



FEATURES:

- RoHS compliant
- 24 Pin DIP Package
- Shielded metal package
- High efficiency up to 83%
- 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)	Efficiency (%)
AM3T-0503S-NZ	4.5-9	3.3	600	1000	64
AM3T-0505S-NZ	4.5-9	5	600	1000	70
AM3T-0512S-NZ	4.5-9	12	250	1000	73
AM3T-0515S-NZ	4.5-9	15	200	1000	75
AM3T-1203S-NZ	9-18	3.3	600	1000	70
AM3T-1205S-NZ	9-18	5	600	1000	70
AM3T-1212S-NZ	9-18	12	250	1000	76
AM3T-1215S-NZ	9-18	15	200	1000	78
AM3T-2403S-NZ	18-36	3.3	600	1000	70
AM3T-2405S-NZ	18-36	5	600	1000	75
AM3T-2412S-NZ	18-36	12	250	1000	81
AM3T-2415S-NZ	18-36	15	200	1000	81
AM3T-4803S-NZ	36-72	3.3	600	1000	72
AM3T-4805S-NZ	36-72	5	600	1000	78
AM3T-4812S-NZ	36-72	12	250	1000	82
AM3T-4815S-NZ	36-72	15	200	1000	83

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM3T-0505D-NZ	4.5-9	±5	±300	1000	69
AM3T-0512D-NZ	4.5-9	±12	±125	1000	72
AM3T-0515D-NZ	4.5-9	±15	±100	1000	72
AM3T-1205D-NZ	9-18	±5	±300	1000	72
AM3T-1212D-NZ	9-18	±12	±125	1000	77
AM3T-1215D-NZ	9-18	±15	±100	1000	79
AM3T-2405D-NZ	18-36	±5	±300	1000	78
AM3T-2412D-NZ	18-36	±12	±125	1000	81
AM3T-2415D-NZ	18-36	±15	±100	1000	82
AM3T-4805D-NZ	36-72	±5	±300	1000	76
AM3T-4812D-NZ	36-72	±12	±125	1000	81
AM3T-4815D-NZ	36-72	±15	±100	1000	82

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage range		5, 4.5-9 12, 9-18 24, 18-36 48, 36-72		VDC
Filter		π (Pi) Network		

Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Rated voltage		1500		VDC
Resistance		> 1000		MOhm
Capacitance		100		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Voltage balance		±1p and ±3 n.		%
Short Circuit protection	Continuous			
Short circuit restart	Automatic			
Line voltage regulation (Single)		±0.2		%
Line voltage regulation (Dual)		±0.2		%
Load voltage regulation (Single)		±0.1		%
Load voltage regulation (Dual)		±0.1		%
Temperature coefficient		±0.03		%/°C
Ripple	20...300KHz	30		mV p-p
Noise	0...20MHz	80		mV p-p

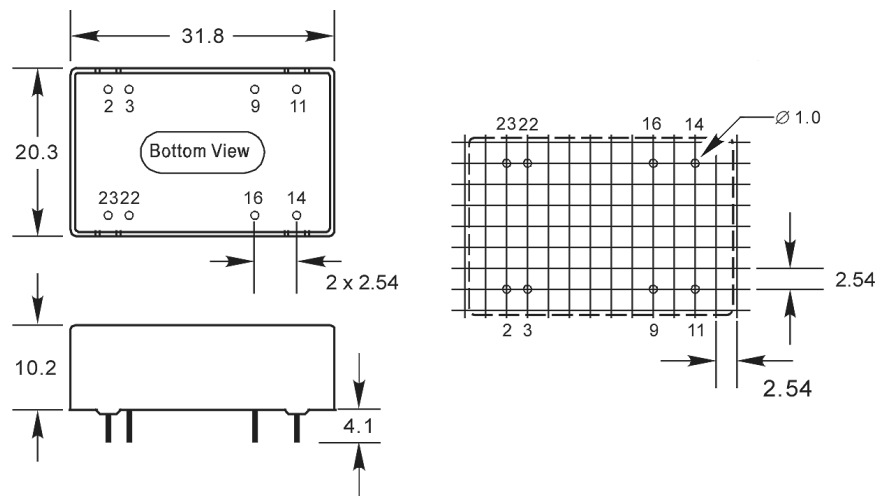
General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	With derating above +71°C	-40 to +85		°C
Storage temperature		-55 to +125		°C
Case temperature			100	°C
Cooling	Free air convection			
Humidity	Non condensing		95	%
Case material		Metal		
Weight		16.3		g
Dimensions		1.25 x 0.8 x 0.4 inches	31.75 x 20.32 x 10.2 mm	
MTBF		>1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

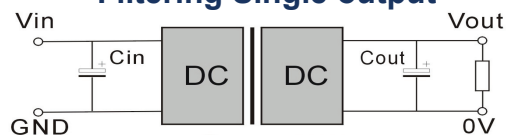
Pin Out Specifications

Pin	1500VDC	
	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	NC	-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

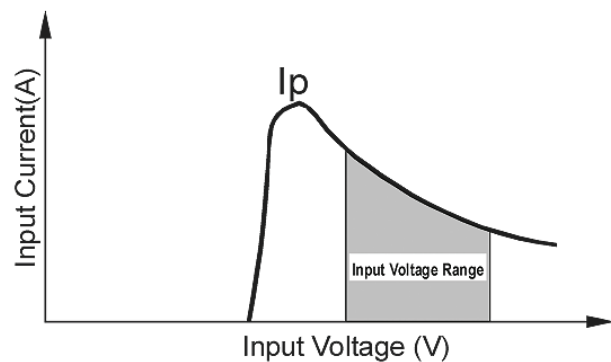
Dimensions



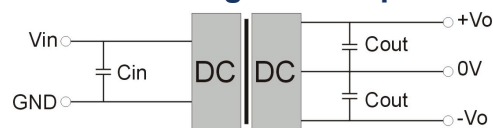
Filtering Single output



Input current

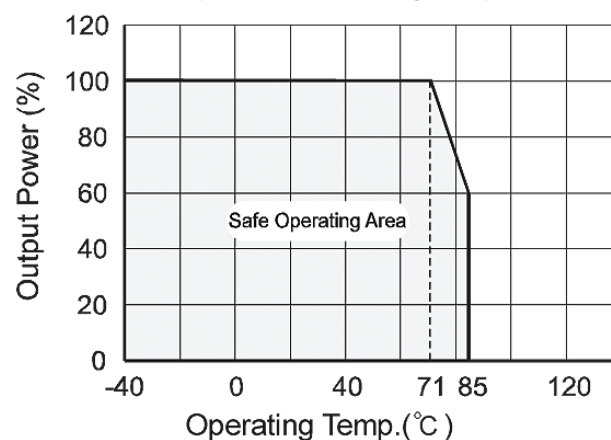


Filtering Dual output



Derating

Temperature Derating Graph



External capacitor – Single output

Vin (VDC)	External capacitor (0-+70 °C) (uF)	Vout (VDC)	External capacitor (-40-+85 °C) (uF)
5 & 12	100	100	47
24 & 48	10	Electrolytic capacitor	Tantalum capacitor

External capacitor – Dual output

Vin (VDC)	External capacitor (0-+70 °C) (uF)	Vout (VDC)	External capacitor (-40-+85 °C) (uF)
5 & 12	100	100	47
24 & 48	22	Electrolytic capacitor	Tantalum capacitor