



FEATURES:

- Efficiency 75%
- SMD Package
- Low Ripple & Noise
- Operating Temperature -50 °C to +125 °C
- Input / Output Isolation of 3500 VDC
- Pin Compatible with multiple manufacturers
- Continuous Short Circuit Protection



Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current Max / Min (mA)	Isolation (VDC)	Max Capacitive Load	Input Current Max Load No Load		Efficiency (%)
AM1LE-0505SH35-NZ	4.5-5.5	5.0	200 / 20	3500	220	267	20	75

NOTE: The model AM1LE-0505SH35-NZ is not recommended for new designs; For new design, please refer to AM1LE-0505SH35-JZ.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	5	4.5-5.5		VDC
Filter		Capacitor		
Reflected Ripple Current		15		mA
Absolute Maximum Rating	5V input models		-0.7 to 9	VDC
No Load Input Current			20	mA

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, <1mA		3500	VDC
Resistance	500VDC	>1000		MOhm
Capacitance		20		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Nominal load (See tolerance graph)	±2.5		%
Short Circuit protection		continuous		
Line voltage regulation	Per 1% of Vin Change		1.2	%
Load voltage regulation (Single)	10% to 100% load	12		%
Temperature coefficient	Nominal Input		±0.03	%/°C
Ripple & Noise	20MHz Bandwidth	60		mV p-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100	300	KHz
Operating temperature	No derating up to +105 C (see derating graph)	-50 to +125		°C
Storage temperature		-55 to +135		°C
Maximum case temperature			100	°C
Cooling		Free Air Convection		
Humidity	Non Condensing		95	% RH
Case material		Epoxy Resin (UL94-V0)		
Weight		1.5		g
Dimensions (L x W x H)		0.50 x 0.44 x 0.28 inches	12.70 x 11.20 x 7.25 mm	
MTBF		3.5M hours		
Maximum soldering temperature		300 (1.5mm from case for 10 seconds)		°C

Safety Specifications

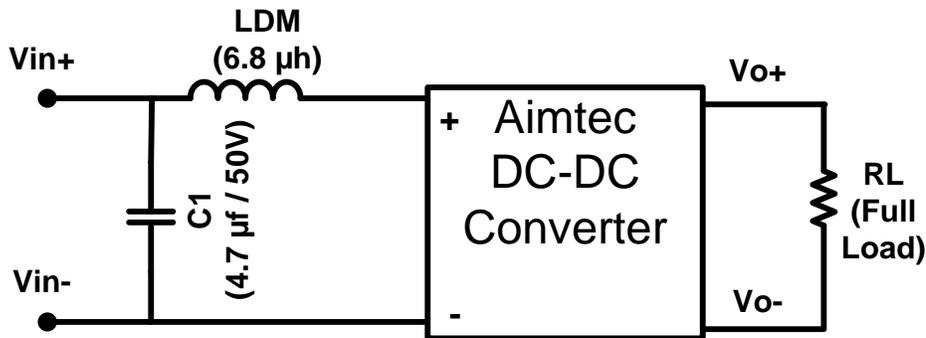
Parameters

Agency Approval	
Standards	EN55022 Class B (see recommended circuit) IEC61000-4-2, Perf. Criteria B (ESD Contact +/- 6KV)

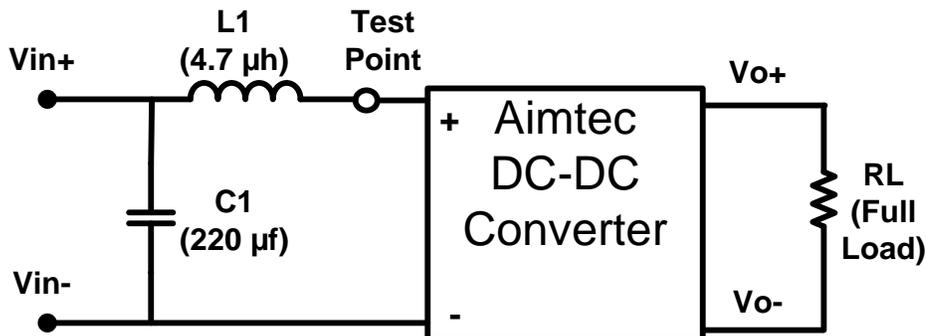
Pin Out Specifications

Pin	1000VDC Single
1	-V Input
2	+V Input
3	No Pin
4	-V Output
5	+V Output
6	No Pin
7	No Pin
8	N.C

EMI Recommended Circuit (Class B)

