

Series AM5NG-NZ 5 Watt | DC-DC Converter



FEATURES:

- I/O Isolation of 4,000VAC
- Efficiency up to 87%
- Input under voltage lock out
- IGBT dedicated DC-DC converter
- Operating temperature range: -40 to +85°C
- Industrial Standard Pin-out

Mode	els
Dual	output

L	Jual output						RoHS	
	Model	Input Voltage (V)	Input current FL (mA)	Output Voltage (V)	Max Output Current (mA)	Max Capacitive Load (uF)	Efficiency (%)	
	AM5NG-151509DH40-NZ	13.5-16.5	368	+15 / -9	±200	1000	87	

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.

Input Specifications

Parameters	Nominal Typical Maximum		Units	
Voltage range	15V Input 13.5-16.5 VDC		VDC	
Filter	Capacitor			
No Load Input Current	15V Input 20 m		mA	
Input Under Voltage Protection	12 VD		VDC	

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60sec, <1mA		4000	VAC
Resistance		>1000		MOhm
Capacitance	1MHz/0.1V	3		pF

Output Specifications

Parameters		Conditions	Typical	Maximum	Units	
Voltage accuracy		See Tolerance Graph			%	
Output Current	+lo	Vin = 15VDC	200	250	~ ^	
Output Current	-lo	Vin = 15VDC	-200	-250	mA	
Outrast Malta and	+Vo	Vin=15VDC, Pin16 & Pin14 +lo=+200mA	15	13.5~16.5		
Output Voltage	-Vo	Vin=15VDC, Pin11 & Pin9 -lo=-200mA	-9	-8.1~-9.9	VDC	
Short Circuit protection		Continuous, auto restart				
Line voltage regulation		Full load	±1.2	±1.5	% of Vin	
Load voltage regulation		10 – 100% load	±8	±10	%	
Temperature coefficient		Full load		±0.03	%/°C	
Ripple & Noise		20MHz Bandwidth	80	120	mV p-p	

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	280		kHz
Operating temperature	Without derating	-40 te	o +85	°C
Storage temperature	-55 to +125			
Case temperature Rise	Ta = 25 °C	30		°C
Cooling	Free air convection			
Humidity			95	% RH
Case material	Non-conductive black p	plastic (UL94V-0	rated)	
Weight		11.4		g
Dimensions (L x W x H)	Dimensions (L x W x H) 1.244 x 0.799 x 0.402 inches 31.60 x 20.30 x 10.20 mm			
MTBF	>1,000,000hrs (MIL-HDBK -217F, Ground Benign, t=+25 °C)			

Safety Specifications

-	parety opechications					
	Parameters					
	Standards	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact +/-4kV, Criteria B			

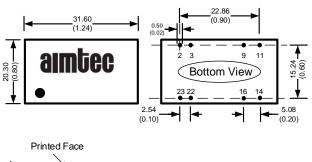


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Pin Out Specifications

Pin	Single
2	-Vin
3	-Vin
9	Common
11	- V Output
14	+ V Output
16	Common
22	+Vin
23	+Vin

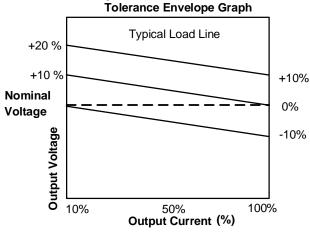
Dimensions



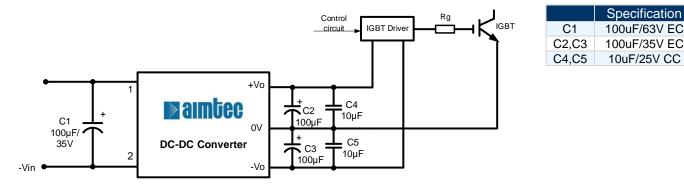
0.16) (0.16) (0.16) (0.16) (0.16) (0.16)

All dimensions are typical: millimeters (inches) Pin Diameter: 0.50 ± 0.1 (0.02 ± 0.004) Case Tolerence: ± 0.5 (± 0.02)

Tolerance Graph



Application Circuit



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 <u>www.aimtec.com</u>.