

## 4 Watt | DC-DC Converter



Single output

#### **FEATURES:**

- Wide Input Range (4:1)
- 24 Pin DIP Package
- Metal package
- High efficiency up to 75%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1500 VDC
- Pin compatible with multiple manufacturers
- Continuous short circuit protection



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)
AM4TW-2403S-RVZ	9-36	3.3	1000	1000	66
AM4TW-2405S-RVZ	9-36	5	800	1000	71
AM4TW-2412S-RVZ	9-36	12	333	320	74
AM4TW-2415S-RVZ	9-36	15	266	220	74
AM4TW-4803S-RVZ	18-72	3.3	1000	1000	66
AM4TW-4805S-RVZ	18-72	5	800	1000	72
AM4TW-4812S-RVZ	18-72	12	333	320	73
AM4TW-4815S-RVZ	18-72	15	266	220	74

## Models

**Dual output** 

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)
AM4TW-2405D-RVZ	9-36	±5	±400	±470	70
AM4TW-2412D-RVZ	9-36	±12	±166	±100	72
AM4TW-2415D-RVZ	9-36	±15	±133	±68	75
AM4TW-4805D-RVZ	18-72	±5	±400	±470	70
AM4TW-4812D-RVZ	18-72	±12	±166	±100	72
AM4TW-4815D-RVZ	18-72	±15	±133	±68	73

**Input Specifications** 

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

**Isolation Specifications** 

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

**Output Specifications** 

Parameters	Conditions	Typical	Maximum	Units		
Voltage Balance	Balanced Load	±1		%		
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		

# Series AM4TW-RVZ 4 Watt | DC-DC Converter

**General Specifications** 

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100-400		KHz
Operating temperature	Full Load (see derating chart)	-40	0 to +85	°C
Storage temperature		-40 to +125		
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			2 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.

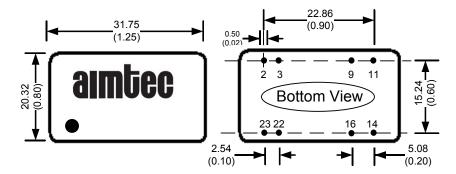
### **Pin Out Specifications**

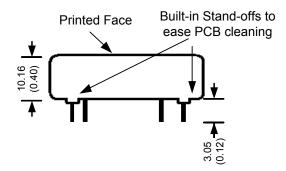
Pin	1500 VDC		
	Single	Dual	
2	-V Input	-V Input	
3	-V Input	-V Input	
9	No pin	Common	
11	N.C.	-V Output	
14	+V Output	+V Output	
16	-V Output	Common	
22	+V Input	+V Input	
23	+V Input	+V Input	



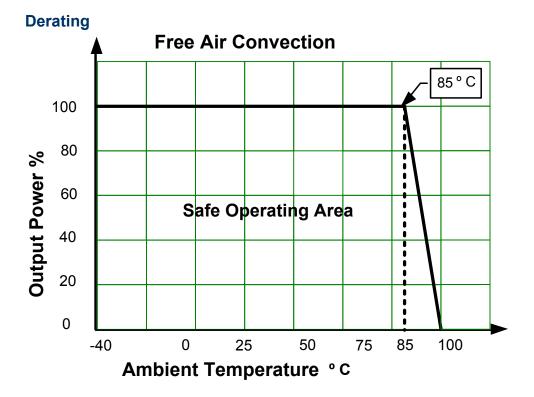


### **Dimensions**





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



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