

FEATURES:

- I/O Isolation of 3000VAC
- Efficiency up to 80%
- Ultra-low Isolation capacitance
- SIP 7 Multiple Manufacturers pin compatible
- Extended temperature range: -40 to +105°C
- Continuous short circuit protection

Models
Single output



Model	Input Voltage (V)	Input current FL (mA)	Output Voltage (V)	Output Current max (mA)	Max Capacitive Load (uF)	Efficiency (%)
AM1DG-1509SH30-NZ	14.5 – 15.5	84	9 (8 ~ 10)	111	220	80

Models
Dual output

Model	Input Voltage (V)	Input current FL (mA)	Output Voltage (V)	Output Current max (mA)	Max Capacitive Load (uF)	Efficiency (%)
AM1DG-1509DH30-NZ	14.5 – 15.5	84	+9 (8 ~ 10) / -9 (8 ~ 10)	+55/-55	220	80

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	15	14.5 – 15.5		VDC
Filter	Capacitor			
Absolute Maximum Rating			-0.7 - 16	VDC
Peak Input Voltage time			100	ms
No Load Input Current			20	mA

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60sec, <1mA		3000	VAC
Resistance		>1000		MOhm
Capacitance	100KHz/0.1V	6.6		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±6		%
Short Circuit protection	Continuous, auto restart			
Line voltage regulation		±1.2		% of Vin
Load voltage regulation	10 – 100% load	±12	±26	%
Temperature coefficient	Full load		±0.03	%/°C
Ripple & Noise	20MHz Bandwidth	100	200	mV p-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100	300	KHz
Operating temperature	Derating above 85°C	-40 to +105		°C
Storage temperature		-55 to +125		°C
Maximum case temperature			105	°C

Cooling	Free air convection		
Humidity		95	% RH
Case material	Non-conductive black plastic (UL94V-0 rated)		
Weight	4.3		g
Dimensions (L x W x H)	0.77 x 0.39 x 0.49 inches	19.50 x 9.80 x 12.50 mm	
MTBF	>3,500,000hrs (MIL-HDBK -217F, Ground Benign, t=+25 °C)		
Maximum soldering temperature	1.5 mm from case for 10sec	300	°C

Safety Specifications

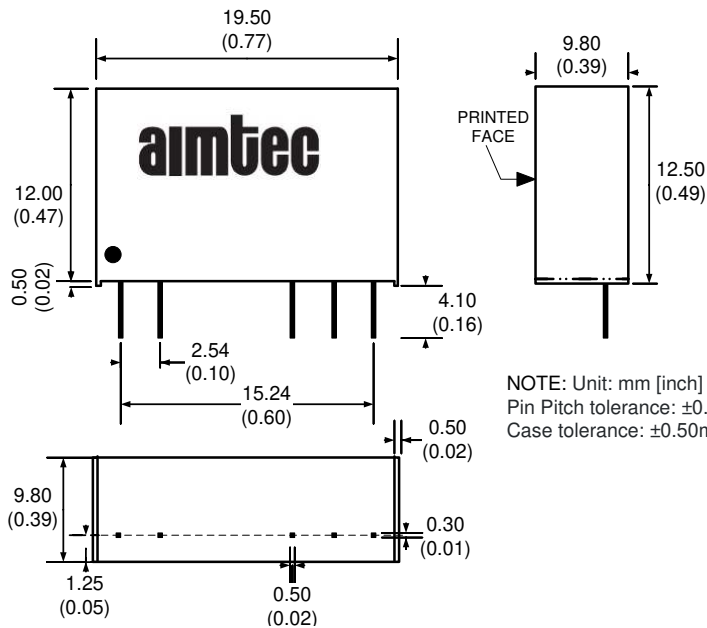
Parameters	
Approvals	UL
	UL60950-1
Standards	EN55022 Class B (see recommended circuit)
	IEC61000-4-2, Perf. Criteria B (ESD Contact +/- 8KV)

Pin Out Specifications

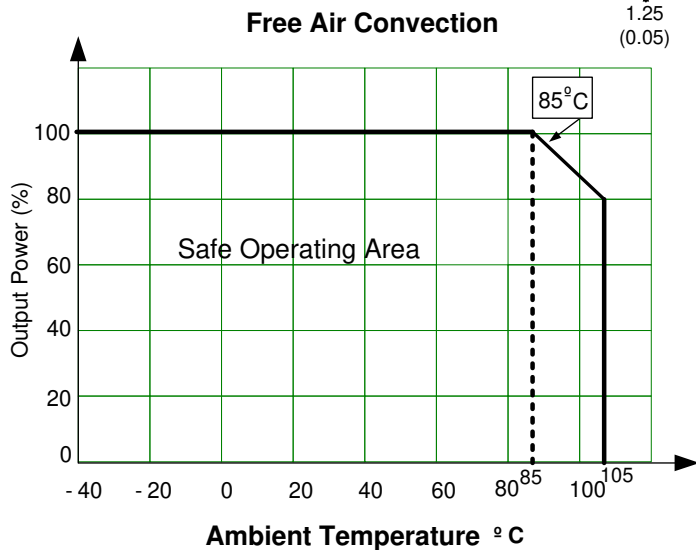
Pin	Single	Dual
1	+ V Input	+ V Input
2	- V Input	- V Input
5	- V Output	- V Output
6	N. C.*	Common
7	+ V Output	+ V Output

* N.C. Not Connected

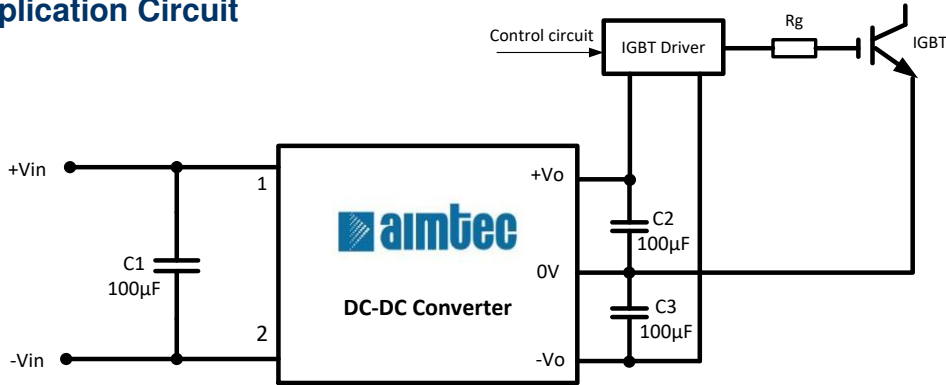
Dimensions



Derating

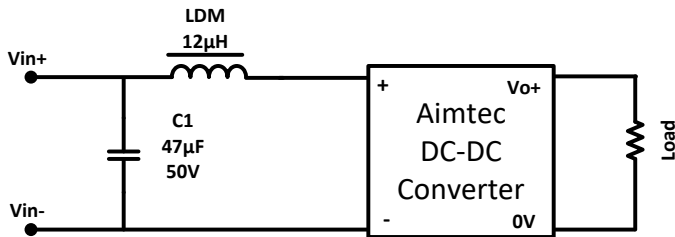


Application Circuit



Note: Low Internal resistance capacitors suggested

EMI Recommended Circuit (Class B)



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