

FEATURES:

- 7 pin SIP package
- High efficiency up to 90%
- Low profile plastic package
- RoHS compliant
- Operating temperature -40°C to + 85°C
- Short circuit protection
- Input / Output Isolation 1000, 3000 VDC
- Pin compatible with multiple manufacturers

Models

Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM3D-0505SZ	4.5-5.5	5	600	1000	80
AM3D-0509SZ	4.5-5.5	9	333	1000	81
AM3D-0512SZ	4.5-5.5	12	250	1000	82
AM3D-0515SZ	4.5-5.5	15	200	1000	84
AM3D-1205SZ	10.8-13.2	5	600	1000	84
AM3D-1209SZ	10.8-13.2	9	333	1000	86
AM3D-1212SZ	10.8-13.2	12	250	1000	89
AM3D-1215SZ	10.8-13.2	15	200	1000	90
AM3D-0505SH30Z	4.5-5.5	5	600	3000	80
AM3D-0509SH30Z	4.5-5.5	9	333	3000	81
AM3D-0512SH30Z	4.5-5.5	12	250	3000	82
AM3D-0515SH30Z	4.5-5.5	15	200	3000	84
AM3D-1205SH30Z	10.8-13.2	5	600	3000	84
AM3D-1209SH30Z	10.8-13.2	9	333	3000	86
AM3D-1212SH30Z	10.8-13.2	12	250	3000	89
AM3D-1215SH30Z	10.8-13.2	15	200	3000	90

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM3D-0505DZ	4.5-5.5	±5	±300	1000	82
AM3D-0509DZ	4.5-5.5	±9	±167	1000	83
AM3D-0512DZ	4.5-5.5	±12	±125	1000	84
AM3D-0515DZ	4.5-5.5	±15	±100	1000	86
AM3D-1205DZ	10.8-13.2	±5	±300	1000	85
AM3D-1209DZ	10.8-13.2	±9	±167	1000	86
AM3D-1212DZ	10.8-13.2	±12	±125	1000	89
AM3D-1215DZ	10.8-13.2	±15	±100	1000	90
AM3D-0505DH30Z	4.5-5.5	±5	±300	3000	82
AM3D-0509DH30Z	4.5-5.5	±9	±167	3000	83
AM3D-0512DH30Z	4.5-5.5	±12	±125	3000	84
AM3D-0515DH30Z	4.5-5.5	±15	±100	3000	86
AM3D-1205DH30Z	10.8-13.2	±5	±300	3000	85
AM3D-1209DH30Z	10.8-13.2	±9	±167	3000	86
AM3D-1212DH30Z	10.8-13.2	±12	±125	3000	89
AM3D-1215DH30Z	10.8-13.2	±15	±100	3000	90

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		
Filter	Capacitor			
Start up time				ms
Absolute Maximum Rating	5	9		VDC
	12	15		
Peak Input Voltage time			100	ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec	1000, 3000		VDC
Resistance		>1000		MOhm
Capacitance		60		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±3		%
Line voltage regulation	For 1.0% of Vin	±1.2		% of Vin
Load voltage regulation	load 10~100%	±8		%
Temperature coefficient		±0.02		%/°C
Short Circuit Protection		Momentary (1sec)		
Ripple & Noise	20MHz Bandwidth	50		mV p-p
Minimum Load Current		10		% of Max

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	70		KHz
Operating temperature	With Derating Above 71 °C (5V input models only)	-40 to +85		°C
Storage temperature		-40 to +125		°C
Maximum case temperature			100	°C
Derating				%/°C
Cooling	Free Air Convection			
Humidity			95	% RH
Case material	Non-conductive black plastic UL 94 V-0			
Weight		2.8		g
Dimensions (L x W x H)	0.76 x 0.28 x 0.37 inches 19.50 x 7.20 x 9.50 mm			
MTBF	>1 800 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			
Maximum soldering temperature	1.5mm from case for 10 sec		260	°C

