



FEATURES:

- Wide Input Range (4:1)
- 24 Pin DIP Package
- Metal package
- High efficiency up to 79%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1500 or 3500VDC
- Pin compatible with multiple manufacturers
- Continuous short circuit protection



Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)
AM3TW-2405S-VZ	9-36	5	600	2200	70
AM3TW-2409S-VZ	9-36	9	333	470	71
AM3TW-2412S-VZ	9-36	12	250	470	73
AM3TW-2415S-VZ	9-36	15	200	470	73
AM3TW-2424S-VZ	9-36	24	125	220	71
AM3TW-4805S-VZ	18-72	5	600	2200	75
AM3TW-4809S-VZ	18-72	9	333	470	77
AM3TW-4812S-VZ	18-72	12	250	470	79
AM3TW-4815S-VZ	18-72	15	200	470	79
AM3TW-4824S-VZ	18-72	24	125	220	76
AM3TW-2405SH35-VZ	9-36	5	600	2200	70
AM3TW-2409SH35-VZ	9-36	9	333	470	71
AM3TW-2412SH35-VZ	9-36	12	250	470	73
AM3TW-2415SH35-VZ	9-36	15	200	470	73
AM3TW-2424SH35-VZ	9-36	24	125	220	71
AM3TW-4805SH35-VZ	18-72	5	600	2200	75
AM3TW-4809SH35-VZ	18-72	9	333	470	77
AM3TW-4812SH35-VZ	18-72	12	250	470	79
AM3TW-4815SH35-VZ	18-72	15	200	470	79
AM3TW-4824SH35-VZ	18-72	24	125	220	76

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)
AM3TW-2405D-VZ	9-36	±5	±300	±1000	70
AM3TW-2409D-VZ	9-36	±9	±167	±220	72
AM3TW-2412D-VZ	9-36	±12	±125	±220	74
AM3TW-2415D-VZ	9-36	±15	±100	±220	74
AM3TW-2424D-VZ	9-36	±24	±63	±100	73
AM3TW-4805D-VZ	18-72	±5	±300	±1000	73
AM3TW-4809D-VZ	18-72	±9	±167	±220	75
AM3TW-4812D-VZ	18-72	±12	±125	±220	78
AM3TW-4815D-VZ	18-72	±15	±100	±220	78
AM3TW-4824D-VZ	18-72	±24	±63	±100	76
AM3TW-2405DH35-VZ	9-36	±5	±300	±1000	70
AM3TW-2409DH35-VZ	9-36	±9	±167	±220	72
AM3TW-2412DH35-VZ	9-36	±12	±125	±220	74
AM3TW-2415DH35-VZ	9-36	±15	±100	±220	74
AM3TW-2424DH35-VZ	9-36	±24	±63	±100	73
AM3TW-4805DH35-VZ	18-72	±5	±300	±1000	73
AM3TW-4809DH35-VZ	18-72	±9	±167	±220	75
AM3TW-4812DH35-VZ	18-72	±12	±125	±220	78
AM3TW-4815DH35-VZ	18-72	±15	±100	±220	78
AM3TW-4824DH35-VZ	18-72	±24	±63	±100	76

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage Range	24	9-36		VDC
	48	18-72		
Filter	π (Pi) Network			
Absolute Max Rating	24 Vin	-0.7-40		VCD
	48 Vin	-0.7-80		
Start up time		20		ms
Peak Input Voltage time		15		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec		1500 (3500 H35 Model)	VDC
Resistance		> 1000		MOhm
Capacitance		60		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		± 1		%
Short circuit protection		Continuous		
Short circuit restart		Auto Recovery		
Line voltage regulation		± 0.5		%
Load voltage regulation		± 0.5		%
Temperature coefficient		± 0.02		%/°C
Ripple & Noise	At 20MHz Bandwidth	60		mV p-p
Voltage balance	Balanced Load	± 1		%

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100-400		KHz
Operating temperature	Full Load (see derating chart)	-40 to +85		°C
Storage temperature		-40 to +125		°C
Max Case temperature			100	°C
Cooling		Free air convection		
Humidity			95	%
Case material		Nickel coated copper		
Weight		15		g
Dimensions(L x W x H)	Tolerance ± 0.5 mm or ± 0.02 inches	1.25 x 0.8 x 0.4 inches	31.75 x 20.32 x 10.16 mm	
MTBF		>2,200,000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		

Safety Specifications

Parameters	
Standards	Designed to meet IEC 60950-1

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.

