



FEATURES:

- RoHS compliant
- 24 Pin DIP Package
- Wide 2:1 input range
- Power modules for PCB mounting
- Operating temperature -40°C to + 75°C
- Regulated output
- Low ripple and noise
- Input/output Isolation voltage 1500VDC

Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive Load, max(uf)	Ripple & Noise max, (% mV p-p)	Efficiency (%)
AM8T-0503SIZ	4.5-9	3.3	1600	18400	80	74
AM8T-0505SIZ	4.5-9	5	1600	18400	80	79
AM8T-0512SIZ	4.5-9	12	660	18400	120	83
AM8T-0515SIZ	4.5-9	15	530	18400	150	83
AM8T-1203SIZ	9-18	3.3	1600	6930	80	75
AM8T-1205SIZ	9-18	5	1600	6930	80	83
AM8T-1212SIZ	9-18	12	660	6930	120	85
AM8T-1215SIZ	9-18	15	530	6930	150	85
AM8T-2403SIZ	18-36	3.3	1600	6800	80	81
AM8T-2405SIZ	18-36	5	1600	6800	80	83
AM8T-2412SIZ	18-36	12	660	6800	120	88
AM8T-2415SIZ	18-36	15	530	6800	150	87
AM8T-4803SIZ	36-75	3.3	1600	5030	80	81
AM8T-4805SIZ	36-75	5	1600	5030	80	83
AM8T-4812SIZ	36-75	12	660	5030	120	88
AM8T-4815SIZ	36-75	15	530	5030	150	87

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive Load, max(uf)	Ripple & Noise max, (%)	Efficiency (%)
AM8T-0505DIZ	4.5-9	±5	±800	±9200	80	85
AM8T-0512DIZ	4.5-9	±12	±330	±9200	120	85
AM8T-0515DIZ	4.5-9	±15	±260	±9200	150	85
AM8T-1205DIZ	9-18	±5	±800	±3465	80	85
AM8T-1212DIZ	9-18	±12	±330	±3465	120	85
AM8T-1215DIZ	9-18	±15	±260	±3465	150	85
AM8T-2405DIZ	18-36	±5	±800	±3400	80	83
AM8T-2412DIZ	18-36	±12	±330	±3400	120	88
AM8T-2415DIZ	18-36	±15	±260	±3400	150	87
AM8T-4805DIZ	36-75	±5	±800	±2515	80	83
AM8T-4812DIZ	36-75	±12	±330	±2515	120	88
AM8T-4815DIZ	36-75	±15	±260	±2515	150	87

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	5 12 24 48	4.5-9 9-18 18-36 36-75		VDC
Filter	π (Pi) Network			

Input Specifications (continued)

Parameters	Nominal	Typical	Maximum	Units
Absolute Maximum Rating	5 Vin 12 Vin 24 Vin 48 Vin		10 20 40 83	VDC
Permissible absolute maximum duration			2	h

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1500	VDC
Resistance		> 1000		MOhm
Capacitance		1000		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Short Circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Over voltage protection		Zener diode clamp		
Over load protection	Auto recovery	Over 110% full load		
Line voltage regulation (Single)	HL-LL	±0.5		%
Line voltage regulation (Dual)	HL-LL	±0.5		%
Load voltage regulation (Single)		±0.5		%
Load voltage regulation (Dual)		±2		%
Temperature coefficient		±0.05		%/°C

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	Derating above +70 °C		-40 to +75	°C
Storage temperature			-55 to +115	°C
Maximum Case temperature			+95	°C
Cooling		Free air convection		
Humidity			95	%
Case material		Nickel coated cooper		
Weight		33		g
Dimensions (L x W x H)	Tolerance ±0.02 inch, ±0.5mm	1.25 x 0.80 x 0.40 inches	31.80 x 20.30 x 10.20 mm	
MTBF		> 800 000 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.

