



FEATURES:

- RoHS Compliant
- Wide 2:1 input range
- High Efficiency up to 83%
- Continuous short circuit
- Operating Temperature -40°C to 85°C
- Input / Output Isolation of 500VAC
- No Tantalum capacitors used inside
- Over voltage protection



Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VAC)	Efficiency (%)
AM2Q-0512DZ	4.5-9	±12	±65	500	82
AM2Q-0515DZ	4.5-9	±15	±50	500	81
AM2Q-1212DZ	9-18	±12	±65	500	83
AM2Q-1215DZ	9-18	±15	±50	500	83
AM2Q-2412DZ	18-36	±12	±65	500	81
AM2Q-2415DZ	18-36	±15	±50	500	82
AM2Q-4812DZ	36-75	±12	±65	500	80
AM2Q-4815DZ	36-75	±15	±50	500	79

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	4.5-9	4.5-9	VDC
	12	9-18	9-18	
	24	18-36	18-36	
	48	36-75	36-75	
Filter	LC Type			
Start up time		20		ms
No Load Input Current		30		mA
Input reflected current		20		mA

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3sec		500	VAC
Resistance		50		MOhm
Capacitance		500		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Cross Regulation (Dual Output Models)	25% load on one output – 100% load on the other output	±5		%
Over voltage protection	Zener Diode Clamp	±12	±15	V
		±15	±18	
Short Circuit protection	Continuous			
Short circuit restart	Auto Recovery			
Line voltage regulation (Dual)	LL-HL	±0.5		% of Vin
Load voltage regulation (Dual)	Load:0-100% unbalanced	±1		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	20MHz Bandwidth	50		mV p-p
Minimum Load Current		0		% of Max

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100		KHz
Operating temperature	Derating above 60°C		-40 to +85	°C
Storage temperature		-40 to +125		°C
Maximum case temperature			100	°C
Cooling		Free Air Convection		
Humidity			95	% RH
Case material		Nickel Coated Copper		
Weight		10		g
Dimensions (L x W x H)		1.08 x 0.70 x 0.28 inches	27.50 x 18.00 x 7.00 mm	
MTBF		>1.6Mhrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Transient recovery deviation		±3		%

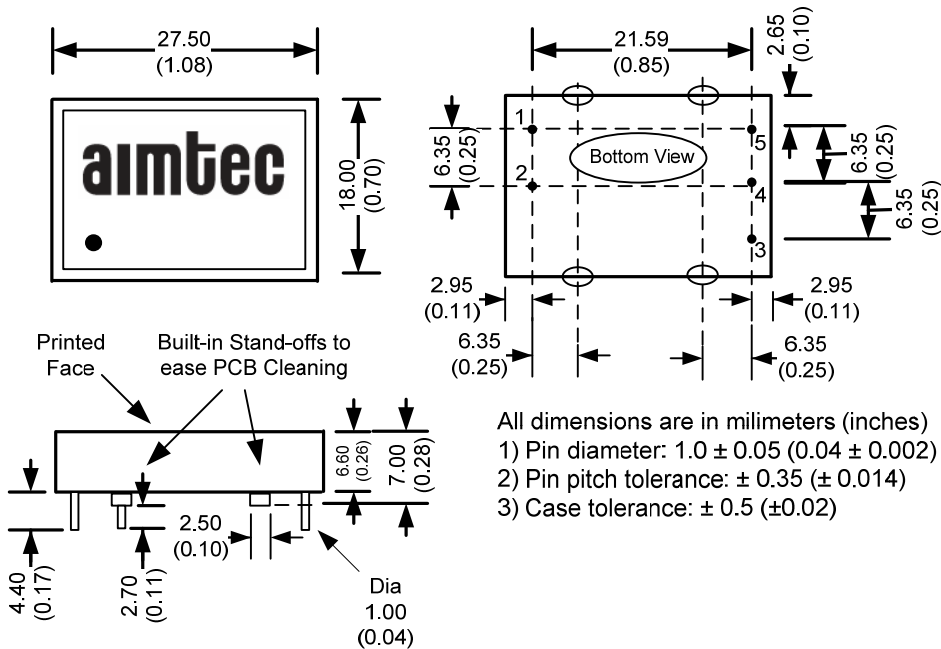
Safety Specifications

Parameters	
Standards	Designed to meet IEC/EN 60950-1

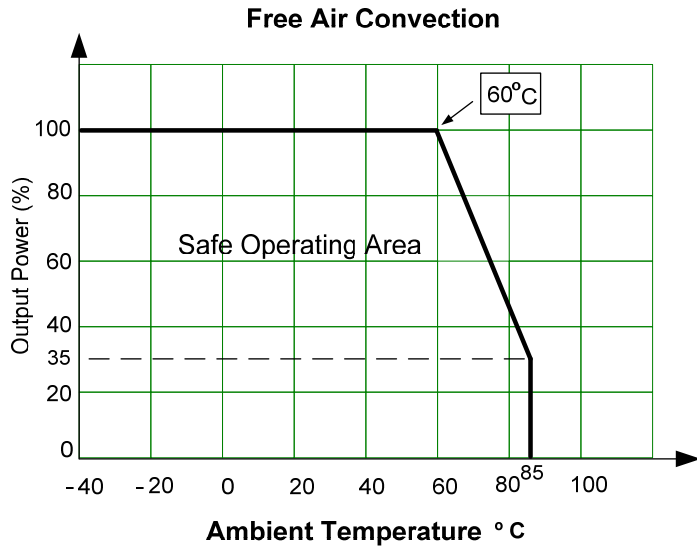
Pin Out Specifications

Pin	500 VAC Dual
1	-V Input
2	+V Input
3	+V Output
4	Common
5	-V Output

Dimensions



Derating



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