

**FEATURES:**

- RoHS compliant
- 24 Pin DIP Package
- Shielded metal package
- High efficiency up to 78%
- Wide 2:1 input range
- Operating temperature -40°C to + 85°C
- Input / Output Isolation 1500VDC
- Pin compatible with multiple manufacturers
- Continuous short circuit protection

**Models****Single output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max. Cap. Load (μF)	Efficiency (%)
AM3T-0505S-NZ	4.5-9	5	600	1500	4700	74
AM3T-0512S-NZ	4.5-9	12	250	1500	2700	77
AM3T-0515S-NZ	4.5-9	15	200	1500	2200	77

Models**Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max. Cap. Load (μF)	Efficiency (%)
AM3T-0505D-NZ	4.5-9	±5	±300	1500	2200	76
AM3T-0512D-NZ	4.5-9	±12	±125	1500	1800	78
AM3T-0515D-NZ	4.5-9	±15	±100	1500	1000	78

NOTE: All specifications 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	5	4.5-9	5 Vin	VDC
Filter	π (Pi) Network			
Absolute Maximum	5 Vin		12	VDC

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec	1500		VDC
Resistance		> 1000		MOhm
Capacitance		120		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Dual Output Voltage Balance	Balanced Loads	±0.5		%
Short Circuit protection	Continuous			
Short circuit restart	Auto-recovery			
Line voltage regulation		±0.2		%
Load voltage regulation		±0.2		%
Temperature coefficient		±0.03		%/°C
Ripple & Noise	20MHz bandwidth	75		mV p-p
Transient Recovery Time	25% Load Step	0.5		m sec
Transient Deviation	25% Load Step	±2		%

General Specifications

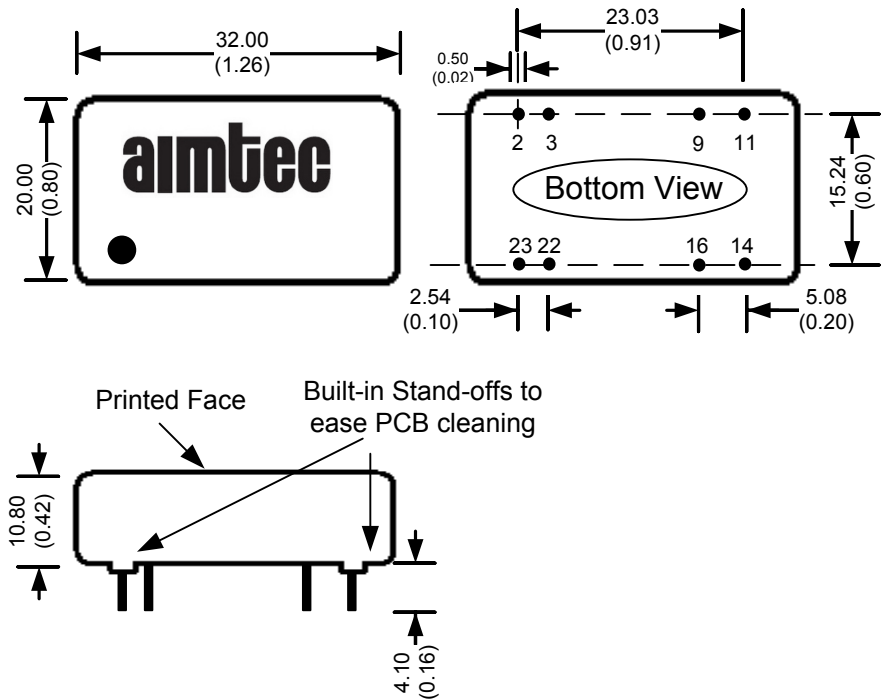
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	200		KHz
Operating temperature	With derating above +85°C	-40 to +85		°C
Storage temperature		-55 to +125		°C
Max Case temperature			100	°C
Temperature Rise	Full Load, 25°C	25°C		°C
Lead Temperature	1.5mm from case for 10 Seconds		300	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Black Anodized Aluminum			
Weight		14		g
Dimensions (L x W x H)	1.26 x 0.80 x 0.42 inches 32.00 x 20.00 x 10.80mm			
MTBF	>1 000000 hrs(MIL-HDBK -217F, Ground Benign, t=+25°C)			

