



**FEATURES:**

- Input: 85-305VAC, 47-440Hz or 70-430VDC
- Operating temperature -40°C to +85°C
- Low power consumption  $\leq 0.25W$
- 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	85-305/47-63	70-430	-20 to +70	3.3	600	820	65
AMEOF3-5SJZ	85-305/47-63	70-430	-20 to +70	5	600	680	70
AMEOF3-9SJZ	85-305/47-63	70-430	-20 to +70	9	333	470	73
AMEOF3-12SJZ	85-305/47-63	70-430	-20 to +70	12	250	470	74
AMEOF3-15SJZ	85-305/47-63	70-430	-20 to +70	15	200	330	75
AMEOF3-24SJZ	85-305/47-63	70-430	-20 to +70	24	125	100	77
AMEOF3-3.3SLJZ	85-305/47-63	70-430	-20 to +70	3.3	600	820	65
AMEOF3-5SLJZ	85-305/47-63	70-430	-20 to +70	5	600	680	70
AMEOF3-9SLJZ	85-305/47-63	70-430	-20 to +70	9	333	470	73
AMEOF3-12SLJZ	85-305/47-63	70-430	-20 to +70	12	250	470	74
AMEOF3-15SLJZ	85-305/47-63	70-430	-20 to +70	15	200	330	75
AMEOF3-24SLJZ	85-305/47-63	70-430	-20 to +70	24	125	100	77

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	13		A
	230VAC	23		A
External fuse	Recommended slow blow type	1		A
Input dissipation	No Load, 230VAC		0.25	W
Input filter	Recommended external $\pi$ (Pi) filter			

**Output Specifications**

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 3.3V output		$\pm 6$	%
	Full load, others		$\pm 5$	%
Line regulation	Full load, 3.3V output	$\pm 2.5$		%
	Full load, others	$\pm 1.5$		%
Load regulation	10% - 100% load	$\pm 2.5$		%
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		MΩ

**General Specifications**

Parameters	Conditions	Typical	Maximum	Units
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Switching frequency		38		KHz
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		6		g
Dimensions (L x W x H)		1.38 x 0.71 x 0.43 inches	35 x 18 x 11 mm	
MTBF		>300,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)		

## Safety Specifications

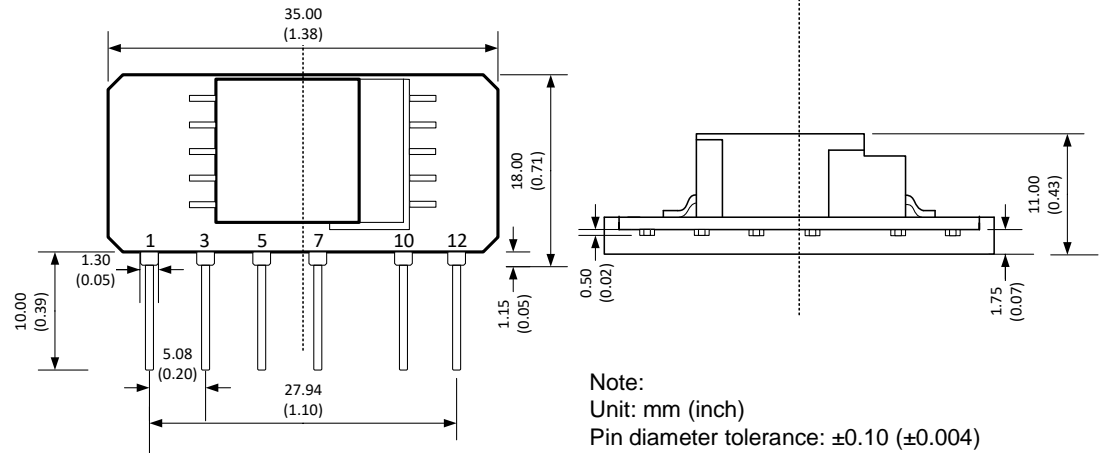
Parameters	
Agency Approvals	UL
Standards	UL60950-1
	EN 55022, Class A & B, with external filter circuits, as referenced
	IEC 61000-4-2, Contact ±4KV, Criteria B
	IEC 61000-4-3, 10V/m, Criteria A, with Class B external filter, as referenced
	IEC 61000-4-4, ±2KV/±4KV, Criteria B, with Class A/B external 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, 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

