

**FEATURES:**



- Regulated Single Output
- Continuous Short Circuit Protection
- RoHS Compliant
- MTBF>1,500,000 hours
- 1000VDC Isolation
- Operating temperature: -40°C to +85°C
- Industry Standard Pinout
- 14 Pin DIP Package

**Models**

**Single output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM1MR-0503SZ	4.5-5.5	3.3	303	1000	55
AM1MR-0505SZ	4.5-5.5	5	200	1000	64
AM1MR-0507SZ	4.5-5.5	7.2	139	1000	64
AM1MR-0509SZ	4.5-5.5	9	111	1000	65
AM1MR-0512SZ	4.5-5.5	12	83	1000	66
AM1MR-0515SZ	4.5-5.5	15	67	1000	66
AM1MR-1203SZ	10.8-13.2	3.3	303	1000	56
AM1MR-1205SZ	10.8-13.2	5	200	1000	64
AM1MR-1207SZ	10.8-13.2	7.2	139	1000	65
AM1MR-1209SZ	10.8-13.2	9	111	1000	66
AM1MR-1212SZ	10.8-13.2	12	83	1000	66
AM1MR-1215SZ	10.8-13.2	15	67	1000	68
AM1MR-2403SZ	21.6- 26.4	3.3	303	1000	56
AM1MR-2405SZ	21.6- 26.4	5	200	1000	63
AM1MR-2407SZ	21.6- 26.4	7.2	139	1000	65
AM1MR-2409SZ	21.6- 26.4	9	111	1000	66
AM1MR-2412SZ	21.6- 26.4	12	83	1000	67
AM1MR-2415SZ	21.6- 26.4	15	67	1000	67

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	Nominal	Typical	Maximum	Units
Voltage range	5	4.5- 5.5		VDC
	12	10.8-13.2		
	24	21.6- 26.4		
Filter	Capacitor			
Absolute Maximum Rating (100 ms)	5		7	VDC
	12		15	
	24		28	
Input no load current			35	mA
Input reflected current		20		mA

**Isolation Specifications**

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	3 sec	1000		VDC
Resistance	At 500VDC	>1000		MOhm
Capacitance		60		pF

## Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Short Circuit protection		Continuous		
Short circuit restart		Auto-Recovery		
Line voltage regulation	LL ~ HL	±0.5		% of Vin
Load voltage regulation	From 0% to 100% Load	±0.5		%
Load voltage regulation (3.3V output)	From 0% to 100% Load	±1		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	20MHz Bandwidth	50		mV p-p

## General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		50 (variable)		KHz
Operating temperature	Full Load	-40 to +85		°C
Storage temperature		-40 to +125		°C
Maximum case temperature			100	°C
Cooling		Free Air Convection		
Humidity			95	% RH
Case material		Non-Conductive Plastic (UL94V-0)		
Weight		2.7		g
Dimensions (L x W x H)		20.30 x 10.16 x 6.90 mm (0.80 x 0.40 x 0.27 inches )		
MTBF		>1,500,000hrs dual (MIL-HDBK -217F, Ground Benign, t=+25°C) (too big, may be 1.5M?)		
Maximum soldering temperature	1.5mm from case for 10 sec		260	°C

## Safety Specifications

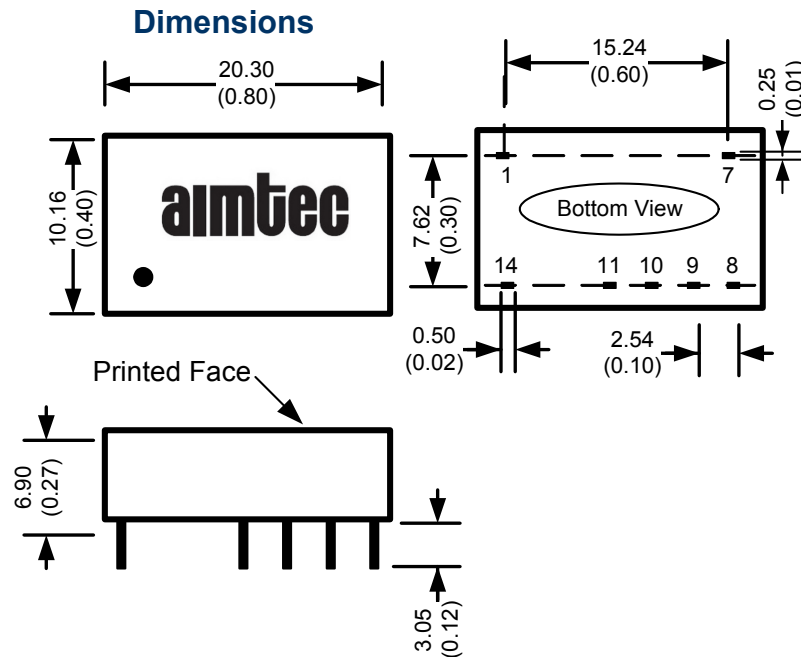
### Parameters

Safety Standards	Designed to meet IEC 60950-1
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## Pin Out Specifications

Pin	Single
1	- V input
7	NC
8	No Pin
9	+ V output
10	No Pin
11	- V output
14	+ V input

NC: No Connection



**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. 5. 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 than the ones listed in this datasheet.