

Series AM6TW-RVZ

6 Watt | DC-DC Converter



FEATURES:

- Wide Input Range (4:1)
- 24 Pin DIP Package
- Metal package
- High efficiency up to 82%
- Operating temperature -40°C to + 85°C
- Input / Output isolation 1500 VDC
- 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 (%)
AM6TW-2412S-RVZ	9-36	12	500	470	82
AM6TW-2415S-RVZ	9-36	15	400	330	80
AM6TW-4812S-RVZ	18-72	12	500	470	78
AM6TW-4815S-RVZ	18-72	15	400	330	78

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Capacitive load, max (µF)	Efficiency (%)
AM6TW-2412D-RVZ	9-36	±12	±250	±100	81
AM6TW-2415D-RVZ	9-36	±15	±200	±68	80
AM6TW-4812D-RVZ	18-72	±12	±250	±100	78
AM6TW-4815D-RVZ	18-72	±15	±200	±68	75

Input Specifications

input opecinications				
Parameters	Nominal	Typical	Maximum	Units
Voltage Dange	24	9-36		VDC
Voltage Range	48	18-72		
Filter		π (Pi) Network		
Absolute Max Rating	24 Vin	-0.7-40		VDC
	48 Vin	-0.7-80		VDC

Isolation Specifications

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

Output Specifications

output opcomouncing					
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	

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			x 10.16 mm
MTBF	>2,200,000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

Safety Specifications

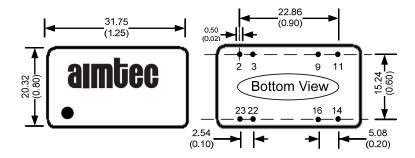
Parameters	
Standards	Designed to meet IEC 60950-1

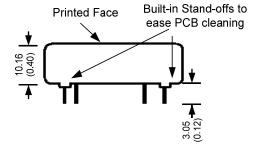
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Pin Out Specifications

Pin	1500	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





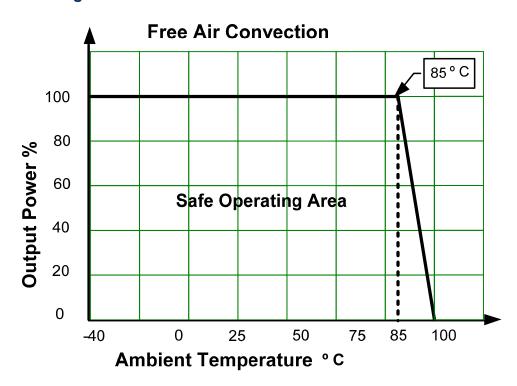
All dimensions are typical: millimeters (inches)

Pin Diameter: $0.50 \pm 0.05 (0.02 \pm 0.002)$ Pin Pitch Tolerance: $\pm 0.35 (\pm 0.014)$

Case Tolerence: ± 0.5 (±0.02)



Derating



NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. **2.** Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. **3.** Mechanical drawings and specifications are for reference only. **4.** All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. **5.** Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. **6.** This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. **7.** Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.

F 051e R13.B 3 of 3 North America only