuit protection
- I/O Isolation 3000VAC
- Ultra slim open frame SIP
- Over current protection
- Class II power supply

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 (%)
AMEOF3-3.3SJZ	85-264/47-440	70-400	-20 to +55	3.3	500	470	63
AMEOF3-5SJZ	85-264/47-440	70-400	-20 to +55	5	500	470	68
AMEOF3-9SJZ	85-264/47-440	70-400	-20 to +55	9	333	150	75
AMEOF3-12SJZ	85-264/47-440	70-400	-20 to +55	12	250	100	77
AMEOF3-15SJZ	85-264/47-440	70-400	-20 to +55	15	200	100	78
AMEOF3-24SJZ	85-264/47-440	70-400	-20 to +55	24	125	100	80
AMEOF3-3.3SLJZ	85-264/47-440	70-400	-20 to +55	3.3	500	470	63
AMEOF3-5SLJZ	85-264/47-440	70-400	-20 to +55	5	500	470	68
AMEOF3-9SLJZ	85-264/47-440	70-400	-20 to +55	9	333	150	75
AMEOF3-12SLJZ	85-264/47-440	70-400	-20 to +55	12	250	100	77
AMEOF3-15SLJZ	85-264/47-440	70-400	-20 to +55	15	200	100	78
AMEOF3-24SLJZ	85-264/47-440	70-400	-20 to +55	24	125	100	80

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

Parameters	Conditions	Typical	Maximum	Units
Comment	115VAC		120	mA
Current	230VAC		60	mA
Inrush current <2ms	115VAC	13		Α
	230VAC	23		Α
External fuse	Recommended slow blow type	1		Α
Input dissipation	No Load		0.5	W
Input filter	Recommended external π (Pi) filter			

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 3.3V output Full load, others		±8 ±5	%
Line regulation	Full load	±1.5		%
Load regulation	10% - 100% load	±2.5		%
Ripple & Noise	20MHz Bandwidth		150	mV p-p
Minimum load current		10		% 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		60		KHz



Series AMEOF3-JZ

3 Watt | AC-DC Converter

Over current protection	Auto-recovery	≥110		% of I out
Short circuit protection	Continuous			
Short circuit restart		Auto-recovery		
Operating temperature	See derating curve	-40 to +85		°C
Storage temperature		-40 to +105		°C
Temperature coefficient		±0.15		% / °C
Cooling	Free air convection			
Humidity			85	% RH
Weight		7		g
Dimensions (L x W x H)	1	.38 x 0.71 x 0.43 inches 35 x 18 x 1	1 mm	
MTBF	>300,00	0 hours (MIL-HDBK -217F, Ground Ben	ign, t=+25°C)	

Safety Specifications

Parameters	
Standards	IEC/EN/UL60950-1 pending approval EN 55022, Class A & B, with external filter circuits, as referenced IEC 61000-4-2, Contact ±4KV, Criteria B IEC 61000-4-3, 10V/m, Criteria A, with Class B external filter, as referenced IEC 61000-4-4, ±2KV/±4KV, Criteria B, with Class A/B external filter referenced IEC 61000-4-5, ±1KV/±2KV, Criteria B, with Class A/B external filter referenced IEC 61000-4-6, 10Vrms, Criteria A, with Class B external filter, as referenced
	IEC 61000-4-8, 10A/m, Criteria A, with Class B external filter, as referenced
	IEC 61000-4-11, 0-70%, Criteria B, with Class B external filter, as referenced

Pin Out Specifications*

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

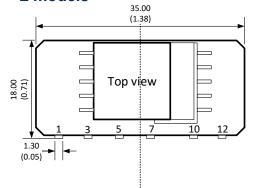
^{*} Add capacitor between pin 5 & 7. Application circuit below.

Pin diameter tolerance: ±0.10 (±0.004) Case tolerance: ±0.50 (±0.02)

Dimensions



L models



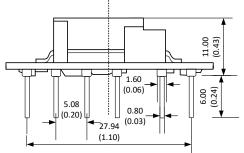
Note:

Unit: mm (inch)

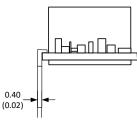
Pin diameter tolerance: ±0.10 (±0.004)

Case tolerance: ±0.50 (±0.02)

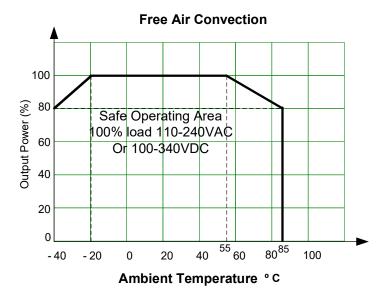


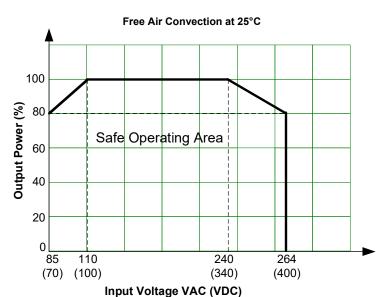






Derating*

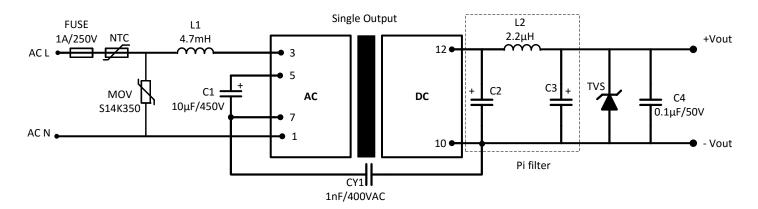




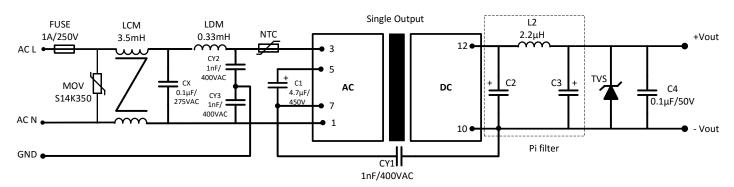
*Power derating: -40 to -20 increase 1%/°C 55 to 85 decrease 0.67%/°C



Recommended EMC class A external circuit:



Recommended EMC class B external circuit:



Model	C2	C3	TVS
3.3 Vout	220 /	120 µF / 25V	7V
5 Vout	330 µF / 25V	68 µF / 35V	/ V
9 Vout	250		12V
12 & 15	150 µF /		20V
Vout	35V		
24 Vout	100 µF /		30V
Z+ VOut	35V		30 V

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.

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 www.aimtec.com.

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