AM10EW-C Series



10 watt dc-dc converters

- POWER MODULES FOR PCB MOUNTING
- 4:1 WIDE INPUT RANGE
- REGULATED OUTPUT

- LOW RIPPLE & NOISE
- REMOTE ON/OFF CONTROL (OPTIONAL)

C€ c¶S[®]us

GENERAL DESCRIPTION

Our AM10EW-C series is a family of cost effective 10W single output DC-DC converters. These converters are shielded on all six sides and encapsulated with a nickel-coated copper with a non-conductive base and dimensions of 50.8x25.4x10.5mm. The high performance features of our AM10EW-C components include short circuit protection with current limit auto recovery, tight line regulation and a high efficiency operation coefficient up to 83%. These wide range devices operate over 4:1 input voltage range, providing a continuously stable output voltage.

Ten models operate from an input voltage range of 24 & 48VDC producing output voltages of 3,3, 5, 12, 15 & 24VDC. 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.

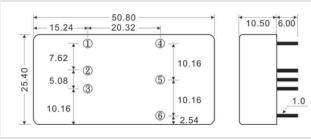
Input Specifications:		Output Specifications:	
Voltage range	24VDC, 9~36VDC	Voltage accuracy	±2%, max.
Filter	48 VDC, 18~75VDC p (Pi) Network	Ripple Noise	<0.2% Vout +20mVmax (Vp-p) <0.5% Vout +50mVmax (Vp-p)
	p (FI) Network	Short circuit protection	Current limit, auto-recovery
Isolation Specifications: Rated voltage	1500VDC	Over current protection	Works over 120% of rating and recovers automatically
Resistance Capacitance	>1000 Mohms 1000pF	Over voltage protection	•
*	Тооорг	Line regulation (HL-LL)	· • • •
General Specifications:		Load regulation (10-100%)	b) $\pm 1\%$, typ.
Efficiency	78% to 83%	Temperature coefficient	±0.02%/°C, typ.
Switching frequency	300KHz, typ. 100% load	Physical Specifications:	
Environmental Specifications:		Dimensions	50.8x25.4x10.5mm
Operating temperature	-25°C+71°C		2.0x1.0x0.413inches
Storage temperature	-55°C+105°C	Weight	32g
Case temperature	+95°C, max.	Case material	Nickel-Coated Copper with
Humidity (non-condensing)	Up to 95%		Non-Conductive base,
Cooling	Free-air convection		six sides' shielded

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

AM10EW-C Series

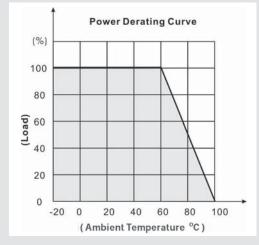
OUTLINE DIMENSIONS & PIN CONNECTIONS

MECHANICAL DIMENSION (Top View)



Pin	Single		
1	On/Off Control (Optional)		
2	-V Input		
3	+V Input		
4	-V Output		
5	No pin		
6	+V Output		

DERATING



BLOCK DIAGRAM

MODELS Single output

Models	Input Voltage	Ouput Voltage	Ouput Current max.
AM10EW-2403SC	9VDC-36VDC	3.3VDC	2000mA
AM10EW-2405SC		5VDC	2000mA
AM10EW-2412SC		12VDC	830mA
AM10EW-2415SC		15VDC	670mA
AM10EW-2424SC		24VDC	420mA
AM10EW-4803SC	18VDC-75VDC	3.3VDC	2000mA
AM10EW-4805SC		5VDC	2000mA
AM10EW-4812SC		12VDC	830mA
AM10EW-4815SC		15VDC	670mA
AM10EW-4824SC		24VDC	420mA