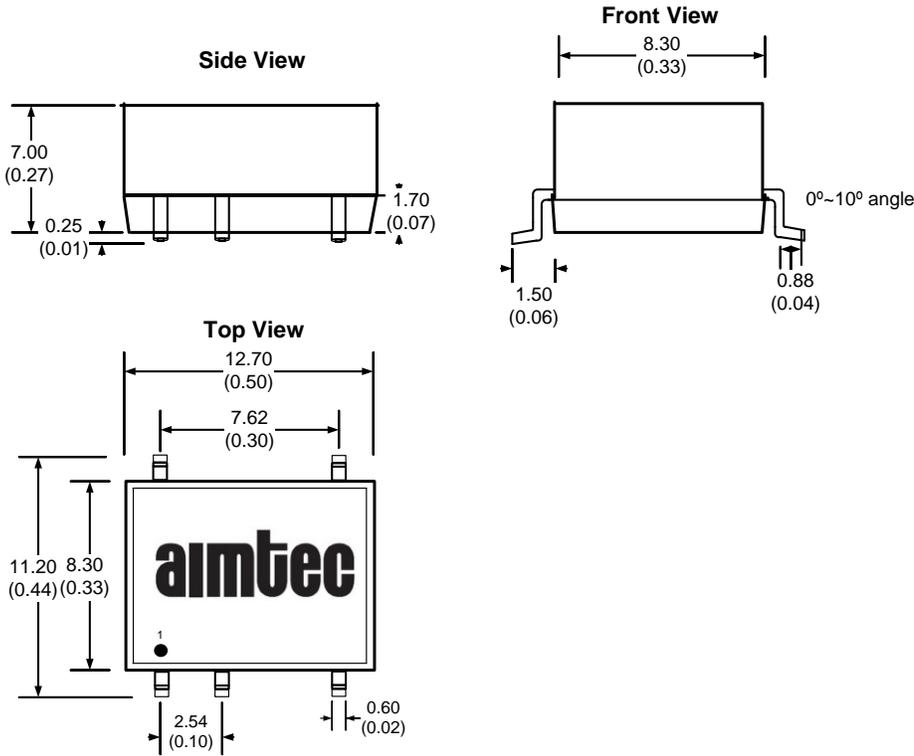


Input Reflected Ripple Current Test Circuit

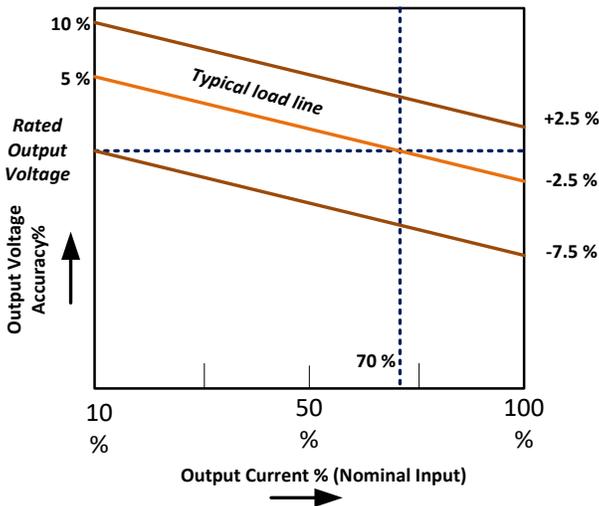


* Tested at full load, and nominal input

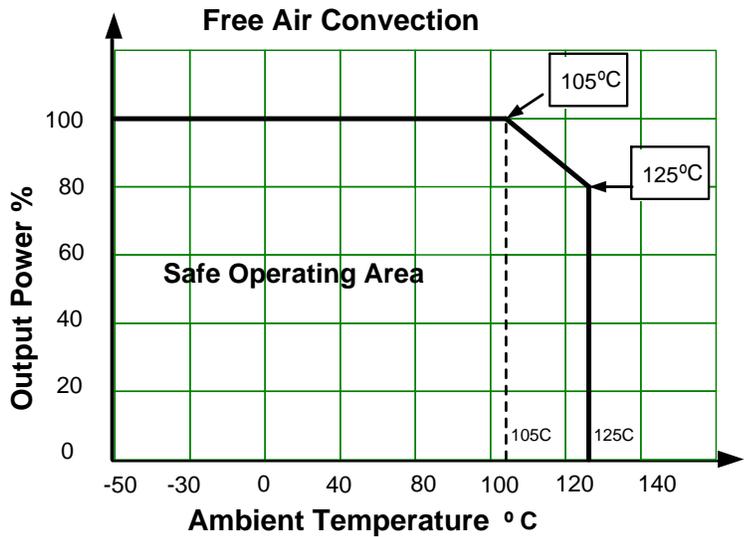
Dimensions



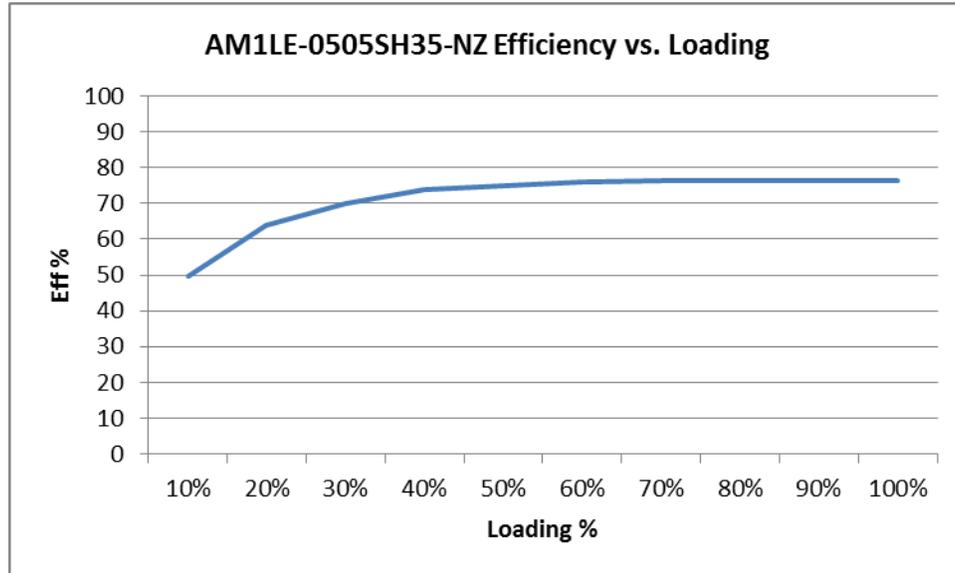
Load Accuracy Tolerance Graph



Derating



Efficiency vs. Loading



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 www.aimtec.com.