



FEATURES:

- RoHS Compliant
- Low ripple and noise
- High efficiency up to 87%
- UL94-VO case
- Input / Output Isolation 1000, 3000VDC
- Operating temperature -40°C to + 85°C
- Pin compatible with multiple manufacturers
- 7 pin SIP package

Models

Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM2D-0505S-NZ	4.5-5.5	5	400	1000	81
AM2D-0509S-NZ	4.5-5.5	9	222	1000	82
AM2D-0512S-NZ	4.5-5.5	12	167	1000	84
AM2D-0515S-NZ	4.5-5.5	15	134	1000	84
AM2D-1205S-NZ	10.8-13.2	5	400	1000	82
AM2D-1209S-NZ	10.8-13.2	9	222	1000	83
AM2D-1212S-NZ	10.8-13.2	12	167	1000	85
AM2D-1215S-NZ	10.8-13.2	15	134	1000	85
AM2D-2405S-NZ	21.6-26.4	5	400	1000	83
AM2D-2409S-NZ	21.6-26.4	9	222	1000	84
AM2D-2412S-NZ	21.6-26.4	12	167	1000	86
AM2D-2415S-NZ	21.6-26.4	15	134	1000	86
AM2D-0505SH30-NZ	4.5-5.5	5	400	3000	80
AM2D-0509SH30-NZ	4.5-5.5	9	222	3000	81
AM2D-0512SH30-NZ	4.5-5.5	12	167	3000	82
AM2D-0515SH30-NZ	4.5-5.5	15	134	3000	84
AM2D-1205SH30-NZ	10.8-13.2	5	400	3000	80
AM2D-1209SH30-NZ	10.8-13.2	9	222	3000	83
AM2D-1212SH30-NZ	10.8-13.2	12	167	3000	84
AM2D-1215SH30-NZ	10.8-13.2	15	134	3000	85
AM2D-2405SH30-NZ	21.6-26.4	5	400	3000	81
AM2D-2409SH30-NZ	21.6-26.4	9	222	3000	84
AM2D-2412SH30-NZ	21.6-26.4	12	167	3000	85
AM2D-2415SH30-NZ	21.6-26.4	15	134	3000	86

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM2D-0505D-NZ	4.5-5.5	±5	±200	1000	82
AM2D-0509D-NZ	4.5-5.5	±9	±111	1000	83
AM2D-0512D-NZ	4.5-5.5	±12	±83	1000	85
AM2D-0515D-NZ	4.5-5.5	±15	±67	1000	85
AM2D-1205D-NZ	10.8-13.2	±5	±200	1000	83
AM2D-1209D-NZ	10.8-13.2	±9	±111	1000	84
AM2D-1212D-NZ	10.8-13.2	±12	±83	1000	86
AM2D-1215D-NZ	10.8-13.2	±15	±67	1000	86
AM2D-2405D-NZ	21.6-26.4	±5	±200	1000	84
AM2D-2409D-NZ	21.6-26.4	±9	±111	1000	85
AM2D-2412D-NZ	21.6-26.4	±12	±83	1000	87
AM2D-2415D-NZ	21.6-26.4	±15	±67	1000	87

Models
Dual output (continue)

Model	Input –Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM2D-0505DH30-NZ	4.5-5.5	±5	±200	3000	82
AM2D-0509DH30-NZ	4.5-5.5	±9	±111	3000	83
AM2D-0512DH30-NZ	4.5-5.5	±12	±83	3000	85
AM2D-0515DH30-NZ	4.5-5.5	±15	±67	3000	85
AM2D-1205DH30-NZ	10.8-13.2	±5	±200	3000	83
AM2D-1209DH30-NZ	10.8-13.2	±9	±111	3000	84
AM2D-1212DH30-NZ	10.8-13.2	±12	±83	3000	86
AM2D-1215DH30-NZ	10.8-13.2	±5	±67	3000	86
AM2D-2405DH30-NZ	21.6-26.4	±9	±200	3000	84
AM2D-2409DH30-NZ	21.6-26.4	±12	±111	3000	85
AM2D-2412DH30-NZ	21.6-26.4	±15	±83	3000	87
AM2D-2415DH30-NZ	21.6-26.4	±5	±67	3000	87

