



Микро-Чип
электронные компоненты

Наличие и актуальные цены на

AM1/4LS-0503S-NZ

<https://www.icmicro.ru/store/AM1/4LS-0503S-NZ/>



FEATURES:

- SMD Package
- I/O Isolation 1500 & 3000 VDC
- Ultra Low Ripple and Noise
- Industry Standard Pinout
- Single Output Models
- Operating temperature -40°C to + 105°C
- Efficiency up to 79%
- Continuous Short Circuit Protection



Models Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max Min (mA)		Input Current Full No Load (mA)		Isolation (VDC)	Max Capacitive Load(uF)	Efficiency (%)
AM1/4LS-0305S-NZ ‡	2.97-3.63	5	50	5	104	20	1500	220	71
AM1/4LS-0503S-NZ	4.5-5.5	3.3	76	8	68	15	1500	220	72
AM1/4LS-0505S-NZ	4.5-5.5	5	50	5	68	15	1500	220	67
AM1/4LS-1205S-NZ	10.8-13.2	5	50	5	27	10	1500	220	66
AM1/4LS-1209S-NZ	10.8-13.2	9	28	3	27	10	1500	220	73
AM1/4LS-1212S-NZ	10.8-13.2	12	21	2	27	10	1500	220	77
AM1/4LS-2405S-NZ	21.6-26.4	5	50	5	15	8	1500	220	54
AM1/4LS-0505SH30-NZ	4.5-5.5	5	50	5	68	15	3000	220	67
AM1/4LS-1205SH30-NZ	10.8-13.2	5	50	5	27	10	3000	220	66

‡ With Momentary short circuit protection of 1 second

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.

NOTE: AM1/4LS-1209S-NZ and AM1/4LS-0505SH30-NZ will be discontinued (EOL) by December 30, 2021; for new designs, please refer to AM1LS-JZ series.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	3.3	2.97-3.63		VDC
	5	4.5-5.5		
	12	10.8-13.2		
	24	21.6-26.4		
Filter	Capacitor			
Absolute Maximum Rating	3.3 Vin	-0.7-5		VDC
	5 Vin	-0.7-9		
	12 Vin	-0.7-18		
	24Vin	-0.7-30		
Peak Input Voltage time		1		s
Input Reflected Ripple Current	3.3 & 5V Input	20		mA p-p
	12 & 24V Input	5		

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec, <1mA	1500 & 3000		VDC
Resistance	500VDC	>1000		MOhm
Capacitance		20		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	100% load (see tolerance chart)	±2.5		%
Short Circuit protection	Continuous, unless marked with ‡			
Short circuit restart	Auto-Recovery			
Line voltage regulation	For ±1% of Vin, 3.3Vout		±1.5	% of Vin
	For ±1% of Vin, other models		±1.2	% of Vin
Load voltage regulation	10% - 100% load, 3.3Vout	15	20	%
	10% - 100% load, 5 / 9Vout	12	15	%
	10% - 100% load, 12Vout	7	10	%

Temperature coefficient	100% load		±0.03	%/°C
Ripple & Noise	20MHz Bandwidth, 1.5KV isolation models	20	120	mV p-p
	20MHz Bandwidth, 3KV isolation models	20	50	mV p-p