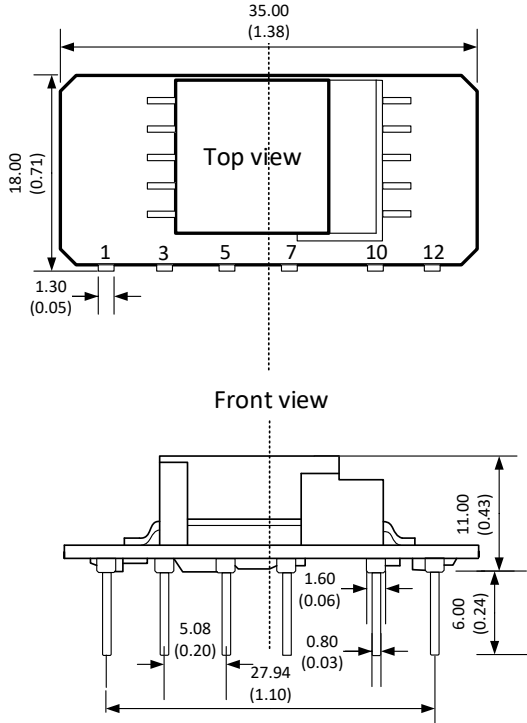
\* Add capacitor between pin 5 & 7.  
Application circuit below.

## Dimensions



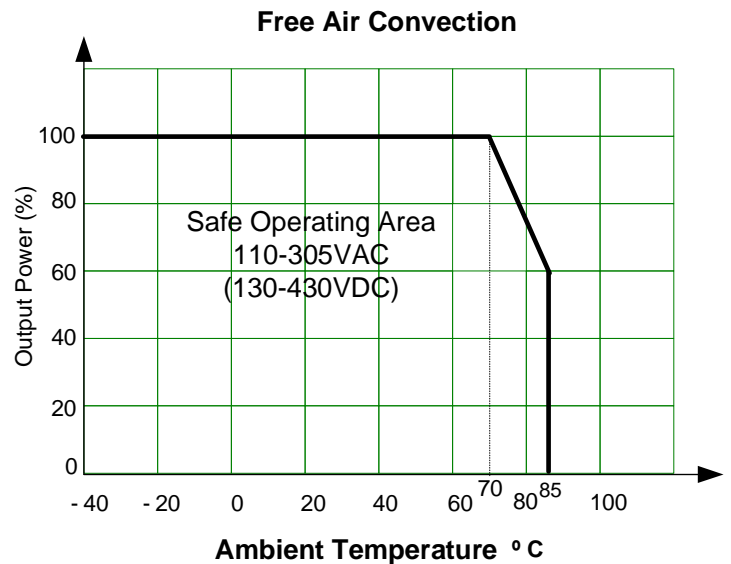
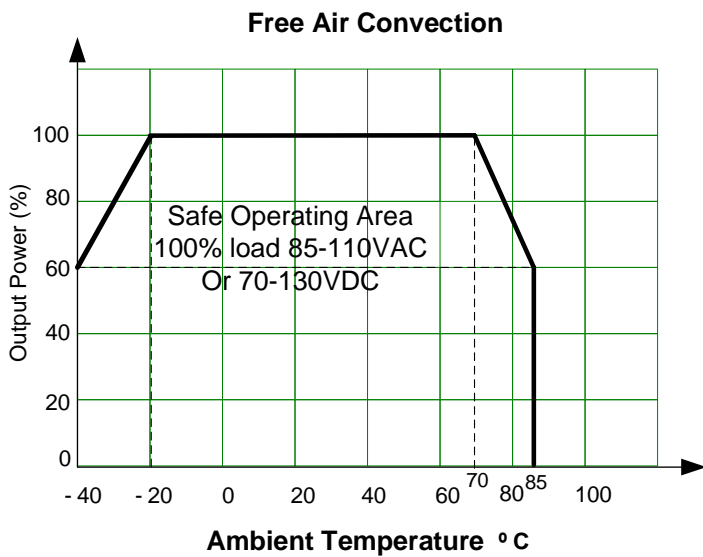
Note:  
Unit: mm (inch)  
Pin diameter tolerance: ±0.10 (±0.004)  
Case tolerance: ±0.50 (±0.02)

**L models**

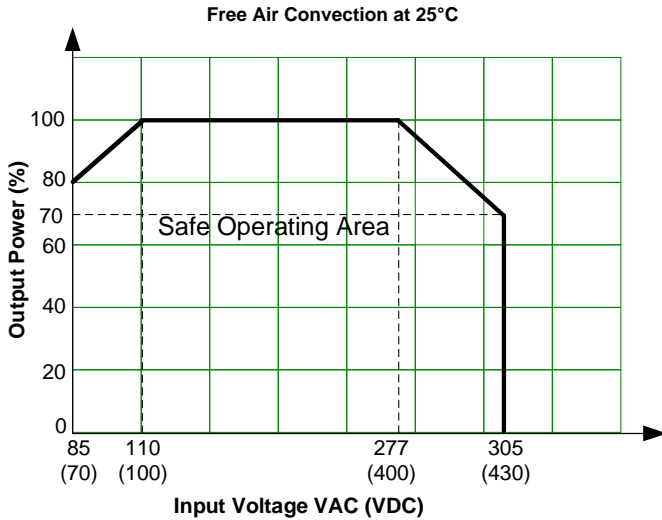


Note:  
Unit: mm (inch)  
Pin diameter tolerance:  $\pm 0.10$  ( $\pm 0.004$ )  
Case tolerance:  $\pm 0.50$  ( $\pm 0.02$ )

