



FEATURES:

- I/O Isolation of 3000VAC or 3500VAC/6000VDC
- Maximum Capacitive load up to 1000µF
- Operating temperature: -40 to +105°C
- Efficiency up to 83%
- SIP7 Package
- Ultra-low Isolation capacitance



Models
Dual output

Model	Input Voltage (V)	Input current FL/NL (mA)	Output Voltage (V)	Output Current max (mA)	Max Capacitive Load (uF)	Efficiency (%)
AM3DG-121508DH30-NZ	11.4 – 12.6	280 40	+15 (14.25 ~ 15.75) / -8 (-6.4 ~ -9.6)	+120 / -120	1000	81
AM3DG-151508DH30-NZ	14.25 – 15.75	230 35				
AM3DG-241508DH30-NZ	22.8 – 25.2	144 30				
AM3DG-152004DH60-NZ	13.5 – 16.5	196 16	+20 / -4	+100 / -100	220	83

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	See model's table			
Filter	Capacitor			
Absolute Maximum Rating	AM3DG-121508DH30-NZ		-0.7 - 14	VDC
	AM3DG-151508DH30-NZ		-0.7 - 16	
	AM3DG-241508DH30-NZ		-0.7 - 26	
	AM3DG-152004DH60-NZ		-0.7 - 21	
Peak Input Voltage time			100	ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage, AM3DG-152004DH60-NZ	60sec, <1mA		3500	VAC
Tested I/O voltage, other models			6000	VDC
Resistance		I/O Isolation 500VDC	>1000	3000
Capacitance, AM3DG-152004DH60-NZ	100KHz/0.1V	3.5		pF
Capacitance, other models		6		

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	AM3DG-152004DH60-NZ	±6		%
	Others			
Short Circuit protection	AM3DG-152004DH60-NZ			Continuous, auto restart
	Others		1	
Line voltage regulation	AM3DG-152004DH60-NZ, HL-LL	±1.1	±1.3	%
	Others, HL-LL, +15 Vout		±5	
	Others, HL-LL, -8 Vout		±20	
Load voltage regulation	10 – 100% load: 20Vdc output		±15	%
Temperature coefficient	Full load		±0.03	%/°C
Ripple & Noise	AM3DG-152004DH60-NZ, 20MHz Bandwidth		75	mV p-p
	Others, 20MHz Bandwidth	100	200	

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100		KHz

Operating temperature	Derating above 85°C	-40 to +105	°C
Storage temperature	-55 to +125		°C
Case temperature rise	AM3DG-152004DH60-NZ, Ta=25°C	30	°C
	Others, Ta=25°C	40	
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

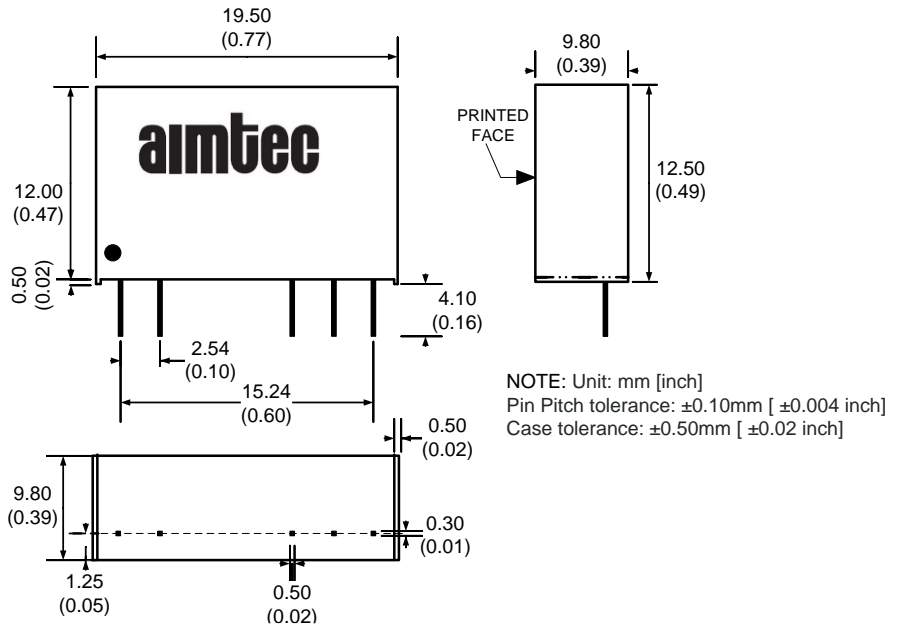
Parameters	
Standards	EN55022 Class B for AM3DG-152004DH60-NZ model (see recommended circuit)
	IEC61000-4-2, Perf. Criteria B (ESD Contact +/- 8KV)
	IEC61000-4-4, Perf. Criteria B (EFT +/- 2KV), measured on the 3000VAC isolated models
	IEC61000-4-5, Perf. Criteria B (Surge Input to Output +/- 2KV), measured on the 3000VAC isolated models

