

**FEATURES:**

- Efficiency up to 86%
- Ultra Wide 4:1 input range
- Continuous Short Circuit Protection
- Operating temperature -40°C to + 85°C
- Low ripple and noise
- Over Voltage Protection
- Input / Output Isolation 1500VDC

Models**Single output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load max (μF)	Efficiency (%)
AM10EW-11005S-NZ	40~160	5	2000	2200	81
AM10EW-11012S-NZ	40~160	12	833	220	85
AM10EW-11015S-NZ	40~160	15	667	100	85
AM10EW-11024S-NZ	40~160	24	416	47	86

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	110	40~160	170	VDC
Filter	π (Pi) Network			
Input Surge Voltage (1sec max.)			180	VDC
Start-up Voltage			40	VDC

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	1 min		1500	VDC
Resistance		> 1000		MOhm
Capacitance		1000		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1	±2	%
Short Circuit protection		Continuous		
Short Circuit restart		Auto Recovery		
Transient Recovery Time	25% Load Step	500	1000	μs
Transient Deviation Response	Change	±3	±5	%
Line voltage regulation	Full Load (HL-LL)	±0.2	±0.5	%
Load voltage regulation	5-100% load	±0.5	±1	%
Over Voltage Protection		120	140	% Vo
Temperature coefficient		±0.03		%/°C
Ripple & Noise	20Mhz bandwidth	100		mV p-p

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	350		KHz
Operating temperature	See derating chart	-40 to +85		°C
Storage temperature		-55 to +125		°C
Max case temperature			105	°C
Cooling	Free air convection			
Humidity	Non condensing		95	%
Solder Temp Leads	1.5 mm from case 10 sec.		300	°C
Case material	Aluminum Alloy			
Weight		22		g
Dimensions (L x W x H)	Tolerance ±0.5mm	2.00 x 1.00 x 0.46 inches 50.80 x 25.40 x 11.80mm		
MTBF	>1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

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.

