

DC/DC Product Specification

Embedded Power for
Business-Critical Continuity

- Half brick fully regulated DCDC converter.

AGH150-48S05 Half brick

Input voltage: 36-75V
Single Output: 5V
Rated power: 150W

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
- Openframe structure with Baseplate option

Safety

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



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AGH150 series
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Product Description

The AGH150-48S05 is the latest high efficiency half brick. It operates from a wide input range of 36Vdc to 75Vdc and provides a regulated output voltage of 5Vdc. The output is rated to a power level up to 150Watts. 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 a baseplate design that is optimised for either contact-cooled applications or forced airflow applications.

Specifications

Feature	
Output power:	150W
Super high efficiency:	92%(5V)
Functions:	Remote control, trim function, Sense; Input LVP, output OVP and OCP, OTP, Pre-bias Open frame structure with base plate option.
Isolation:	Basic Isolation
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	5Vdc.
Trim range	+13% to -20% Vout
Output Current	30A
Ripple and noise	50mV pk-pk
Regulation	Load regulation = 16.5mV, Line regulation = 6.6mV
Switching Frequency	Fixed switching frequency 280Khz
Isolation Voltage	2000Vdc
Transient response.	150mV deviation 200 lout, 0.1A/uS) Typ.

Environmental Specification

Storage Temperature	-55 to +125 deg C
Ambient operating temp	-40 to +85 deg C
MTBF at 25degC	2 Million hours (Vin 48V, Io=30A)
OTP	110 deg C

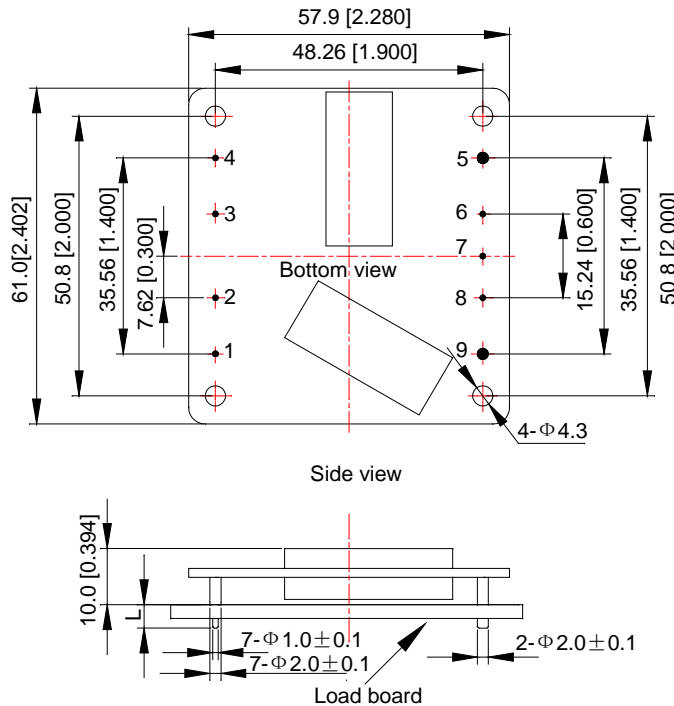
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Mechanical (open frame)



Pin #	Function
1	+V in
2	Enable
3	Case
4	-V in
5	-V out
6	-Sense
7	Trim
8	+Sense
9	+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	5V	30A	92%	AGH150-48S05-6
48V	5V	30A	92%	AGH150-48S05P-6
48V	5V	30A	92%	AGH150-48S05B-6
48V	5V	30A	92%	AGH150-48S05PB-6

Notes

- Standard converter is Negative enable
- 'B' = Baseplate
- '-6' = 3.8mm pin length.
- '-P' = Positive remote control ,

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 = +/- 0.5mm
- 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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