

**FEATURES:**



- Input: 85-264VAC, 47-440Hz or 70-400VDC
- Operating temperature -40°C to +85°C
- Low power consumption  $\leq 0.5W$
- 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 (%)
AMEOF1-5SJZ	85-264/47-440	70-400	-20 to +55	5	200	220	66
AMEOF1-9SJZ	85-264/47-440	70-400	-20 to +55	9	111	100	67
AMEOF1-12SJZ	85-264/47-440	70-400	-20 to +55	12	83	100	70
AMEOF1-15SJZ	85-264/47-440	70-400	-20 to +55	15	67	100	69
AMEOF1-24SJZ	85-264/47-440	70-400	-20 to +55	24	42	100	68

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
Current	115VAC		120	mA
	230VAC		60	mA
Inrush current <2ms	115VAC	9		A
	230VAC	15		A
External fuse	Recommended slow blow type	1		A
Input dissipation	No Load		0.5	W
Input filter	Recommended external $\pi$ (Pi) filter			

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 5V output		$\pm 8$	%
	Full load, others		$\pm 5$	%
Line regulation	Full load	$\pm 1.5$		%
Load regulation	5% - 100% load	$\pm 2.5$		%
Ripple & Noise	20MHz Bandwidth		120	mV p-p
Hold-up time (min)	115VAC	40		ms
	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		MΩ

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		60		KHz
Over current protection	Auto-recovery	$\geq 110$		% 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

**General Specifications (continued)**

Parameters	Conditions	Typical	Maximum	Units
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 11 mm	
MTBF		>200,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)		

**Safety Specifications**

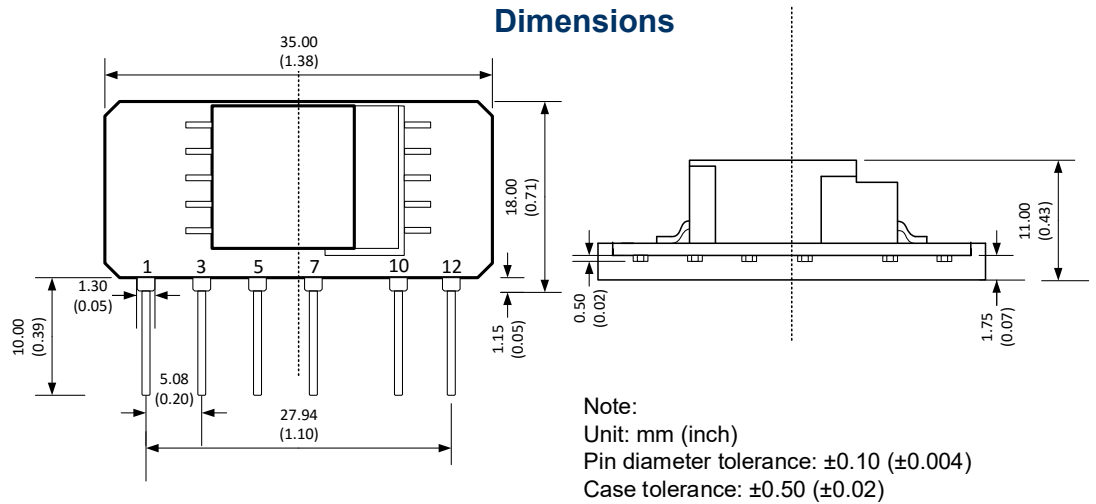
Parameters	
Standards	Meets IEC 60950-1 EN 55022, Class A & B, with external filter circuits, as referenced IEC 61000-4-2, Contact ±4KV, Criteria B IEC 61000-4-3, 10V/m, Criteria A, with Class B external filter, as referenced IEC 61000-4-4, ±2KV/±4KV, Criteria B, with Class A/B external filter referenced 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 IEC 61000-4-11, 0-70%, Criteria B

**Pin Out Specifications\***

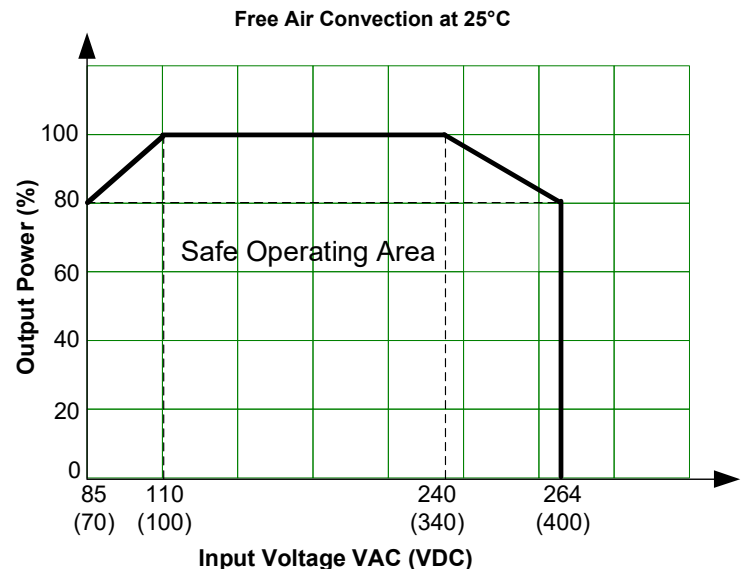
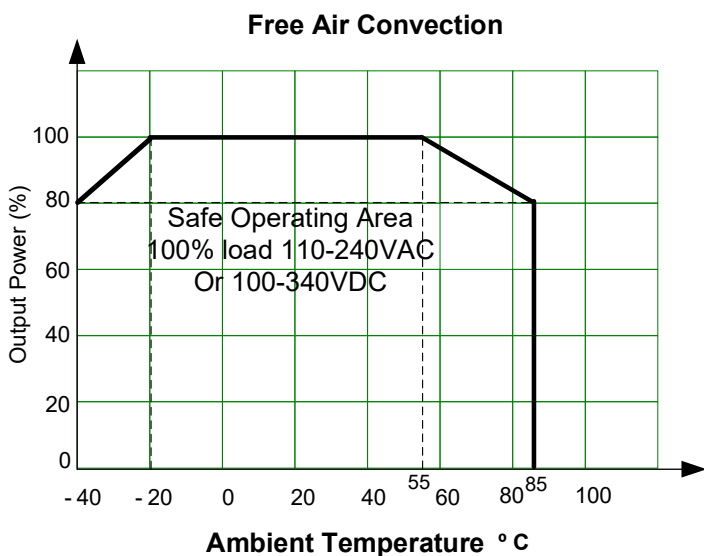
Pin	Single
1	AC N
3	AC L
5	+V sc
7	-V sc
10	-V Output
12	+V Output