Pin Out Specifications

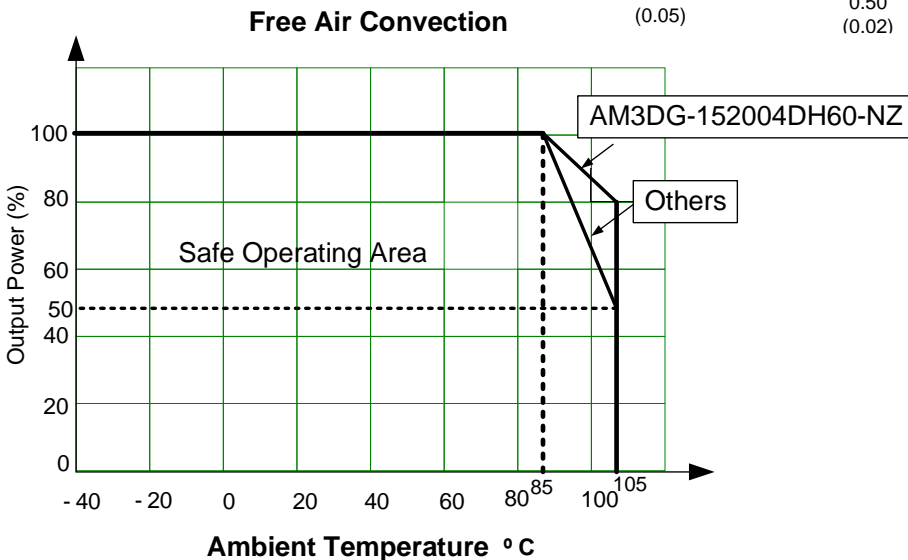
Pin	Dual
1	+ V Input
2	- V Input
5	- V Output
6	Common
7	+ V Output

* N.C. Not Connected

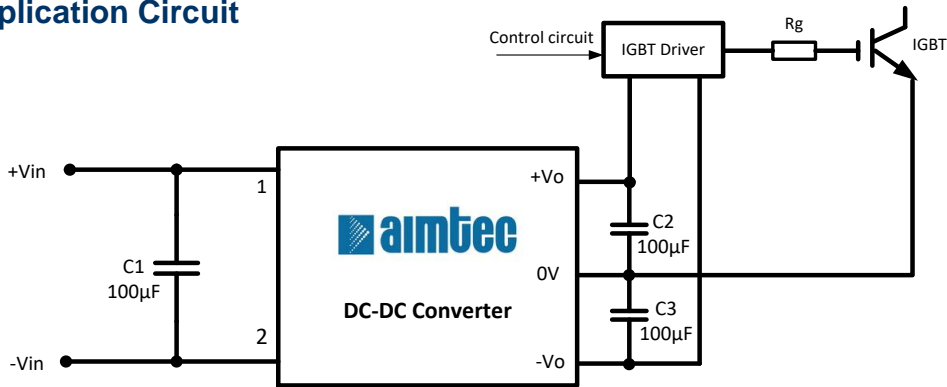
Dimensions



Derating

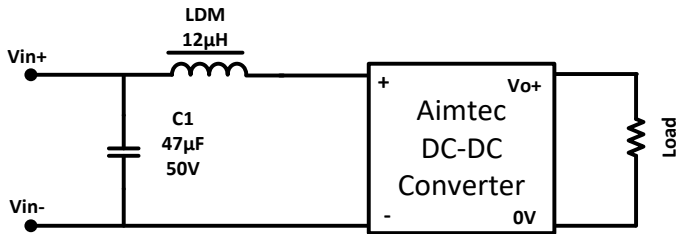


Application Circuit



Note: Low Internal resistance capacitors suggested

EMI Recommended Circuit (Class B for AM3DG-152004DH60-NZ)



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