

100Watts

ALH25-Dual

Ultra High Efficiency



Special Features

- 100W Output loadsharing
- 48VDC input
- Open frame 2.3"x2.4"x0.50" pkg.
- -40°C to +120°C board temperature
- Trim feature, both rails
- Industry standard pin-out
- Enable (on/off) (pos or neg logic)
- OC, OV, OT protection
- 5.0V/3.3V dual outputs

Environmental

Operating PCB temperature range:

-40°C to +120°C

Storage temperature: -55°C to +125°C

Weight: 80 grams

Safety

UL	UL 1950 CAN22.2-950
TUV	EN60950

Total Power: 100 Watts
Input Voltages: 48 V
No. of Outputs: Dual

Electrical Specs

Input

Input range	36-75 VDC (48Vdc Nom.)
Efficiency	88% typical
Input reverse	
Voltage protection	Fuse recommended 3A.MB
Input Surge voltage	100V for 100ms

Output

Voltage tolerance	+/-1%
Line regulation	+/-0.2%
Load regulation	+/-0.5%
Ripple/noise	200mV P-P
Temperature coefficient	+/-0.02%/°C (max)
Transient response	3% Vo max recovery <500msec (50% to 75% step load change)
Switching frequency	250 kHz typical

Control

Enable	on = 1.2Vdc Max (Neg Enable) off = 3Vdc Min (Neg Enable) Ref. to -Vin. TTL compatible
Input current (enable off)	<2ma.
Output trim	Both outputs +/-10% minimum

Isolation

I/O isolation	1500Vdc
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Ordering Information

Input Voltage	Output 1 Voltage / Current	Output 2 Voltage / Current	Model Number
36-75V	5.0V @ 20A	3.3V @ 25A	ALH25AF48N

Note:

Enable function

“N” = negative logic enable (without “N” = positive enable)

1. Maximum output power not to exceed 100W total for 5/3.3V version 20/25A).
2. Any output loading ratio within the maximum specified limits is possible.

Pin Assignments

Dual Outputs

1. -Vin
2. Not present on this converter
3. Control (on/off)
4. +Vin
5. +Vo2
6. -Vo2
7. TRM2
8. +Vo1
9. -Vo1
10. TRM1

Notes:

1. 20 MHz bandwidth. An external 2.20mF ceramic capacitor is recommended to be placed from +Vout to -Vout.
2. Recommended external components below:
C1 = 100uF/100V, C2 =C4= metallic film, 47uF/50V
C3=C5= Electrolytic 1000uF/10V, C6= .01uF/1500V
3. All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
4. All specifications subject to change without notice. Mechanical drawings are for reference only
5. Please refer to the Technical Reference Notes for more information.
6. Warranty: 1yr

