AM8T-C Series



8 watt dc-dc converters

- 24PIN DIP PACKAGE
- PLASTIC ENCAPSULATED CASE
- POWER MODULES FOR PCB MOUNTING
- 2:1 WIDE INPUT RANGE

- REGULATED OUTPUT
- LOW RIPPLE & NOISE
- OPERATING TEMPERATURE: -25...+71°C

$C \in$

GENERAL DESCRIPTION

Our AM8T-C series is a family of cost effective 8W single and dual output DC-DC converters. These converters are shielded on all six sides and aluminum encapsulated, have a non-conductive base and retain an anodized black DIP24 compatible plastic case and dimensions of 31.8x20.3x10.2mm. The high performance features of our AM8T-C components include short circuit protection with current limit auto recovery, tight line regulation and a high

efficiency operation coefficient up to 82%. Twenty four models operate from an input voltage range of 12, 24 & 48VDC producing output voltages of 3,3, 5, 12, 15, 24, ± 5 , ± 12 & ± 15 VDC. The normal operation is specified over the full operating temperature range of -25°C to +71°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:		
Voltage range	12VDC, 9~18VDC	
	24VDC, 18~36VDC	
	48 VDC, 36~75VDC	
Filter	p (Pi) Network	
Isolation Specifications:		
Rated voltage	1500VDC	
Resistance	>1000 Mohms	
Capacitance	1000pF, typ.	
General Specifications:		
Efficiency	78% to 82%	
Switching frequency	300KHz, typ. 100% load	
Environmental Specificati	ions:	
Operating temperature	-25°C+71°C	
Storage temperature	-55°C+105°C	
Case temperature	+95°C, max.	

MTBF: > 800,000 hrs (MIL-HDBK-217F, Ground Benign, t=+25°C)
Specifications are subject to change without notification

Up to 95%

Free-air convection

±2%, max.
<0.2% Vout +20mVmax (Vp-p)
<0.5% Vout +50mVmax (Vp-p)
Current limit, auto-recovery
Works over 120% of rating
and recovers automatically
±0.5%, typ.
) ±2%, typ.
$\pm 0.02\%$ /°C, typ.

Physical Specifications:	
Dimensions	31.8x20.3x10.2mm,
	tolerance ±0.5mm
	1.25x0.8x0.4inches
Weight	13g
Case material	Six-side shielded Aluminum
	with Non-Conductive base,
	Black Anodize

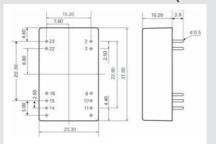
Cooling

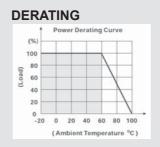
Humidity (non-condensing)

AM8T-C Series

OUTLINE DIMENSIONS & PIN CONNECTIONS

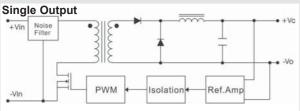
MECHANICAL DIMENSION (Bottom View)

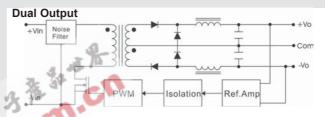




Pin	1500VDC		
	Single	Dual	
2	-V Input	-V Input	
3	-V Input	-V Input	
9	N.C.	Common	
10	N.C.	N.C.	
11	N.C.	-V Output	
14	+V Output	+V Output	
15	N.C.	N.C.	
16	-V Output	Common	
22	+V Input	+V Input	
23	+V Input	+V Input	

BLOCK DIAGRAM





MODELS Single output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM8T-1203SC		3.3VDC	2000mA
AM8T-1205SC		5VDC	1500mA
AM8T-1212SC	9VDC - 18VDC	12VDC	660mA
AM8T-1215SC		15VDC	530mA
AM8T-1224SC		24VDC	330mA
AM8T-2403SC	18VDC - 36VDC	3.3VDC	2000mA
AM8T-2405SC		5VDC	1500mA
AM8T-2412SC		12VDC	660mA
AM8T-2415SC		15VDC	530mA
AM8T-2424SC		24VDC	330mA
AM8T-4803SC	36VDC - 75VDC	3.3VDC	2000mA
AM8T-4805SC		5VDC	1500mA
AM8T-4812SC		12VDC	660mA
AM8T-4815SC		15VDC	530mA
AM8T-4824SC		24VDC	330mA

Dual output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM8T-1205DC		±5VDC	±800mA
AM8T-1212DC	9VDC - 18VDC	$\pm 12 VDC$	±330mA
AM8T-1215DC		±15VDC	±260mA
AM8T-2405DC	18VDC - 36VDC	±5VDC	±800mA
AM8T-2412DC		±12VDC	±330mA
AM8T-2415SC		±15VDC	±260mA
AM8T-4805DC	36VDC - 75VDC	±5VDC	±800mA
AM8T-4812DC		±12VDC	±330mA
AM8T-4815DC		±15VDC	±260mA