

AM8TW-I Series



8 watt dc-dc converters

- 24PIN DIP PACKAGE
- METAL ENCAPSULATED CASE
- POWER MODULES FOR PCB MOUNTING
- 4:1 WIDE INPUT RANGE

- REGULATED OUTPUT
- LOW RIPPLE & NOISE

• OPERATING TEMPERATURE: -40...+75°C

GENERAL DESCRIPTION

Our AM8TW-I series is a family of cost effective 8W single and dual output DC-DC converters. These converters are DIP24 compatible metal case with dimensions of 31.8x20.3x10.2mm. The high performance features of our AM8TW-I components include continuous short circuit protection with auto recovery, tight line regulation and a high efficiency operation coefficient up to 84%.

These wide range devices operate over 4:1 input voltage range, providing a continuously stable output voltage. Fourteen models operate from an input voltage range of 24 & 48VDC producing output voltages of 3.3, 5, 12, 15, \pm 5, \pm 12 & \pm 15VDC. The normal operation is specified over the full operating temperature range of -40°C to +75°C with no derating required. Cooling is done by free air convection.

ELECTRICAL SPECIFICATIONS

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Input Specifications:		Output Specifications:	
Voltage range	24VDC, 9~36VDC 48VDC, 18~75VDC	Voltage accuracy Ripple Noise (3.3,5V)	±2%, max.
Filter	π (Pi) Network	Ripple Noise other Short circuit protection	80m Vp-pmax 1% P-P max Continuous, auto-recovery
Isolation Specifications:		Over load protection	Over 110% full load
Rated voltage Resistance Capacitance	1500VDC >1000 Mohms 1000pF, typ.	Over Voltage Protection Line regulation (HL-LL) Load regulation (10-100%	and recovers automatically Zener diode clamp protection ±0.5%, typ. b) single ±0.5%, max., dual ±2%
General Specifications:		Temperature coefficient	±0.05%/°C, max.
Efficiency Switching frequency	76% to 84% 300KHz, typ. 100% load	Physical Specifications: Dimensions	31.8x20.3x10.2mm,
Environmental Specifications:			tolerance ±0.5mm
Operating temperature	-40°C+75°C		1.25x0.8x0.4inches
Storage temperature	-55°C+115°C	Weight	18g
Case temperature	+95°C, max.	Case material	Nickel-Coated Copper
Humidity (non-condensing)	Up to 95%		

Free-air convection

MTBF: > 800,000 hrs (MIL-HDBK-217F, Ground Benign, t=+25°C)

Specifications are subject to change without notification

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Cooling

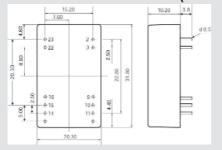


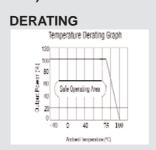


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OUTLINE DIMENSIONS & PIN CONNECTIONS

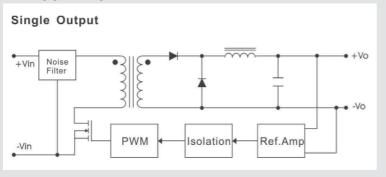
MECHANICAL DIMENSION (Bottom View)

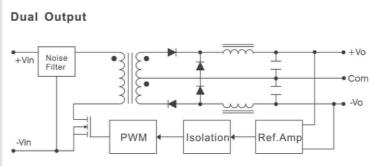




Pin	1500VDC		
	Single	Dual	
2	-V Input	-V Input	
3	-V Input	-V Input	
9	N.C.	Common	
10	N.C.	N.C.	
11	N.C.	-V Output	
14	+V Output	+V Output	
15	N.C.	N.C.	
16	-V Output	Common	
22	+V Input	+V Input	
23	+V Input	+V Input	

BLOCK DIAGRAM





MODELS Single output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM8TW-2403SI		3.3VDC	1600mA
AM8TW-2405SI	9-36VDC	5VDC	1600mA
AM8TW-2412SI		12VDC	660mA
AM8TW-2415SI		15VDC	530mA
AM8TW-4803SI		3.3VDC	1600mA
AM8TW-4805SI	18-75VDC	5VDC	1600mA
AM8TW-4812SI		12VDC	660mA
AM8TW-4815SI		15VDC	530mA

MODELS Dual output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM8TW-2405DI	9-36VDC	±5VDC	±800mA
AM8TW-2412DI		±12VDC	±330mA
AM8TW-2415DI		±15VDC	±260mA
AM8TW-4805DI	18-75VDC	±5VDC	±800mA
AM8TW-4812DI		±12VDC	±330mA
AM8TW-4815DI		±15VDC	±260mA

