





### **FEATURES:**

- RoHS compliant
- 8 Pin DIP Package
- Low ripple and noise
- High efficiency up to 79%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1000 VDC
- Pin computable with multiple manufacturers
- UL94-VO Package





# Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM1P-0505S-NZ	4.5-5.5	5	200	1000	78
AM1P-1215S-NZ	10.8-13.2	15	67	1000	79

**Input Specifications** 

Parameters	Nominal	Typical	Maximum	Units	
Valtaga van va	5	4.5-5.5		VDC	
Voltage range	12	10.8-13.2	VDC		
Filter	Capacitor				

**Isolation Specifications** 

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1000	VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

**Output Specifications** 

Output Opcomoditions					
Parameters	Conditions	Typical	Maximum	Units	
Voltage accuracy		See tolerance graph			
Short Circuit protection		Momentary (1 sec)			
Line voltage regulation	For 1.0% Vin	±1.2		% of Vin	
Load voltage regulation	Load 10 - 100%	10		%	
Temperature coefficient		±0.03		%/°C	
Ripple & Noise	At 20 MHz Bandwidth	75		m Vp-p	

**General Specifications** 

Parameters	Conditions	Typical	Maximum	Units	
Switching frequency	100% load	150		KHz	
Operating temperature	Without derating	-40	to +85	°C	
Storage temperature		-55	to +125	°C	
Case temperature			90	°C	
Cooling		Free air convection			
Humidity			90	%	
Case material		Plastic UL94-VO			
Weight		1.8		g	
Dimensions (L x W x H)		0.46 x 0.39x 0.30 inches 11.70 x 9.80 x 7.70 mm			
MTBF	>1 00	>1 000 000 hrs(MIL-HDBK -217F, Ground Benign, t=+25°C)			

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.

**Safety Specifications** 

Parameters	
Agency approvals	CE
Standards	IEC60950-1 :2001

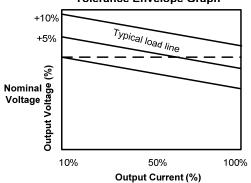


1 Watt | DC-DC Converter

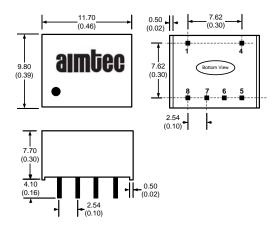
## **Pin Out Specifications**

Pin	Single
1	- V Input
4	+V Input
5	+V Output
6	No pin
7	-V Output
8	No pin

#### **Tolerance Envelope Graph**

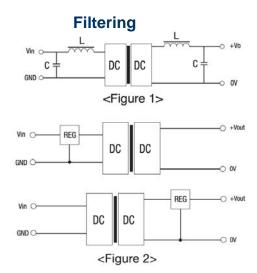


## **Dimensions**



# **External capacitor**

Vin (VDC)	External capacitor (uF)	Vout (VDC)	External capacitor (uF)
5	4.7	5	10
12	2.2	9	4.7
24	1	12	2.2
-	-	15	1



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.