Safety Specifications

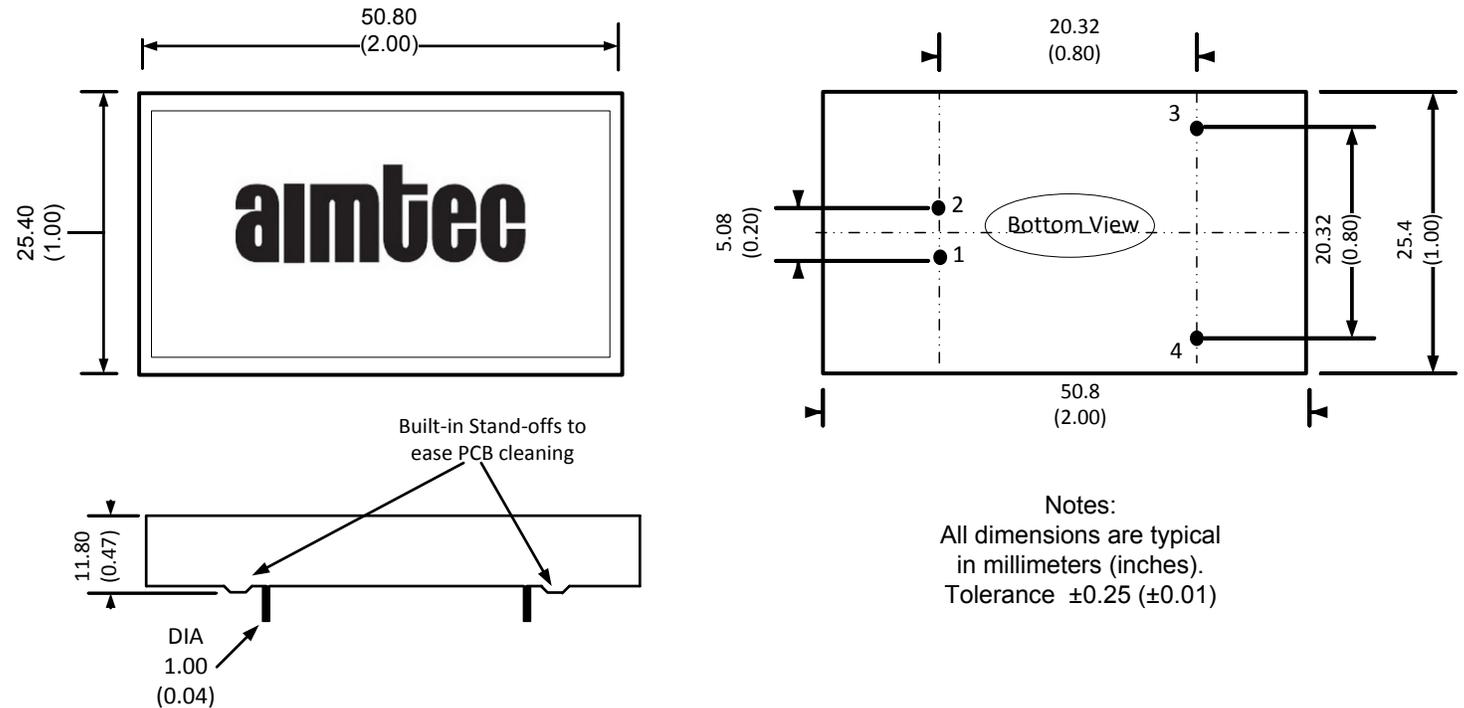
Parameters

Agency Approvals Designed to meet IEC 60950 1:2001

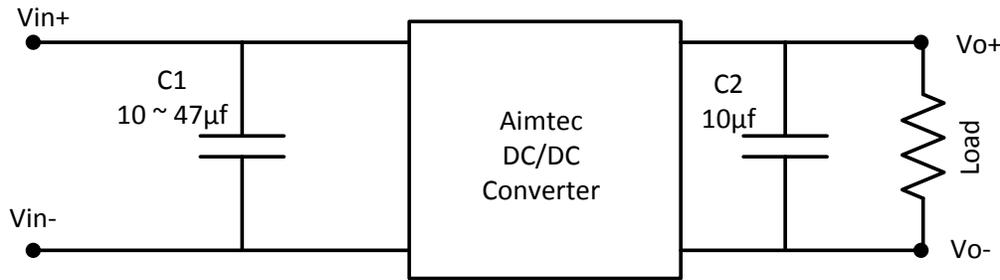
Pin Out Specifications

Pin	Single
1	Vin -
2	Vin +
3	+Vout
4	-Vout

Dimensions



Recommended Circuit

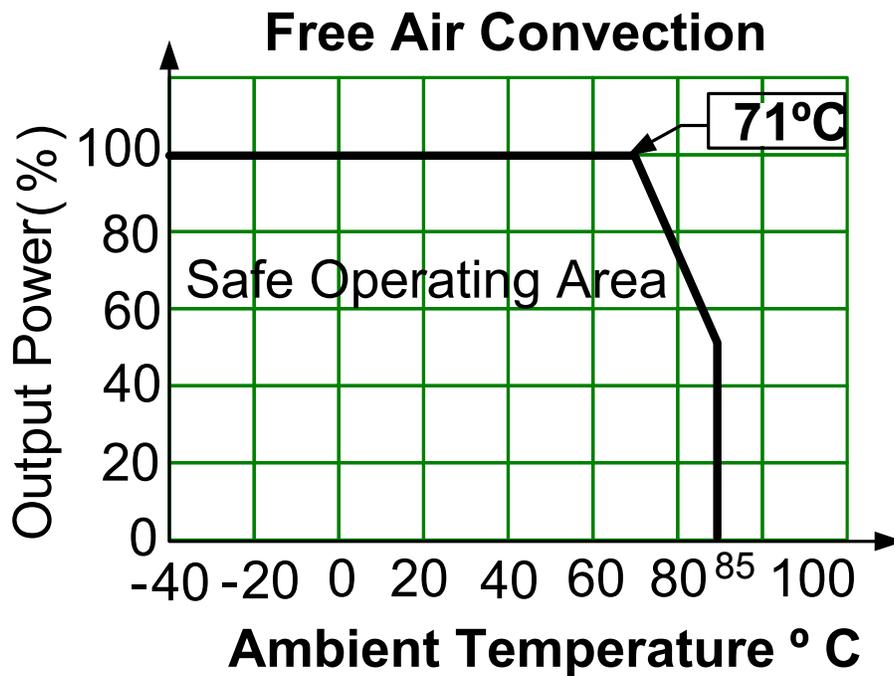


Note: Greater noise filtering can be achieved with additional capacitors, however the largest size can not exceed maximum capacitive load specification.

Parallel connections are not recommended.

Product does not support hot swap / plug and play configurations.

Derating



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