General Specifications

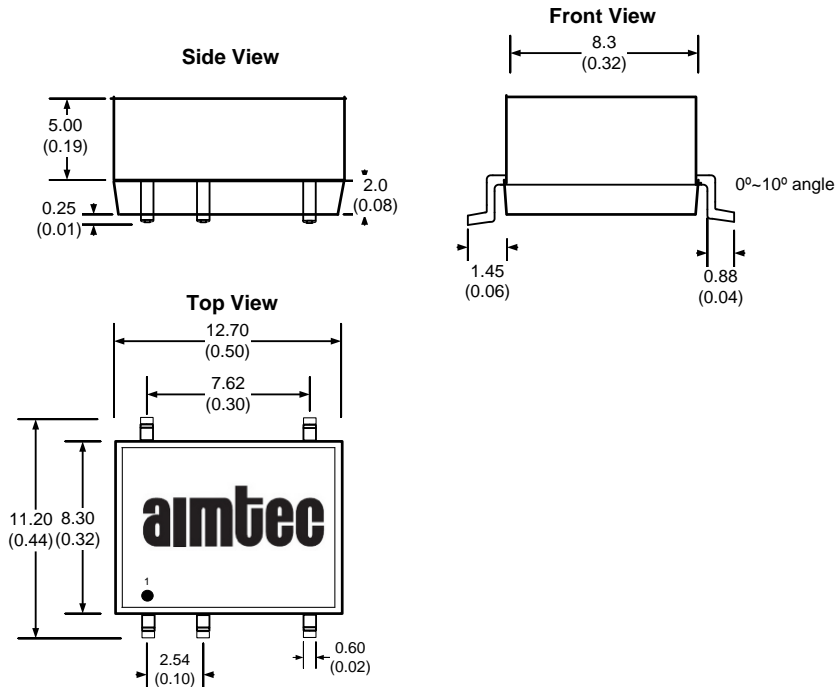
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100		KHz
Operating temperature	With derating above +100	-40 to +105		°C
Storage temperature		-55 to +125		°C
Cooling	Free air convection			
Humidity	Non Condensing		95	% RH
Case material	Epoxy resin (UL94-V0)			
Weight		1.5		g
Dimensions (L x W x H)	0.50 x 0.44 x 0.28 inches	12.70 x 11.20 x 7.25 mm		
MTBF	>3500K hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)hours			
Maximum soldering temperature	1.5mm from case for 10 sec		300	°C
Maximum case temperature			115	°C

Safety Specifications

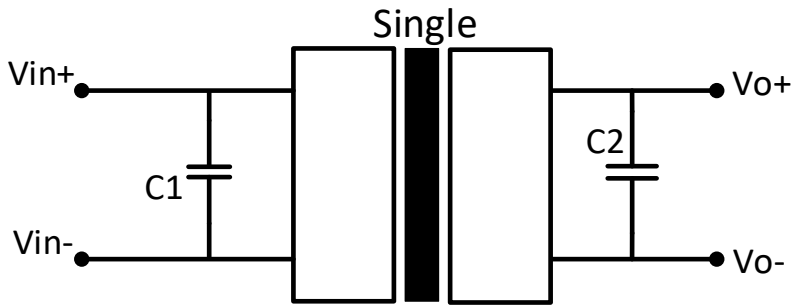
Parameters	
Agency Approval	
Standards	EN55032 Class B (see recommended circuit) IEC 61000-4-2, Contact ±8kV, Criteria B

Pin Out Specifications and Dimensions

Pin	Single
1	- V Input
2	+ V Input
3	No Pin
4	-V Output
5	+V Output
6	No Pin
7	No Pin
8	N.C.

