aimtec
Your Power Partner

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

RoHS

Models
Dual output

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		Capacitor		
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	+Io	Vin = 15VDC	200	250	mA
	-Io	Vin = 15VDC	-200	-250	
Output Voltage	+Vo	Vin=15VDC, Pin16 & Pin14 +Io=+200mA	15	13.5~16.5	VDC
	-Vo	Vin=15VDC, Pin11 & Pin9 -Io=-200mA	-9	-8.1~-9.9	
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 -217F, Ground Benign, t=+25 °C)		

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Safety Specifications

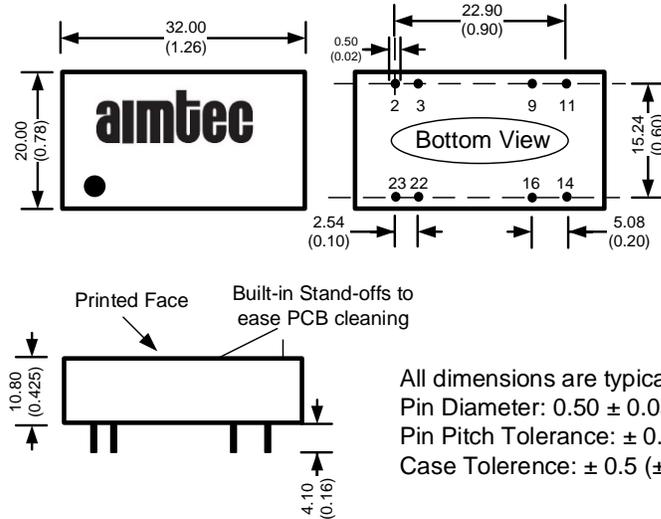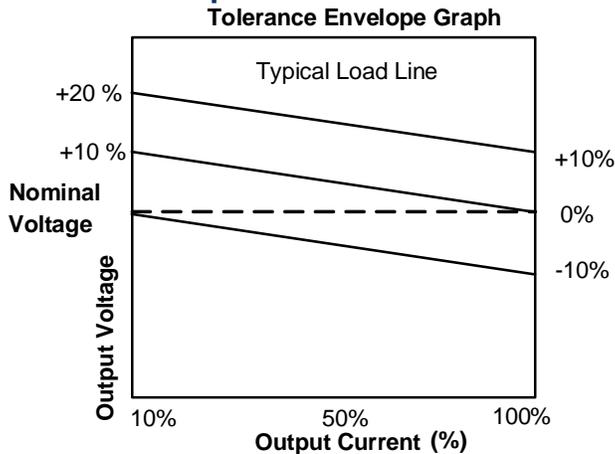| Parameters		
Standards	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact +/-4kV, Criteria B

Pin Out Specifications

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

Dimensions

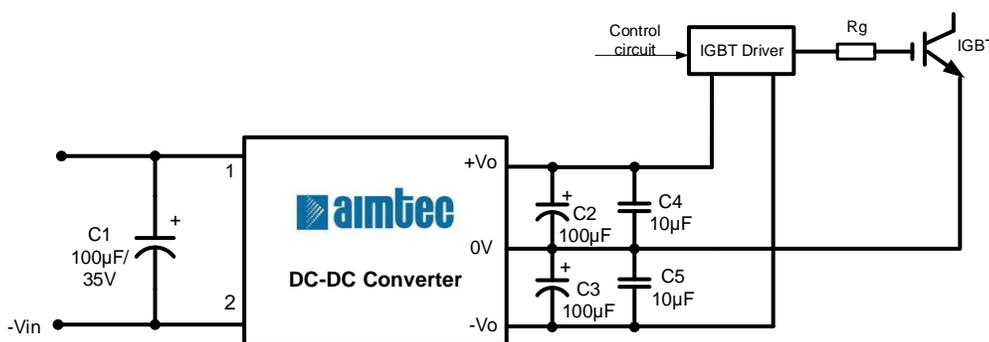All dimensions are typical: millimeters (inches)
Pin Diameter: 0.50 ± 0.05 (0.02 ± 0.002)
Pin Pitch Tolerance: ± 0.35 (±0.014)
Case Tolerence: ± 0.5 (±0.02)

Tolerance Graph

Tolerance Envelope Graph

Application Circuit

	Specification
C1	100uF/63V EC
C2,C3	100uF/35V EC
C4,C5	10uF/25V CC

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