Safety Specifications

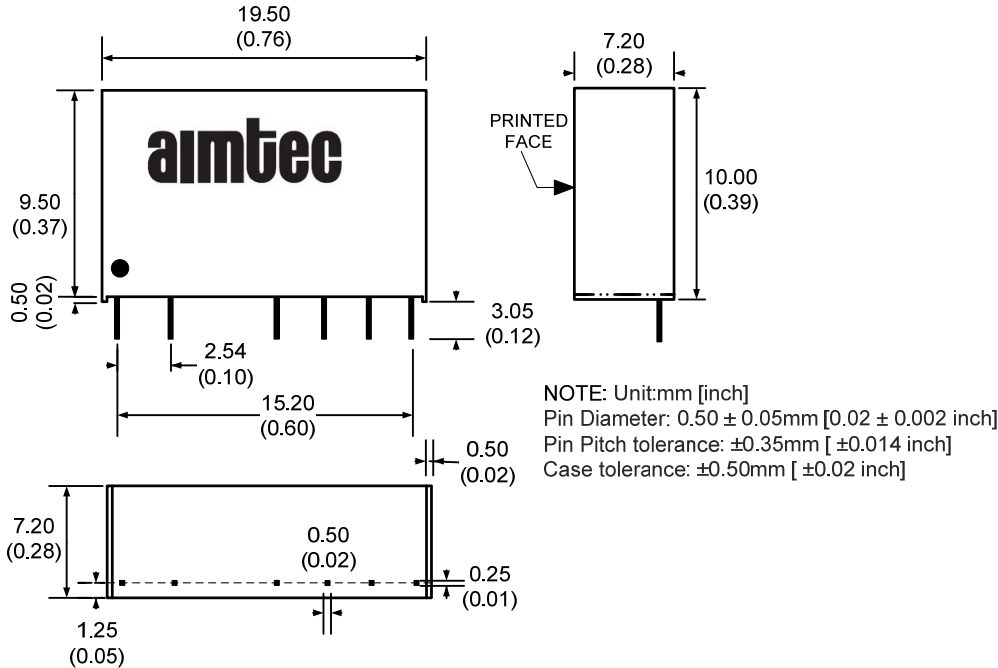
Parameters	
Standards	NOTE: Designed to meet: IEC 60950-1: 2001, EN55022 (Radiated Emissions) class B, IEC61000-4-2(ESD), IEC61000-4-3(Radiated immunity)

Pin Out Specifications

Pin	1000Vdc		3000Vdc	
	Single	Dual	Single	Dual
1	+ V Input	+ V Input	+ V Input	+ V Input
2	- V Input	- V Input	- V Input	- V Input
4	- V Output	- V Output	No pin	No pin
5	No pin	Common	- V Output	- V Output
6	+ V Output	+ V Output	No pin	Common

7	No pin	No pin	+ V Output	+ V Output
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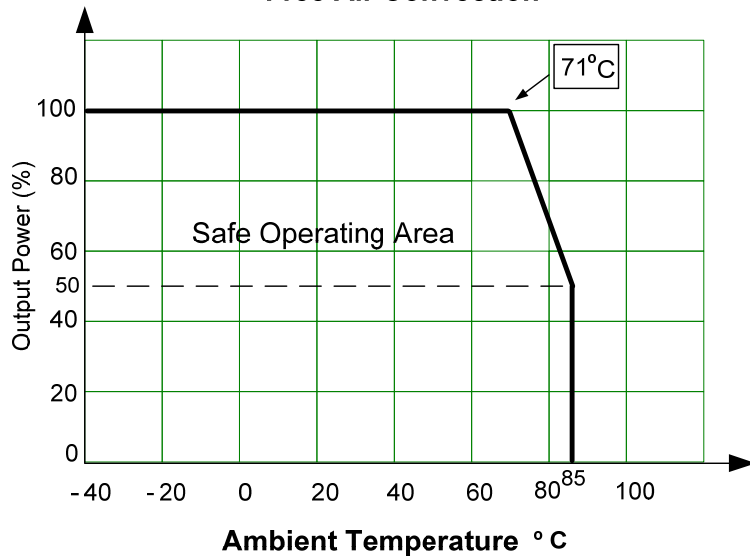
Dimensions



Derating

5V input models only

Free Air Convection



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