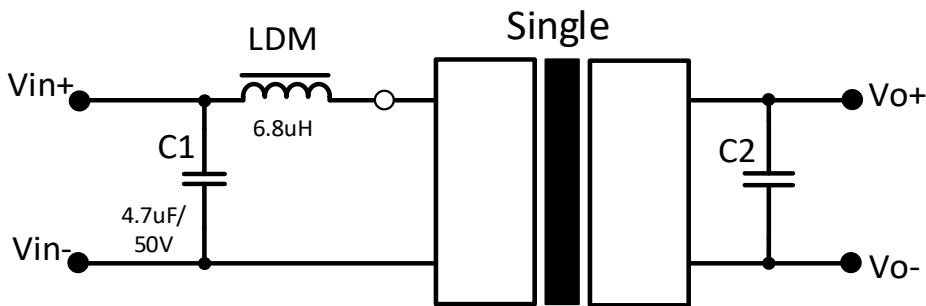


Typical Application Circuits

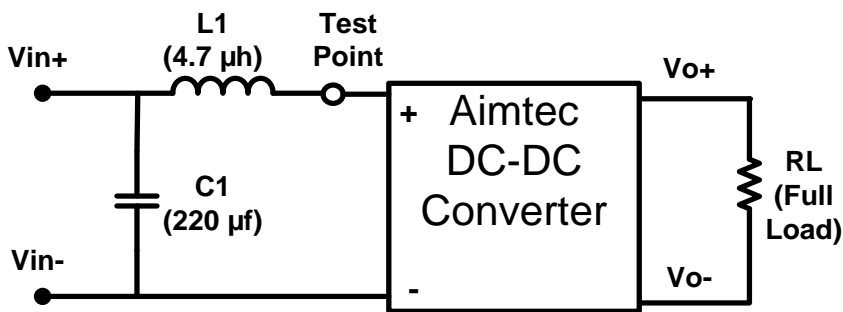


Vin (VDC)	C1 (µF)	Vout (VDC)	C2 (µF)
3.3/5	4.7	3.3 & 5	10
12	2.2	12	2.2
24	1	15	1

EMI Recommended Circuit (Class B)