\* Add capacitor between pin 5 & 7.  
Application circuit below.

**Dimensions**



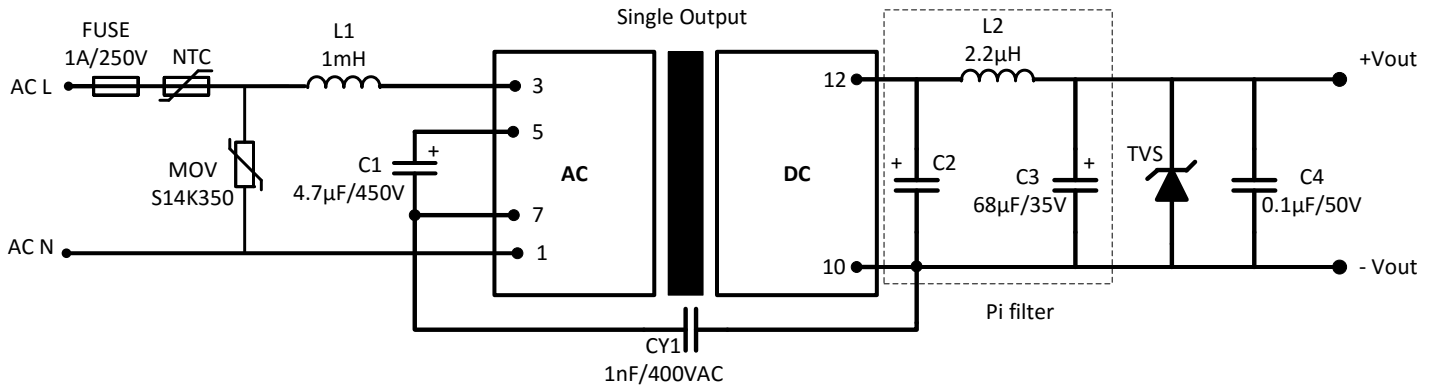
**Derating\***



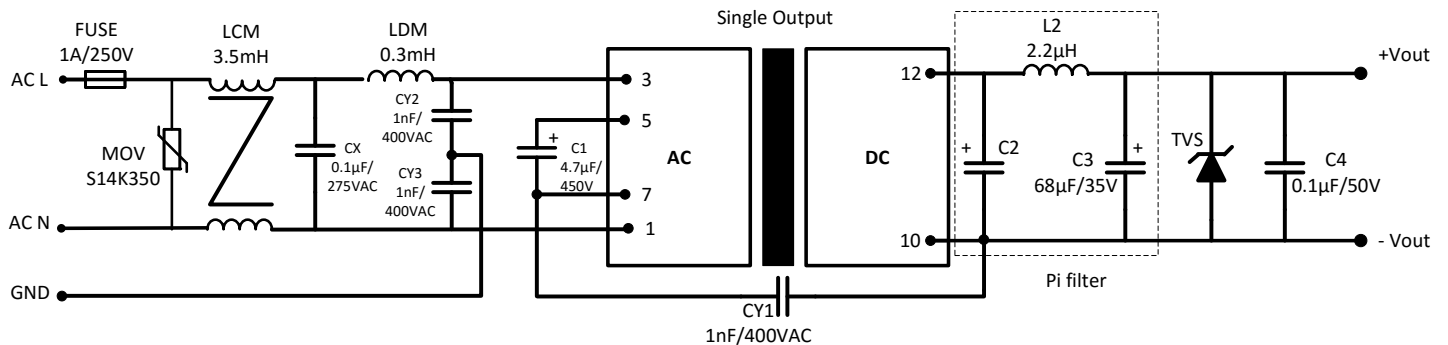
\*Power derating: -40 to -20 increase 1%/°C

55 to 85 decrease 0.67%/°C

**Recommended EMC class A external circuit:**



**Recommended EMC class B external circuit:**



Model	C2	TVS
5 Vout	150 µF /	7V
9 Vout	35V	12V
12 & 15 Vout	100 µF /	20V
24 Vout	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.

**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](http://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](http://www.aimtec.com).