



FEATURES:

- RoHS compliant
- 24 Pin DIP Package
- High efficiency up to 85%
- Wide 2:1 input range
- Operating temperature -40°C to + 85°C
- Input / Output isolation 4000 VACrms
- Pin compatible with multiple manufacturers
- OLP, OVP and SCP

Models Single Output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)	Isolation (VAC)
AM5T-1205SH40-FZ	9 -18	5	1000	2000	81	4000
AM5T-1212SH40-FZ	9 -18	12	500	470	83	4000
AM5T-1215SH40-FZ	9 -18	15	400	440	83	4000
AM5T-2405SH40-FZ	18 - 36	5	1000	2000	82	4000
AM5T-2412SH40-FZ	18 - 36	12	500	470	85	4000
AM5T-2415SH40-FZ	18 - 36	15	400	440	84	4000
AM5T-4805SH40-FZ	36 - 75	5	1000	2000	81	4000
AM5T-4812SH40-FZ	36 - 75	12	500	470	83	4000
AM5T-4815SH40-FZ	36 - 75	15	400	440	82	4000

Models Dual Output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)	Isolation (VAC)
AM5T-1212DH40-FZ	9 -18	±12	±250	±220	83	4000
AM5T-1215DH40-FZ	9 -18	±15	±200	±220	83	4000
AM5T-2412DH40-FZ	18 - 36	±12	±250	±220	84	4000
AM5T-2415DH40-FZ	18 - 36	±15	±200	±220	85	4000
AM5T-4812DH40-FZ	36 - 75	±12	±250	±220	83	4000
AM5T-4815DH40-FZ	36 - 75	±15	±200	±220	83	4000

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	12	9-18		VDC
	24	18-36		
	48	36-75		
Filter	Pi Type			
Turn on Transient process time (50% load step Change)			780	µs
Transient response over shoot	di/dt=0.8A/µs	<±5%		% of Vo
Input reflected ripple current	Vin nominal FL		76	mA p-p
Start up time			510	ms
Absolute Maximum Rating	12 Vin	-0.7-25		VDC
	24 Vin	-0.7-50		
	48 Vin	-0.7-100		
Peak Input Voltage time		100		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Rated I/O voltage	60 sec		4000	VACrms
Tested I/O voltage	1sec flash test		6000	Vpk
Resistance	500VDC	> 1000		MOhm
Capacitance		12		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Over load protection		120%		of full load
Over voltage protection	Zener Diode Clamp	5V model = 6.2V 12V model = 15V 15V model = 18V		Vdc
Voltage accuracy	25% load to full load	±1		%
Short circuit protection		Continuous		
Short circuit restart		Autorecovery		
Line voltage regulation	LL to LH at Full Load	±0.5		%
Load voltage regulation (Single)	25% load to full load	±0.5		%
Load voltage regulation (Dual)	Balanced	±0.5		%
	Unbalanced load 25% to 100% full load	±3.0		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise (At 20MHz Bandwidth)	5V output 12V output 15V output	150 70 200		mV p-p

General Specifications

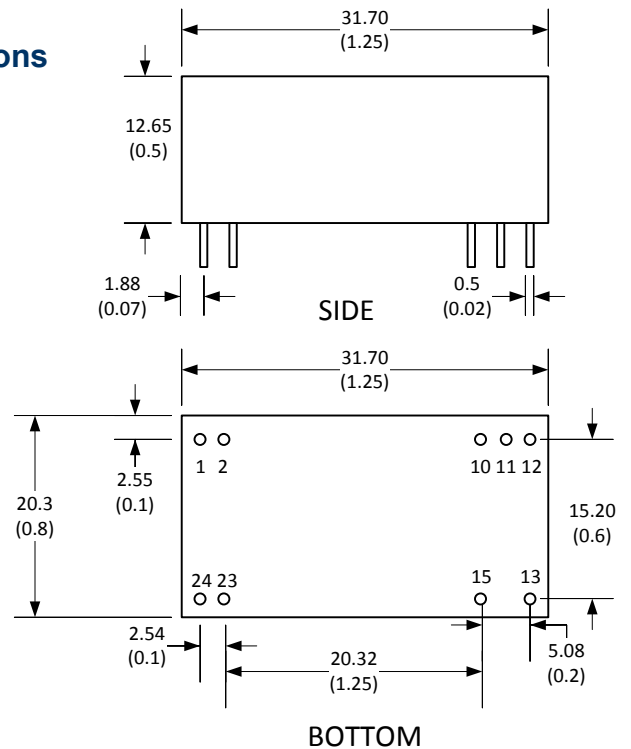
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	150		KHz
Operating temperature	Full Load (with derating see chart)	-40 to +85		°C
Storage temperature		-50 to +125		°C
Max Case temperature			+95	°C
Cooling		Free air convection		
Humidity			95	%
Case material		Non-Conductive Plastic		
Weight		16		g
Dimensions(L x W x H)	Tolerance ±0.5 mm or ±0.02 inches	1.25 x 0.80 x 0.5 inches	31.7x 20.3 x 12.65 mm	
MTBF		>700 000 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.

