



FEATURES:

- RoHS compliant
- High efficiency up to 76%
- Low profile plastic package
- 7 pin SIP package
- Operating temperature -40°C to +85°C
- Continuous short circuit protection
- Pin compatible with multiple manufacturers
- Up to 3000VDC Isolation

Models
Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM1DS-0303S-NZ	3.0-3.6	3.3	303	1000	68
AM1DS-0305S-NZ	3.0-3.6	5	200	1000	70
AM1DS-0505S-NZ	4.5-5.5	5	200	1000	73
AM1DS-0509S-NZ	4.5-5.5	9	112	1000	73
AM1DS-0512S-NZ	4.5-5.5	12	83	1000	75
AM1DS-0515S-NZ	4.5-5.5	15	67	1000	75
AM1DS-0524S-NZ	4.5-5.5	24	42	1000	76
AM1DS-1205S-NZ	10.8-13.2	5	200	1000	73
AM1DS-1209S-NZ	10.8-13.2	9	112	1000	72
AM1DS-1212S-NZ	10.8-13.2	12	83	1000	75
AM1DS-1215S-NZ	10.8-13.2	15	67	1000	76
AM1DS-1515S-NZ	13.5-16.5	15	67	1000	75
AM1DS-2403S-NZ	21.6-26.4	3.3	303	1000	70
AM1DS-2405S-NZ	21.6-26.4	5	200	1000	70
AM1DS-2412S-NZ	21.6-26.4	12	83	1000	75
AM1DS-2415S-NZ	21.6-26.4	15	67	1000	76
AM1DS-0305SH30-NZ	3.0-3.6	5	200	3000	70
AM1DS-0505SH30-NZ	4.5-5.5	5	200	3000	73
AM1DS-0512SH30-NZ	4.5-5.5	12	83	3000	75
AM1DS-0515SH30-NZ	4.5-5.5	15	67	3000	75
AM1DS-0524SH30-NZ	4.5-5.5	24	42	3000	76
AM1DS-1205SH30-NZ	10.8-13.2	5	200	3000	73
AM1DS-1212SH30-NZ	10.8-13.2	12	83	3000	75
AM1DS-2405SH30-NZ	21.6-26.4	5	200	3000	70

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (Ma)	Isolation (VDC)	Efficiency (%)
AM1DS-0505D-NZ	4.5-5.5	±5	±100	1000	69
AM1DS-0509D-NZ	4.5-5.5	±9	±56	1000	73
AM1DS-0512D-NZ	4.5-5.5	±12	±42	1000	74
AM1DS-0515D-NZ	4.5-5.5	±15	±34	1000	74
AM1DS-0524D-NZ	4.5-5.5	±24	±21	1000	76
AM1DS-1205D-NZ	10.8-13.2	±5	±100	1000	70
AM1DS-1212D-NZ	10.8-13.2	±12	±42	1000	76
AM1DS-1215D-NZ	10.8-13.2	±15	±34	1000	76
AM1DS-2405D-NZ	21.6-26.4	±5	±100	1000	68
AM1DS-2412D-NZ	21.6-26.4	±12	±42	1000	76
AM1DS-2415D-NZ	21.6-26.4	±15	±34	1000	76
AM1DS-0505DH30-NZ	4.5-5.5	±5	±100	3000	69
AM1DS-0512DH30-NZ	4.5-5.5	±12	±42	3000	74
AM1DS-0515DH30-NZ	4.5-5.5	±15	±34	3000	74
AM1DS-1212DH30-NZ	10.8-13.2	±12	±42	3000	76

Models

Dual output (continued)

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (Ma)	Isolation (VDC)	Efficiency (%)
AM1DS-1215DH30-NZ	10.8-13.2	±15	±34	3000	76
AM1DS-2405DH30-NZ	21.6-26.4	±5	±100	3000	70
AM1DS-2412DH30-NZ	21.6-26.4	±12	±42	3000	76

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	3.3	3.0-3.6		VDC
	5	4.5-5.5		
	12	10.8-13.2		
	15	13.5-16.5		
	24	21.6-26.4		
Filter	Capacitor			
Start up time				ms
Absolute Maximum Rating	3.3		7	VDC
	5		9	
	12		18	
	15		21	
	24		30	
Peak Input Voltage time			1	s
No Load Input Current			50	mA

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec	1000, 3000		VDC
Resistance		> 1000		MOhm
Capacitance		15		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±5		%
Short Circuit protection		Continuous		
Short circuit restart		Auto recovery		
Line voltage regulation	For 1.0% change of Vin	±1.5		% of Vin
Load voltage regulation	load 10~100%	20%		%
Temperature coefficient		±0.03		%/°C
Ripple & Noise	20MHz Bandwidth	200		mV p-p
Minimum Load Current		10		% of Max

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100		KHz
Operating temperature		-40 to +85		°C
Storage temperature		-55 to +125		°C
Maximum case temperature			100	°C
Derating		Not-Required		
Cooling		Free air convection		
Humidity			95	% RH
Case material		Non-conductive black plastic (UL94V-0 rated)		
Weight		2.3		g

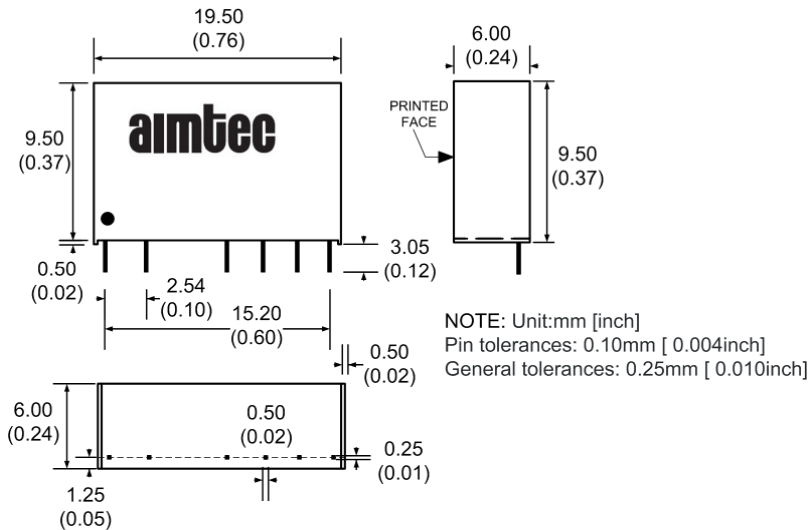
General Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Dimensions (L x W x H)		0.77 x 0.24 x 0.37 inches	19.5 x 6.00 x 9.35 mm	
MTBF		>1 940 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Maximum soldering temperature	1.5 mm from case for 10sec		300	°C

Pin Out Specifications

Pin	1000 VDC		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

Dimensions



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