DC/DC Product Specification

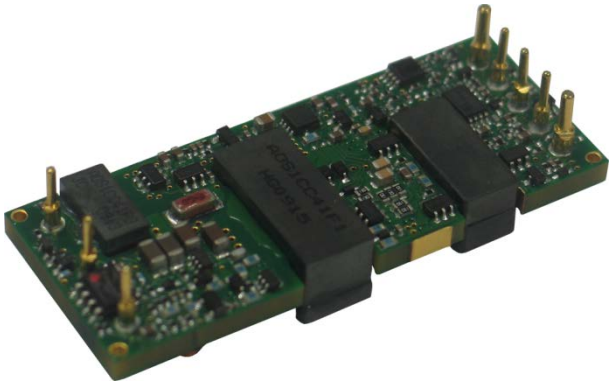
- 1/8th brick fully regulated DCDC converter.

Embedded Power for Business-Critical Continuity

AVO120-48S12

1/8th brick

Input voltage: 36-75V
Single Output: 12V
Rated power: 120W



Special Features

- 2:1 Wide input range
- Optimised for High density, small space applications
- Low ripple and noise
- Fixed switching frequency
- High efficiency
- High capacitive load capability
- Basic insulation system
- Pre-bias start-up capability
- Through hole or SMT termination
- Open frame structure with Base-plate option

Safety

- **UL, cUL:** UL60950
- **TUV/CE:** IEC/EN60950

Product Description

The AVO120-48S12 is the latest high efficiency 1/8th brick series. It operates from a wide input range of 36Vdc to 75Vdc and provides a regulated output voltage of 12Vdc. The output is rated to a power level up to 120Watts. Its protection features include Non-latching OCP, OTP and OVP. It also has an enable pin on the primary side of the converter. The unit is an open frame design with base-plate option that is optimised for either contact-cooled applications or forced airflow applications.

Specifications

Feature	
Output power:	120W
Super high efficiency:	93%(12V)
Functions:	Remote control, trim function, Sense; Input LVP, output OVP and OCP, OTP Open frame structure with base plate option.
Insulation:	Basic Insulation
Safety	
UL:	UL60950
TUV/CE:	IEC/EN60950
Input specification	
Input range	36Vdc to 75Vdc
Input Surge	100V for 100mSec
Control specification	
Enable	TTL compatible Positive or Negative enable
Output specification	
Output Voltage	12Vdc.
Trim range	+10% to –20% Vout
Output Current	10A
Ripple and noise	50mV pk-pk
Regulation	Load regulation =10mV, Line regulation = 5mV
Switching Frequency	Fixed switching frequency 165Khz
Isolation Voltage	2000Vdc
Transient response.	100mV deviation 150uS recovery (25%-50% ~ 25% Iout)

Environmental Specification

Storage Temperature	-55 to +125 deg C
Ambient operating temp	-40 to +85 deg C
MTBF at 25degC	1.5 Million hours
OTP	118 deg C

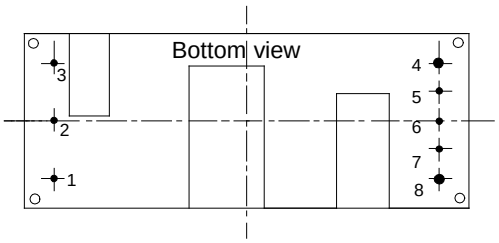
EMERSON Network Power

DC/DC Product Specification

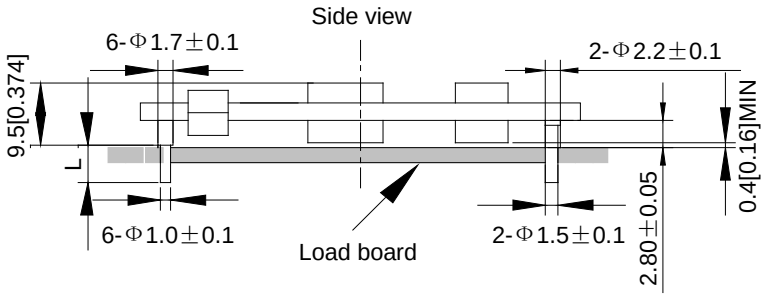
- 1/8th brick fully regulated DCDC converter.

Embedded Power for Business-Critical Continuity

Mechanical



Pin Assignments	
Pin #	Function
1	+V in
2	Enable
3	-V in
4	-V out
5	- Sense
6	Trim
7	+Sense
8	+V out



Unit: mm[inch]

Bottom view: pin on upside

Tolerance: X.Xmm±0.5mm[X.X in.±0.02in.]

X.XXmm±0.25mm[X.XX in.±0.01in.]

Ordering information

Input voltage	Output voltage	Output current	Efficiency	Part number
48V	12V	10A	93%	AVO120-48S12-6L
48V	12V	10A	93%	AVO120-48S12B-6L
48V	12V	10A	93%	AVO120-48S12P-6L
48V	12V	10A	93%	AVO120-48S12PB-6L
48V	12V	10A	93%	AVO120-48S12-4LE

Notes

- Standard converter is Negative enable
- '-6' = 3.8mm pin length.
- '-P' = Positive remote control ,
- '-L' = RoHS-6 compliant.
- '-B' = Base-plate

Notes,

1\ 20Mhz bandwidth. External 10uF tantalum capacitor placed across +Vout and –Vout; 33 uF e-cap or equivalent placed across +Vin and –Vin.

2\ Efficiency measurements taken at full load and nominal line and Tamb = 25degC

3\ All specifications taken at nominal line, full load and Tamb = 25degC unless otherwise noted

4\ Mechanical dimensions are for reference only. Dimensions are in MM. Mechanical tolerance = +/- 0.5mmm

5\ Technical reference notes should be consulted for detailed information when available.

6\ All specifications subject to change without notice

7\ Warranty 2 years

8\ The through-hole terminated modules are intended for wave-soldering process – special request for other manufacturing processes to be made to Emerson

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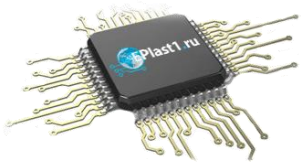
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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