

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 opecifications				
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		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

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	

^{*} In order to achieve ripple and noise specification, a 100µF capacitor is required to be connected to the output of the converter



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General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	100-400		KHz
Operating temperature	Full Load (see derating chart)	-4() 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		12.16		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			k 10.16 mm
MTBF	>2,200,000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

Safety Specifications

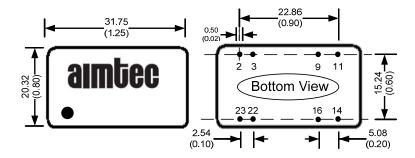
Parameters	
Standards	Designed to meet IEC 60950-1

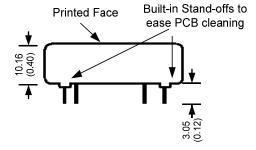
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

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





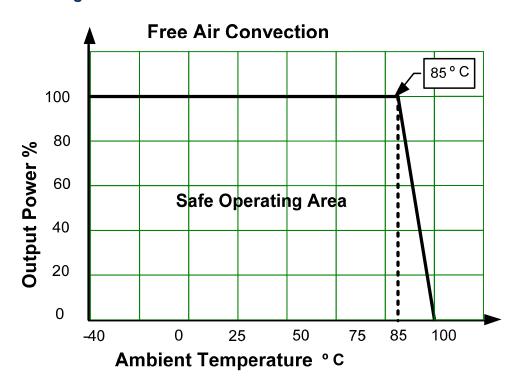
All dimensions are typical: millimeters (inches)

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



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