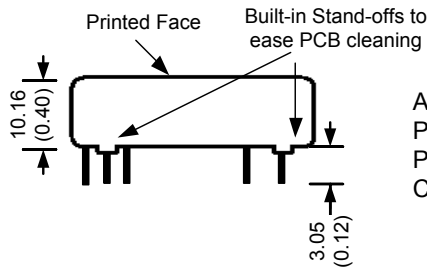
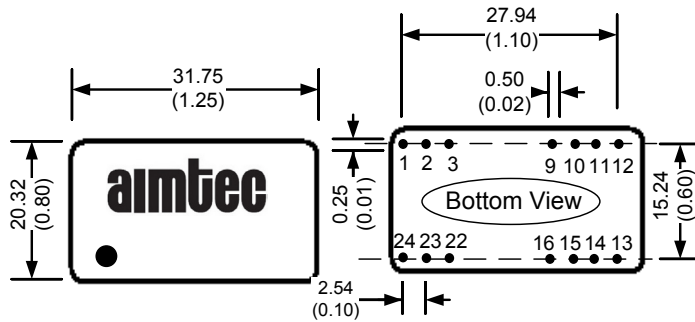
Pin Out Specifications

Pin	1500VDC		3500VDC	
	Single	Dual	Single	Dual
1	+V Input	+V Input	No pin	No pin
2	N.C.	-V Output	-V Input	-V Input
3	N.C.	Common	-V Input	-V Input
9	No pin	No pin	No pin	Common
10	-V Output	Common	No pin	No pin
11	+V Output	+V Output	N.C.	-V Output

Pin Out Specifications (continued)

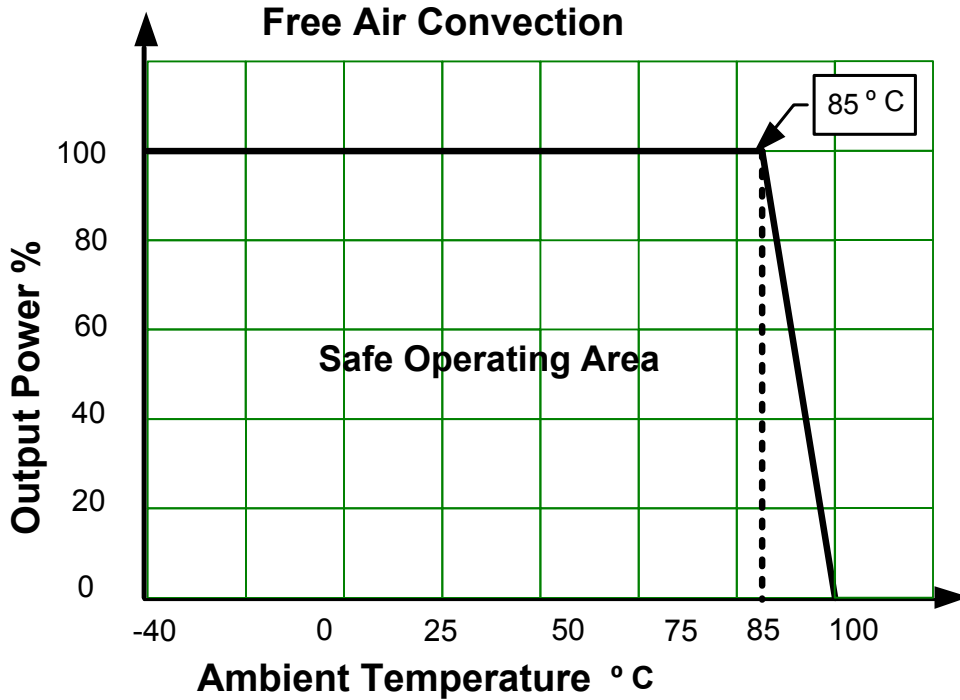
Pin	1500VDC		3500VDC	
	Single	Dual	Single	Dual
12/13	-V Input	-V Input	No pin	No pin
14	+V Output	+V Output	+V Output	+V Output
15	-V Output	Common	No pin	No pin
16	No pin	No pin	-V Output	Common
22	N.C.	Common	+V Input	+V Input
23	N.C.	-V Output	+V Input	+V Input
24	+V Input	+V Input	No pin	No pin

Dimensions



All dimensions are typical: millimeters (inches)
 Pin Diameter: 0.50 ± 0.05 (0.02 ± 0.002)
 Pin Pitch Tolerance: ± 0.35 (± 0.014)
 Case Tolerance: ± 0.5 (± 0.02)

Derating



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