AM5TW-C Series



5 watt dc-dc converters

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

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

GENERAL DESCRIPTION

Our AM5TW-C series is a family of cost effective 5W single and dual output DC-DC converters. These shielded converters are aluminum encapsulated on all six sides, have a non-conductive base & retain an anodized black DIP24 compatible plastic case (31.8x20.3x10.2mm). The high performance features of AM5TW-C series include current limit auto recovery short circuit protection, tight line regulation and high efficiency operation coefficient up to 78%. These wide range devices operate over 4:1 input voltage range, providing a continuously stable output voltage. Input voltage range of 24 & 48VDC converts in 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

Input Specifications:		Physical Specifications:	
Voltage range Filter	24VDC, 9~36VDC 48 VDC, 18~75VDC p (Pi) Network	Dimensions	31.8x20.3x10.2mm, tolerance ±0.5mm 1.25x0.8x0.4inches
Isolation Specifications: Rated voltage Resistance Capacitance	1500VDC >1000Mohms 1000pF, typ.	Weight Case material	13g Six-side shielded Aluminum with Non-Conductive base, Black Anodize
General Specifications: Efficiency Switching frequency	73% to 78% 300KHz, typ. 100% load	Output Specifications: Voltage accuracy Ripple Noise	±2%, max. <0.2% Vout +20mVmax (Vp-p) <0.5% Vout +50mVmax (Vp-p)
Environmental Specification Operating temperature Storage temperature Case temperature Humidity (non-condensing) Cooling	s: -25°C+71°C -55°C+105°C +95°C, max. Up to 95% Free-air convection	Short circuit protection Over current protection Line regulation (HL-LL) Load regulation(10-100% Temperature coefficient	‰) ±2%, typ.

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

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

Specifications are subject to change without notification

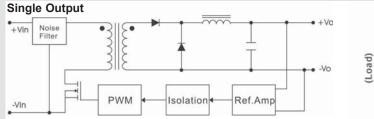
CE

AM5TW-C Series

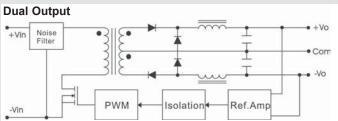
OUTLINE DIMENSIONS & PIN CONNECTIONS

MECHANICAL DIMENSION (Bottom View) 10.20 3.8 7.60 d 0.5 023 2 0 + 22 -2.50 8.80 20.30 22.80 31.80 4.40 10中 11中 Þ 15 6.14 -20.3

BLOCK DIAGRAM

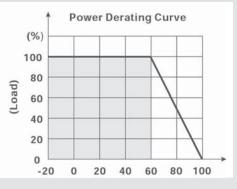


BLOCK DIAGRAM



Pin	1500 & 3500 VDC		
	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	

DERATING



MODELS Single output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM5TW-2403SC	9VDC - 36VDC	3.3VDC	1200mA
AM5TW-2405SC		5VDC	1000mA
AM5TW-2412SC		12VDC	500mA
AM5TW-2415SC		15VDC	400mA
AM5TW-2424SC		24VDC	250mA
AM5TW-4803SC	18VDC - 75VDC	3.3VDC	1200mA
AM5TW-4805SC		5VDC	1000mA
AM5TW-4812SC		12VDC	500mA
AM5TW-4815SC		15VDC	400mA
AM5TW-4824SC		24VDC	250mA

Dual output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM5TW-2405DC		±5VDC	±500mA
AM5TW-2412DC	9VDC - 36VDC	±12VDC	±250mA
AM5TW-2415DC		±15VDC	±200mA
AM5TW-4805DC		±5VDC	±500mA
AM5TW-4812DC	18VDC - 75VDC	±12VDC	±250mA
AM5TW-4815DC		±15VDC	±200mA

TO ORDER CALL 1-888-9-AIMTEC