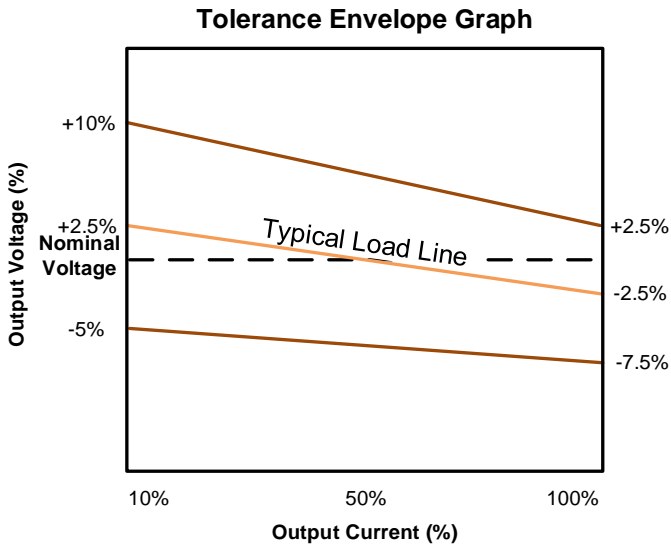


Input Reflected Ripple Current Test Circuit

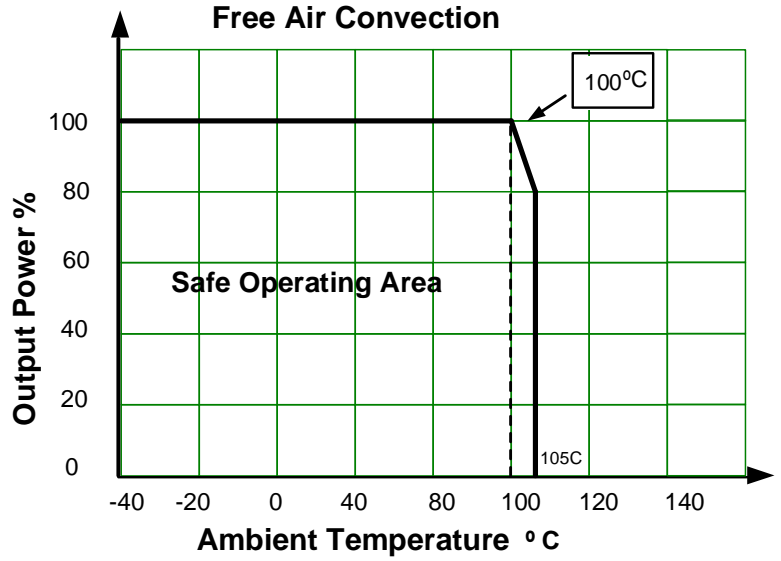


* Tested at full load, and nominal input

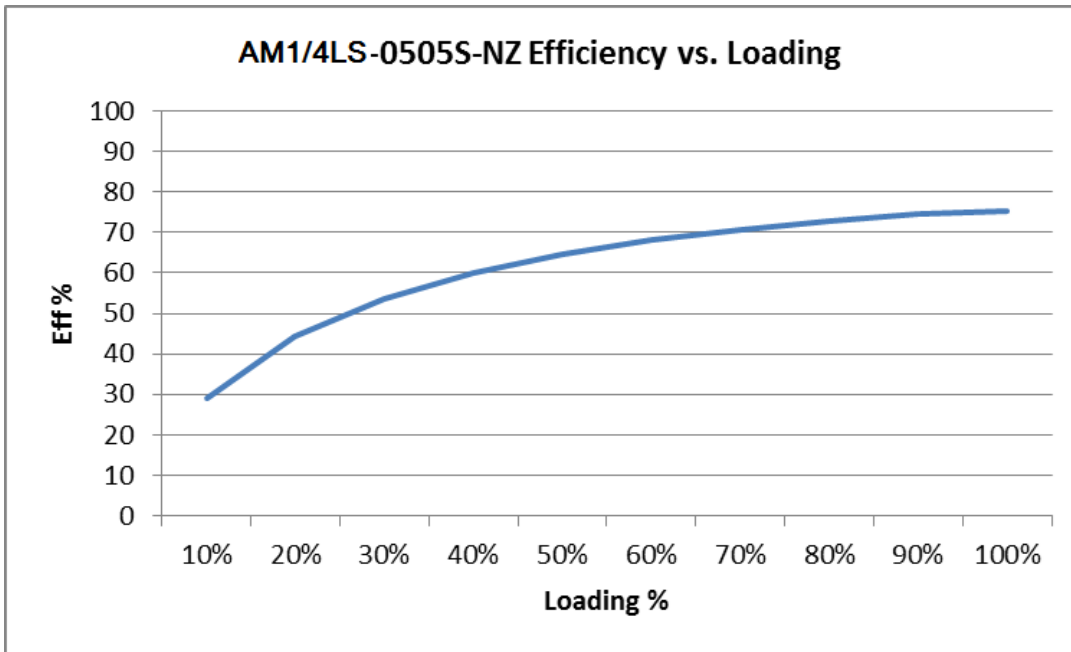
Load Accuracy Tolerance Graph

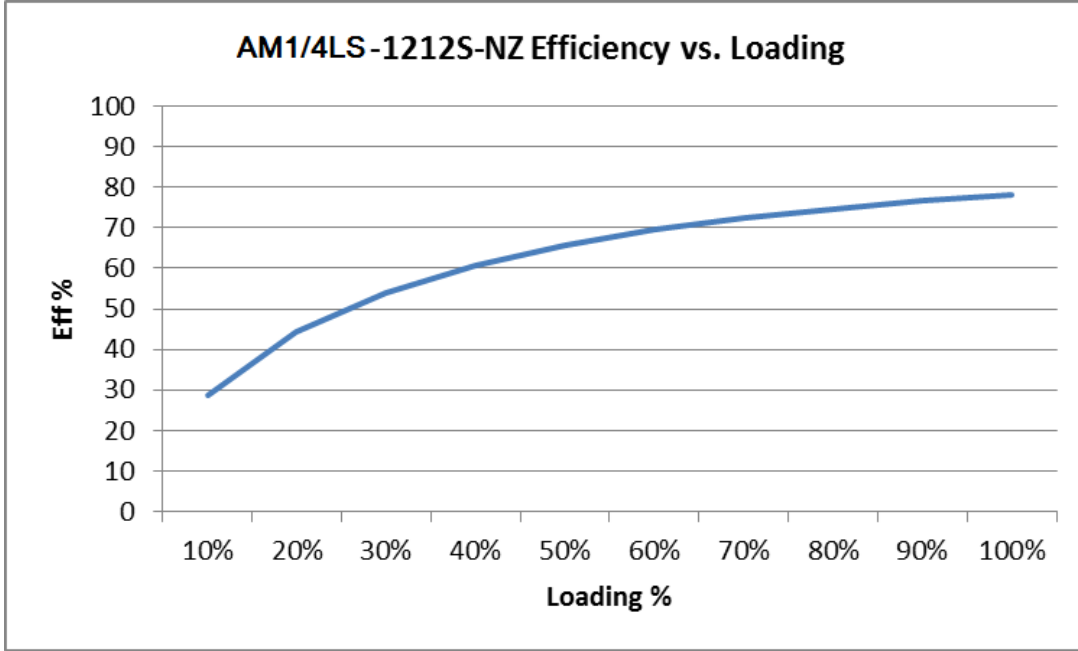


Derating



Typical Efficiency vs. Loading





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