

FEATURES:

- RoHS compliant
- High efficiency up to 80%
- Low profile plastic package
- 7 pin SIP package
- Operating temperature -40°C to + 85°C
- 1 sec short circuit protection
- Pin compatible with multiple manufacturers

Models

Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (Ma)	Isolation (VDC)	Efficiency (%)
AM1D-1505S-NZ	13.5-16.5	5	200	1000	73
AM1D-1509S-NZ	13.5-16.5	9	110	1000	75
AM1D-0507SH30-NZ	4.5-5.5	7.2	140	3000	78

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current (mA)	Isolation (VDC)	Efficiency (%)
AM1D-0507D-NZ	4.5-5.5	±7.2	±70	1000	76
AM1D-1218D-NZ	10.8-13.2	±18	±27	1000	75
AM1D-0507DH30-NZ	4.5-5.5	±7.2	±70	3000	76
AM1D-2418DH30-NZ	21.6-26.4	±18	±27	3000	75
AM1D-0507DH60-NZ	4.5-5.5	±7.2	±70	6000	68
AM1D-1207DH60-NZ	10.8-13.2	±7.2	±70	6000	75

Models

Dual separate output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (VDC)	Isolation (VDC)	Efficiency (%)
AM1D-050505D-NZ	4.5-5.5	5/5	100/100	1000	72
AM1D-241212D-NZ	21.6-26.4	12/12	42/42	1000	80
AM1D-241515D-NZ	21.6-26.4	15/15	35 /35	1000	77

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage range		4.5-5.5 10.8-13.2 13.5-16.5 21.6-26.4		VDC
Filter	Capacitor			

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Rated voltage	60 sec	1000, 3000 & 6000		VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy			±5	%

Voltage balance	Dual Output	±1		%
Short Circuit protection	1 sec.			
Line voltage regulation (Single)	For 1.0% of Vin		±1.2	%
Line voltage regulation (Dual)	For 1.0% of Vin		±1.2	%
Load voltage regulation (Single)	load 10~100%		10	%
Load voltage regulation (Dual)	load 10~100%		10	%
Temperature coefficient			±0.03	%/°C
Ripple & Noise	At 20MHz Bandwidth	75		mV p-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	150		KHz
Case temperature			+95	°C
Operating temperature		-40 to +85		°C
Storage temperature		-55 to +125		°C
Derating	Non-Required			
Cooling	Free air convection			
Humidity	Non condensing		90	%
Case material	Plastic UL94-VO			
Weight		2		g
Dimensions	1000 & 3000VDC	0.76 x 0.24 x 0.39 inch	19.5 x 6.00 x 10.00 mm	
	6000VDC	0.76 x 0.39 x 0.49 inch	19.50 x 9.80 x 12.5 mm	
MTBF	>1 100 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

Pin Out Specifications

Pin	1000 VDC		3000 , 6000 VDC	
	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

Pin	Dual Separated 1000 VDC
1	+V Input
2	-V Input
4	-V1 Output
5	+V1 Output
6	-V2 Output
7	+V2 Output

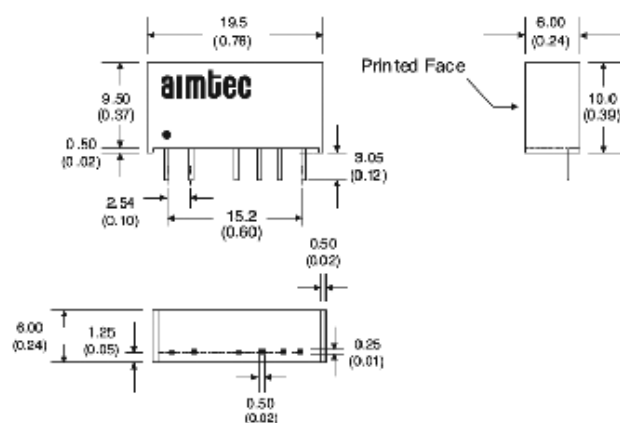
External capacitor – Single output

Vin (VDC)	External capacitor (µF)	Vout (VDC)	External capacitor (µF)
5	4.7	5	10
12	2.2	9	4.7
24	1	12	2.2
-	-	15	1

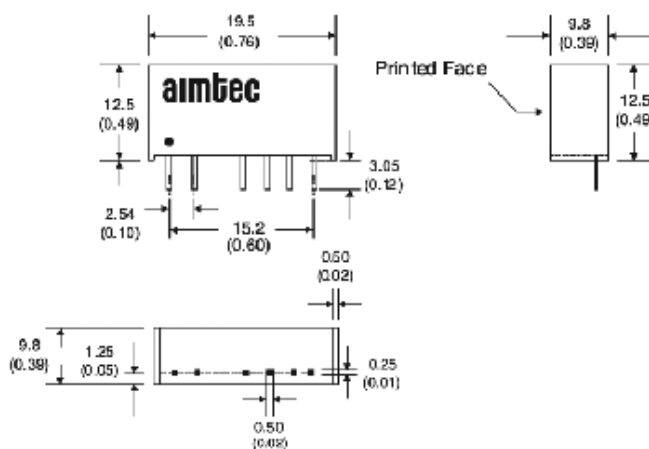
External capacitor – Dual output

Vin (VDC)	External capacitor (μ F)	Vout (VDC)	External capacitor (μ F)
5	4.7	5	10
12	2.2	9	4.7
24	1	12	2.2
-	-	15	1

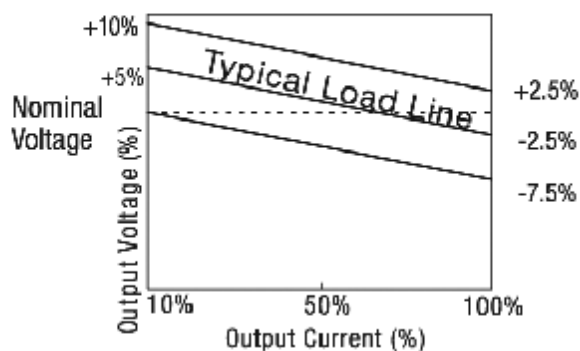
Dimensions 1000 and 3000VDC



Dimensions 6000VDC



Tolerance Envelope Graph



Temperature Derating Graph

