



FEATURES:

- RoHS compliant
- 4 Pin SIP Package
- Low ripple and noise
- High efficiency up to 81%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1000 and 3000VDC
- Pin compatible with multiple manufacturers

Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM1S-0505S-NZ	4.5-5.5	5	200	1000	78
AM1S-0509S-NZ	4.5-5.5	9	110	1000	79
AM1S-0512S-NZ	4.5-5.5	12	83	1000	80
AM1S-0515S-NZ	4.5-5.5	15	67	1000	78
AM1S-1205S-NZ	10.8-13.2	5	200	1000	78
AM1S-1209S-NZ	10.8-13.2	9	110	1000	80
AM1S-1212S-NZ	10.8-13.2	12	83	1000	81
AM1S-1215S-NZ	10.8-13.2	15	67	1000	79
AM1S-2405S-NZ	21.6-26.4	5	200	1000	79
AM1S-2409S-NZ	21.6-26.4	9	110	1000	80
AM1S-2412S-NZ	21.6-26.4	12	83	1000	81
AM1S-2415S-NZ	21.6-26.4	15	67	1000	79
AM1S-0505SH30-NZ	4.5-5.5	5	200	3000	70

Input Specifications

input opcomouncing				
Parameters	Nominal	Typical	Maximum	Units
Voltage range	5	4.5-5.5		
	12	10.8-13.2		VDC
	24	21.6-26.4		
Filter	Capacitor			

Isolation Specifications

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

Output Specifications

Parameters	Conditions	Typical	Maximum	Units	
Voltage accuracy		See tolerance graph			
Short Circuit protection		Momenta	ary (1 sec)		
Line voltage regulation (Single)	For 1.0% of Vin	±1.2		%	
Load voltage regulation (Single)	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
Operating temperature	Without derating	-40 to +85		°C
Storage temperature		-55 to +125		°C
Max Case temperature			90	°C
Cooling	Free air convection			

General Specifications (continued)

Parameters	Conditions	Typical	Maximum	Units
Humidity			90	%
Case material		Plastic UL94-VO		
Weight		1.8		g
Dimensions (L x W x H)	0.46 x 0.24 x 0.37 inches 11.70 x 6.00 x 9.50 mm			
MTBF	>1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

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.

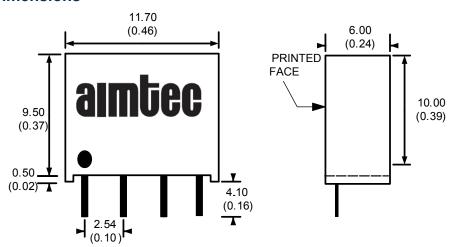
Safety Specifications

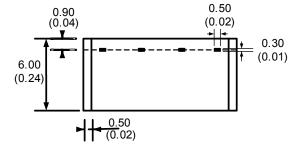
Parameters	
Standards	IEC60950-1 :2001
Agency approvals	UL and CE for 1000VDC models

Pin Out Specifications

Pin	Single	
1	- V Input	
2	+V Input	
3	-V Output	
4	+V Output	

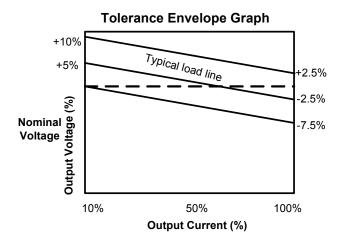
Dimensions







Typical Characteristics



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 С÷ DC DC GND O <Figure 1> -O +Vout REG DC DC GND C O 0V REG DC DC GND

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Isolated DC/DC Converters category:

Click to view products by Aimtec manufacturer:

Other Similar products are found below:

ESM6D044440C05AAQ FMD15.24G PSL486-7LR PSR152.5-7IR Q48T30020-NBB0 AVO240-48S12B-6L AVO250-48S28B-6L NAN-0505 HW-L16D JAHW100Y1 217-1617-001 22827 SPB05C-12 SQ24S15033-PS0S 18952 19-130041 CE-1003 CE-1004 GQ2541-7R PSE1000DCDC-12V RDS180245 MAU228 419-2065-201 449-2075-101 J80-0041NL V300C24C150BG 419-2062-200 419-2063-401 419-2067-101 419-2067-501 419-2068-001 DCG40-5G DFC15U48D15 449-2067-000 XGS-0512 XGS-1205 XGS-1212 XGS-2412 XGS-2415 XKS-1215 033456 NCT1000N040R050B SPB05B-15 SPB05C-15 SSQE48T25025-NAA0G L-DA20 HP3040-9RG HP1001-9RTG NVD0.4YJJ-M6G XKS-2415