

Series AM1DR-NZ 1 Watt | DC-DC Converter



FEATURES:

- RoHScompliant
- Regulated output voltage
- Low ripple and noise
- High efficiency up to 72%
- Operating temperature -40°C to + 85°C
- Input / Output Isolation 1000& 3000VDC
- Pin computable with multiple manufacturers
- UL94-VO Package



Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Input Current Max No Load (mA)	Isolation (VDC)	Efficiency (%)
AM1DR-0505S-NZ	4.75-5.25	5	150	299 30	1000	69
AM1DR-0515S-NZ	4.75-5.25	15	67	274 30	1000	72
AM1DR-1205S-NZ	11.4-12.6	5	150	124 15	1000	69
AM1DR-2405S-NZ	22.8-25.2	5	150	61 8	1000	70
AM1DR-0505SH30-NZ	4.75-5.25	5	150	303 30	3000	68

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
	5	4.75-5.25		VDC
Voltage range	12	11.4-12.6		
	24	22.8-25.2		
Filter	Capacitor			

Isolation Specifications

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

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±3		%
Short Circuit protection	Momentary (1sec)			
Line voltage regulation (Single)	Input voltage: ±5%	±0.25		%
Load voltage regulation (Single)	10-100%	±1		%
Temperature coefficient		±0.03		%/°C
Ripple & Noise		50		mVp-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100		KHz
Operating temperature	Derating above 71°C	above 71°C -40 to +85		°C
Storage temperature		-55 to +125		°C
Cooling		Free air convection		
Humidity			95	%
Case material		Plastic UL94-VO		
Weight		2.7		g
Dimensions (L x W x H)		0.77 x 0.24 x 0.37 inch	19.60 x 6.00 x 9.50 mm	
MTBF	>900	>900 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

NOTE: All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.



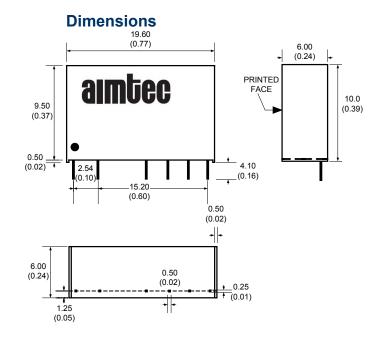


Pin Out Specification

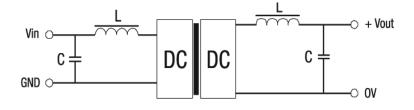
Pin	Single 1000 & 3000VDC	
1	+ V Input	
2	- V Input	
4	- V Output	
5	No pin	
6	+ V Output	
7	No pin	

External capacitor

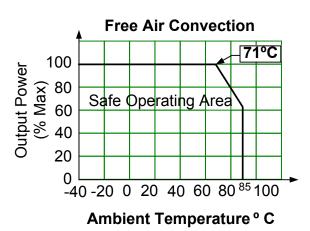
Vin (VDC)	External capacitor (uF)	Vout (VDC)	External capacitor (uF)
5	4.7	5	10
12	2.2	9	4.7
24	1	12	2.2
-	-	15	1



Filtering



Derating



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