Pin Out Specifications

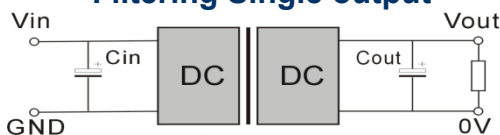
1500VDC		
Pin	Single	Dual
1	No pin	No pin
2	-V Input	-V Input
3	-V Input	-V Input
9	No pin	Common
10	No pin	No pin
11	N.C.	-V Output
12/13	No pin	No pin
14	+V Output	+V Output
15	No pin	No pin
16	-V Output	Common
22	V+ Input	+V Input
23	V+ Input	+V Input
24	No pin	No pin

N.C.: not connected

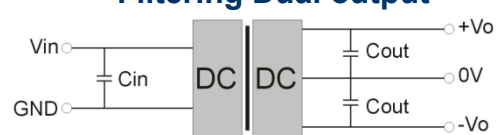
Dimensions



Filtering Single output



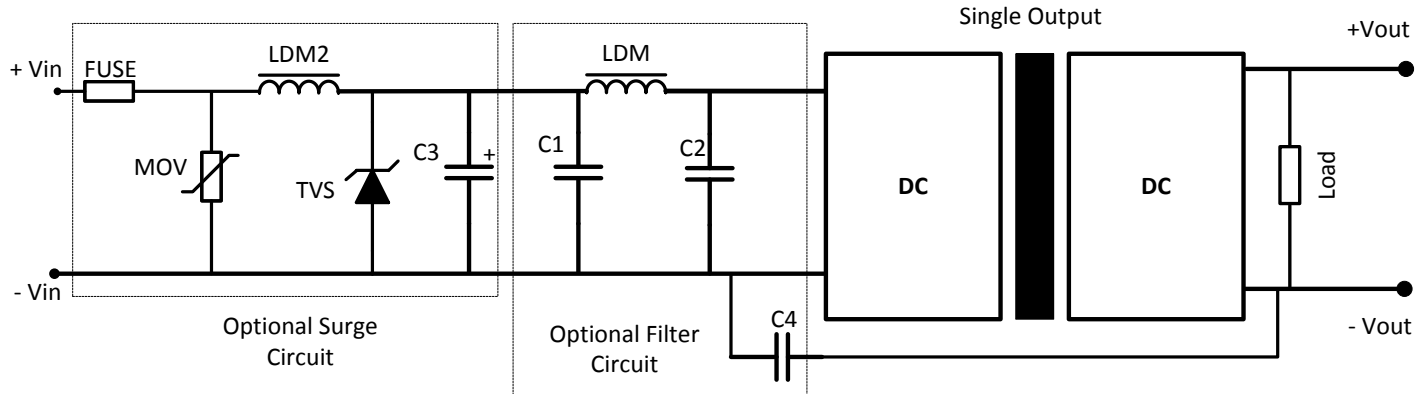
Filtering Dual output



External capacitors

Vin (VDC)	Cin (uF)	Vout (VDC)	Cout (uF)
5	100	5	10
		12	10
		15	10

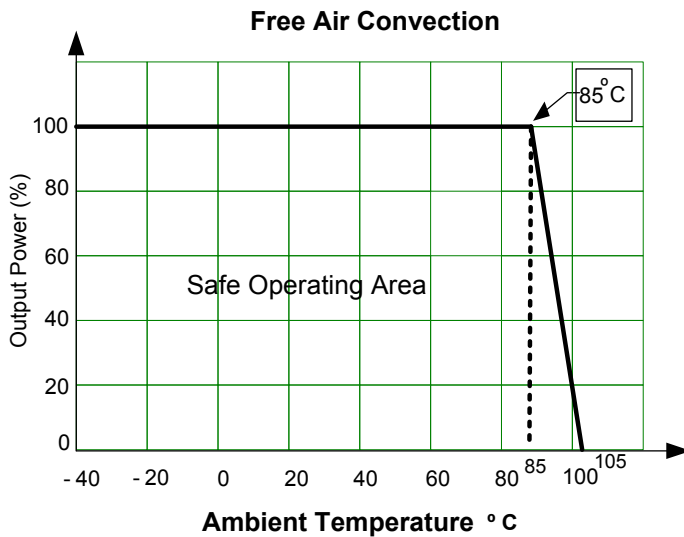
Recommended Circuit



Model	C1	C2	C4	LDM	MOV	TVS	C3	LDM2
5 Vin	4.7 μ F / 50V	4.7 μ F / 50V	1 nF / 2KV	12 μ H	-	SMCJ16A	680 μ F / 25V	-

Note: Fuse is user selectable

Derating



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