

Model: BAP 200-125/48FTND (Standard ND Stock Version)
OSD: 1484 8614 SPND
Summary description: 200W, Single Output DC/DC Converter,
 125V to 48V/4A
Customer Name: ABS ND Stock



Product description:

This rugged, industrial quality DC/DC converter uses field-proven topology to generate the required output power. It is a mature design with a track record in hundreds of applications. The series has large design headrooms and is rated for full operation over the specified temperature range. Cooling is via baseplate to a heatsink surface and by natural convection. Low component count and the use of components with established reliability results in a high MTBF. The unit has two output terminals: a *Redundant* via built-in redundancy diode, and a *Direct*, which bypasses the redundancy diode. The unit is manufactured at our plant under strict quality control.

Special Feature: These stock units are individually packed and ready for immediate shipping

SPECIFICATIONS

Input Voltage

125Vdc nominal
 Operating range 88-140Vdc
 Input Current: 2.8A max

Input Protection

Inrush current limiting
 Varistor
 Reverse polarity protection by series diode
 Internal safety fuse
 Lower input voltages than specified minimum will not damage the unit

Isolation

1500Vdc input to chassis
 2250Vdc input to output
 500Vdc output to chassis

Standards / Approvals

Designed to meet EN60950 requirements and corresponding UL/CSA standards

EMI

EN55022 Class B

Switching Frequency

55kHz +/- 3kHz

Output Voltage/Current

Direct: 48.8Vdc +/- 0.2V/4A
 Redundant: 48V/4A, tracking
Direct output with one diode drop
 Total output power 200W continuous
 Adjustment range: 47.8-56V *Direct* output
 Output is floating, either terminal can be grounded

Redundancy Diode

Installed on *Redundant* output

Line/Load Regulation

+/- 1% combined from no load to full load on the *Direct* output

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

Output Ripple / Noise

Better than 80mVrms or 400mVpp (@ 20MHz BW)

Output Overload Protection

Rectangular current limiting with short circuit protection.
 Thermal shutdown with automatic reset in case of insufficient cooling
 Current Limit set to: 4.5A +/- 0.4A

Output Overvoltage Protection

Double regulator loop. Second loop completely stable and independent of main regulator loop
 OVP setting: 58V +/- 1.5V (*Direct* output)

Efficiency

85% at full load

Operating Temperature Range

0°C to +50°C for full specification with proper cooling

Temperature Drift

0.03% per °C over operating temperature range

Cooling

By conduction via base plate and natural air convection

Environmental Protection

Basic ruggedizing

Shock/Vibration

IEC 61373 Cat 1 A&B as minimum

Humidity

5-95% non-condensing

MTBF

Min. 150,000 hours @ 45°C

Indicators

Green "Power On" LED visible through the cooling slots

Alarm Output

Output Fail Form C contacts

Package / Dimensions (WxHxL)

F2: 114 x 57 x 254mm
 (4.5"x 2.25"x 10.0")
 Mounting holes are clear

Weight

1.3kg (2.9 lbs)

Connections


9-pole barrier-type terminal block, 3/8" spacing

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Drawn by TS/bh	Date May 7, 2009
Checked by TS	Drawing No./ Rev. SCD 1484 8614 SPNDA3
Approved by TS	

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