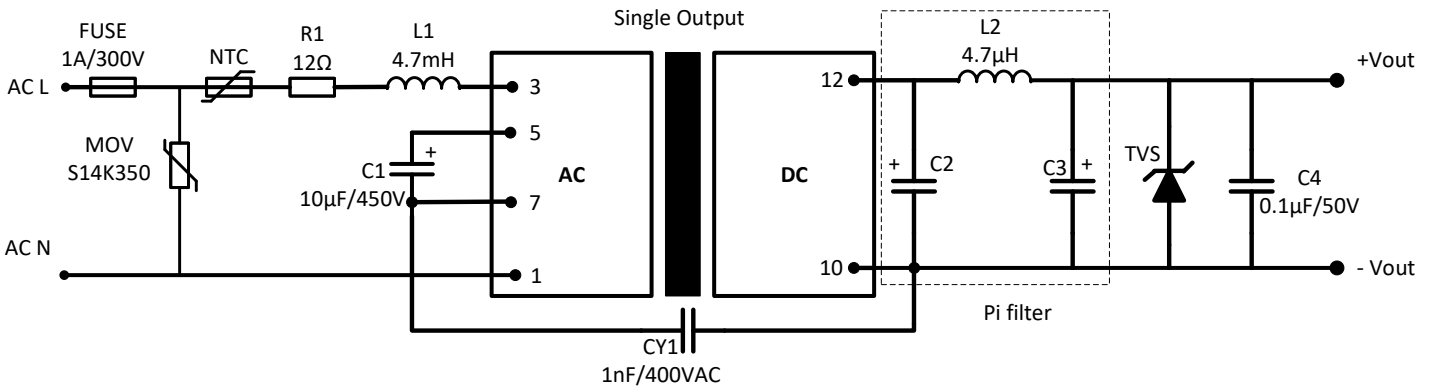
**Derating\***



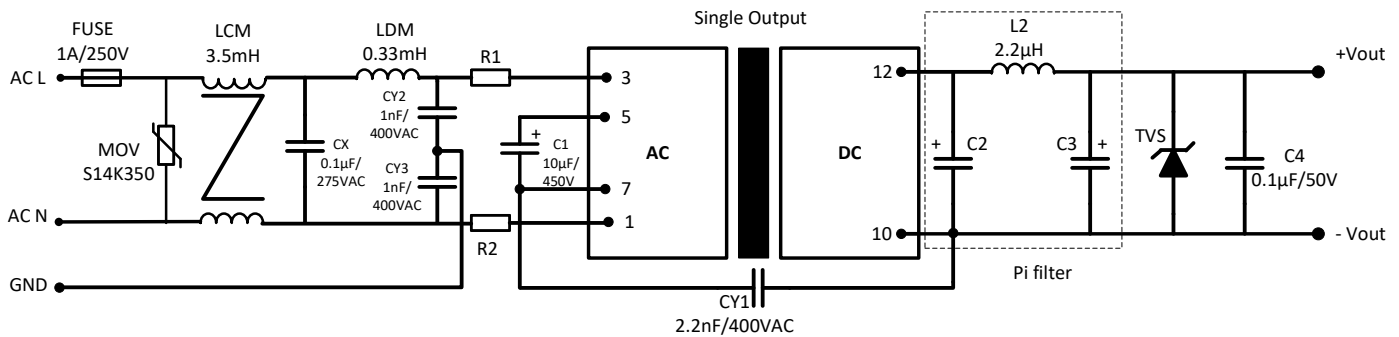
\*Power derating: -40 to -20 increase 2%/°C  
70 to 85 decrease 2.67%/°C



**Recommended EMC class A external circuit:**



**Recommended EMC class B external circuit:**



Model	C2	C3	TVS
3.3 Vout	270 μF / 16V	120 μF / 25V	7V
5 Vout			
9 Vout			
12 Vout			
15 Vout			
24 Vout	470 μF / 35V	47 μF / 35V	20V
	220 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.

**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).