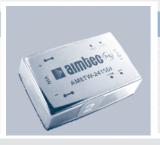


AM8TW-I Series



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, ±5, ±12 & ±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.

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Voltage range 24VDC, $9\sim36$ VDC 48VDC, $18\sim75$ VDC Filter π (Pi) Network

Isolation Specifications:

Rated voltage 1500VDC
Resistance >1000 Mohms
Capacitance 1000pF, typ.

General Specifications:

Efficiency 76% to 84%

Switching frequency 300KHz, typ. 100% load

Environmental Specifications:

Operating temperature -40°C ...+75°C
Storage temperature -55°C ...+115°C
Case temperature +95°C, max.
Humidity (non-condensing) Up to 95%

Cooling Free-air convection

Output Specifications:

 $\begin{array}{ll} \mbox{Voltage accuracy} & \pm 2\%, \mbox{ max.} \\ \mbox{Ripple Noise (3.3,5V)} & 80\mbox{m Vp-pmax} \\ \mbox{Ripple Noise other} & 1\% \mbox{ P-P max} \\ \end{array}$

Short circuit protection Continuous, auto-recovery
Over load protection Over 110% full load

and recovers automatically

Over Voltage Protection Zener diode clamp protection

Line regulation (HL-LL) $\pm 0.5\%$, typ.

Load regulation (10-100%) single $\pm 0.5\%$, max., dual $\pm 2\%$

Temperature coefficient $\pm 0.05\%$ /°C, max.

Physical Specifications:

Dimensions 31.8x20.3x10.2mm, tolerance $\pm 0.5mm$ 1.25x0.8x0.4inches

Weight 18g

Case material Nickel-Coated Copper

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

Specifications are subject to change without notification

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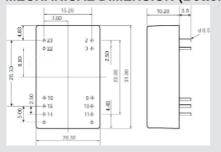


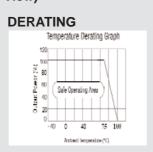


AM8TW-I Series

OUTLINE DIMENSIONS & PIN CONNECTIONS

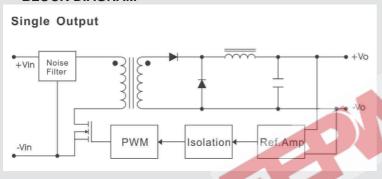
MECHANICAL DIMENSION (Bottom View)

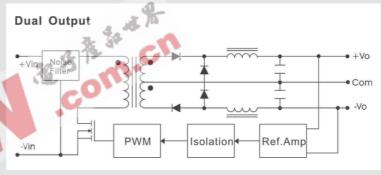




Pin	1500VDC		
	Single	Dual	
2	-V Input	-V Input	
3	-V Input	-V Input	
9	N.C.	Common	
10	N.C.	N.C.	
11	N.C.	-V Output	
14	+V Output	+V Output	
15	N.C.	N.C.	
16	-V Output	Common	
22	+V Input	+V Input	
23	+V Input	+V Input	

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		±5VDC	±800mA
AM8TW-2412DI	9-36VDC	±12VDC	±330mA
AM8TW-2415DI		±15VDC	±260mA
AM8TW-4805DI	18-75VDC	±5VDC	±800mA
AM8TW-4812DI		±12VDC	±330mA
AM8TW-4815DI		±15VDC	±260mA