Input Specifications

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

Isolation Specifications

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

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		See tolerance graph		
Voltage balance	Dual output	±1		%
Short Circuit protection	1sec			
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%	±8		%
Load voltage regulation (Dual)	Load 10~100%	±8		%
Temperature coefficient			±0.03	%/°C
Ripple & Noise	At 20MHz Bandwidth	100		mV p-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	85		KHz
Operating temperature	Without derating	-40 to +85		°C
Storage temperature		-55 to +125		°C
Case temperature			+95	°C
Cooling	Free air convection			
Humidity	Non condensing		90	%
Case material		Plastic UL94-VO		
Weight		2.5		g
Dimensions		0.76 x 0.24 x 0.39 inch	19.5 x 6.00 / 7.05 x 10.00 mm	
MTBF		>800 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

Safety Specifications

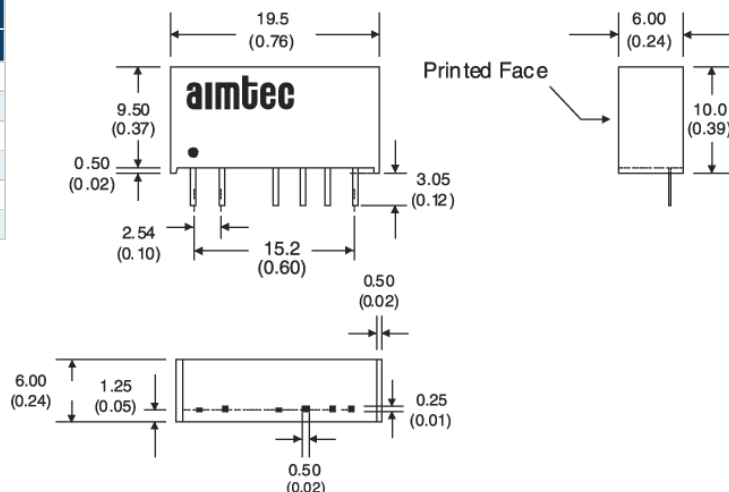
Standards

Agency approvals	cULus (for 3000VDC models)
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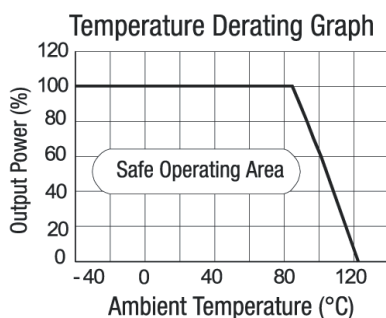
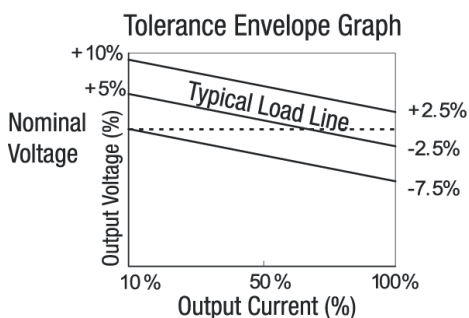
Pin Out Specifications

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

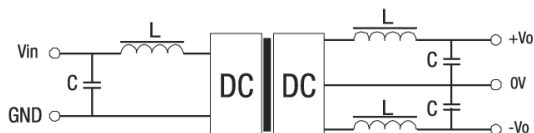
Dimensions



Typical characteristics



Filtering Single

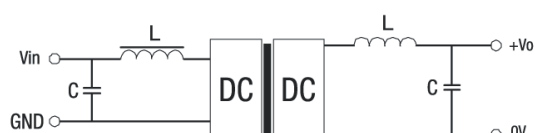


<Figure 1>



<Figure 2>

Filtering Dual



<Figure 1>



<Figure 2>

External capacitor – Single output

Vin (VDC)	External capacitor (uF)	Vout (VDC)	External capacitor (uF)
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 (uF)	Vout (VDC)	External capacitor (uF)
5	4.7	5	4.7
12	2.2	9	2.2
24	1	12	1
-	-	15	0.47