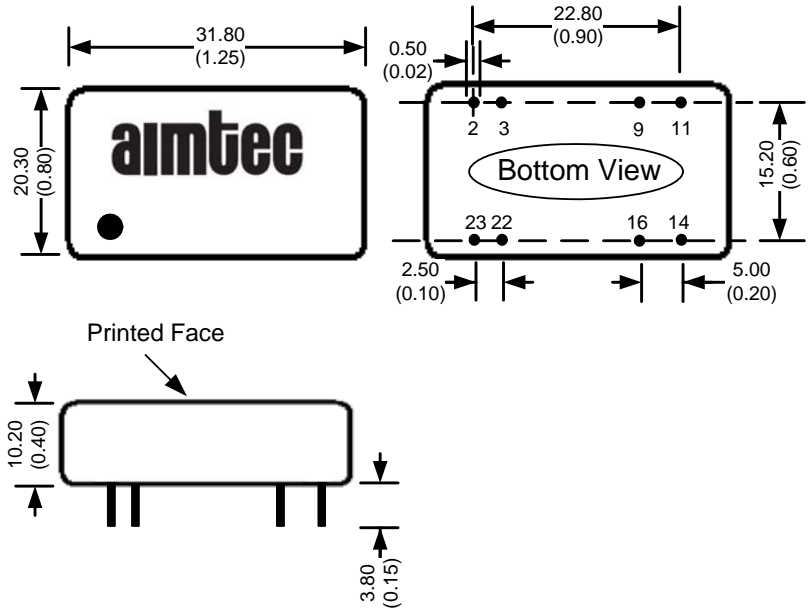
Safety Specifications

Standards	
Agency approvals	CE
Safety	EN 55011 (Industrial, scientific and medical radio frequency equipment- radio disturbance)

Pin Out Specifications

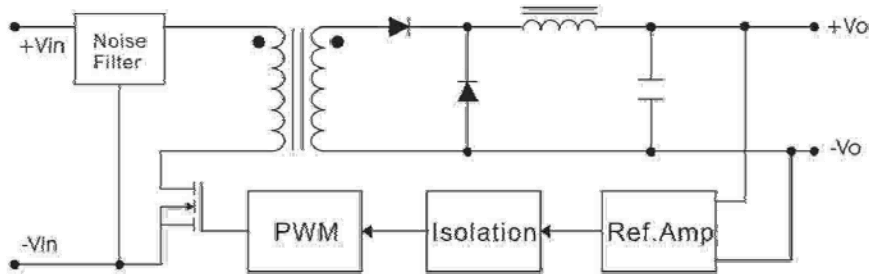
Pin	Single	Dual
2	-V Input	-V Input
3	-V Input	-V Input
9	N.C.	Common
10	Omitted	Omitted
11	N.C.	-V Output
14	+V Output	+ V Output
15	Omitted	Omitted
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

Dimensions

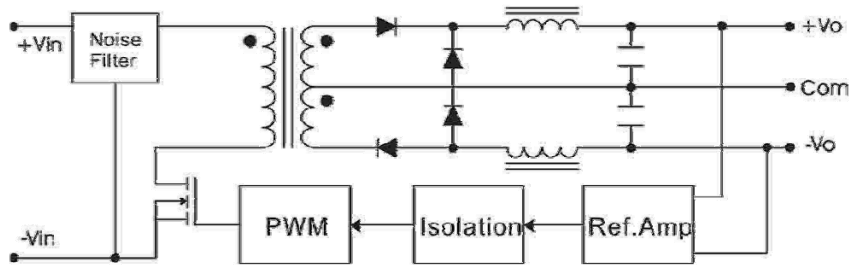


Block Diagrams

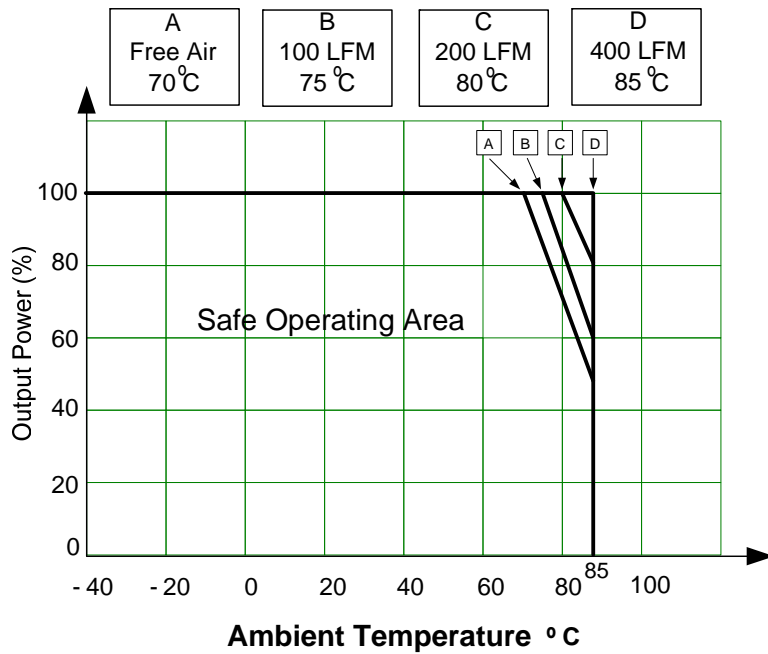
Single Output



Dual Output



Derating



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.