

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	ual 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
Filter	Capa	acitor		
No Load Input Current	15V Input		20	mA
Input Under Voltage Protection		12		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	mA	
Output Current	-lo	Vin = 15VDC	-200	-250	IIIA	
Output Valtage	+Vo	Vin=15VDC, Pin16 & Pin14 +lo=+200mA	15	13.5~16.5	VDC	
Output Voltage	-Vo	Vin=15VDC, Pin11 & Pin9 -Io=-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 to +85		°C	
Storage temperature	-55 to +125			°C	
Case temperature Rise	Ta = 25 °C		30	°C	
Cooling	Free air convection				
Humidity			95	% RH	
Case material	Non-conductive black plastic (UL94V-0 rated)				
Weight		11.4		g	
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 -21	7F, Ground Beni	gn, t=+25 °C)		

Safety Specifications

Paramete	rs		
Standards	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact +/-4kV, Criteria B	



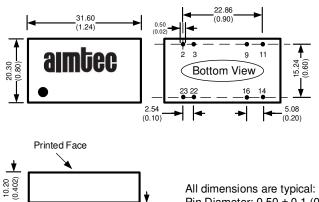
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Pin Out Specifications

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

Dimensions

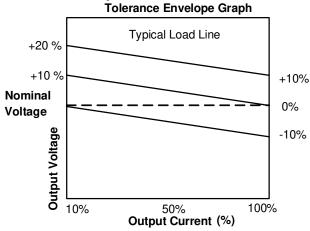
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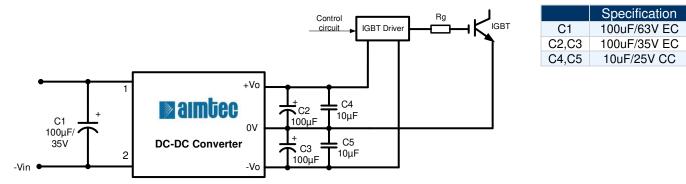
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All dimensions are typical: millimeters (inches) Pin Diameter: 0.50 ± 0.1 (0.02 ± 0.004) Case Tolerence: ± 0.5 (± 0.02)

Tolerance Graph



Application Circuit



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