Pin Out Specifications

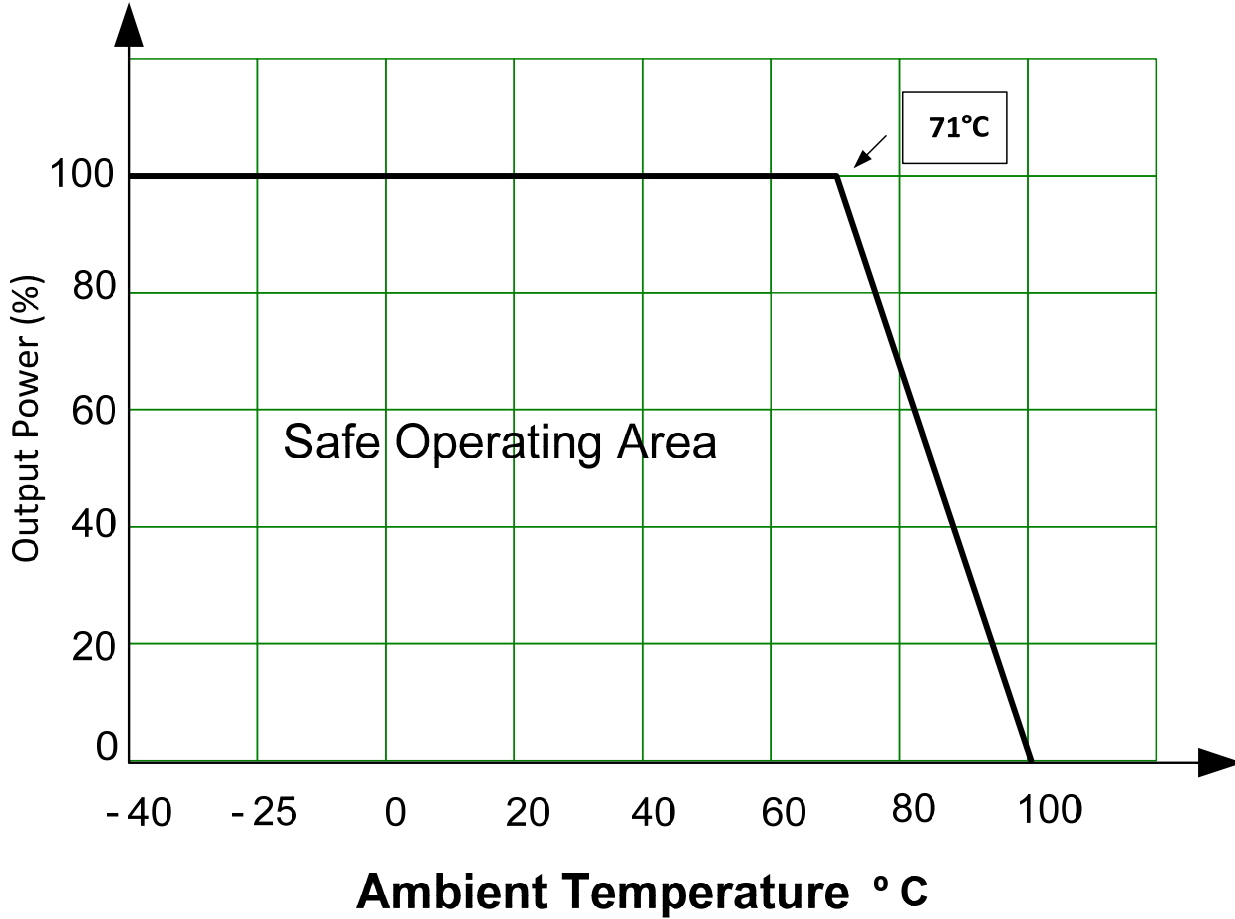
Pin	Dual	
	Single	Dual
1	+V Input	+V Input
2	+V Input	+V Input
10	N. C.	Common
11	N.C.	Common
12	-V output	N. C.
13	+Voutput	-V output
15	N. C.	+V output
23	-V Input	-V Input
24	-V Input	-V Input

Dimensions



Derating

Free Air Convection



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