

Source Control Document.

Model: PWI 50-5PTND (Standard ND Stock Version)
OSD No.: 1337 0199
Summary description: Single Output, Conduction Cooled
50W Power Supply, 5V/10A



Product description:

The unit is a universal-input-range converter in a potted case. It is a special version of the MIW100 design family with a field proven track record. The unit is fully encapsulated with thermally-conductive potting compound, which provides excellent conduction cooling via the base plate of the unit.

SPECIFICATIONS

Input Voltage

95 – 264Vac universal
46 – 64Hz
Input Current 1.2A max.

Input Protection

Inrush current limiting
Varistor
Internal safety fuse
Lower voltage than the specified minimum
input will not damage the unit

Isolation

2200VDC input to chassis
4300VDC input to output
8mm spacing
500VDC output to chassis

Standards

Designed to meet EN60950 and corresponding
UL and CSA standards.

EMI

EN55022 Class A minimum

Hold Up Time

Min. 5ms at nominal input for 5% drop of
the output voltage

Switching Frequency

42KHz +/- 2KHz

Output Voltage/Current

5.0Vdc, +/- 0.05V/10A max.
Output is floating, either terminal can
be grounded

Redundancy diode

None

Line/Load Regulation

+/- 1% combined from zero load to
full load

Dynamic Response

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

Output Ripple/Noise

Better than 30mVrms or 100mVpp
(@ 20MHz BW)

Output Overload Protection

Rectangular current limiting with
hiccup type short-circuit protection
Current Limit: 12A +/- 1A

Output Overvoltage Protection

Second regulator loop, completely
stable and independent of main
regulator loop
OVP setting: 5.6V +/- 0.2V

Efficiency

min. 75% at full load

Operating Temperature Range

-25°C to +70°C for full
specification with proper conduction
cooling

Temperature Drift

0.03% per °C over operating
temperature range

Cooling

Conduction via base plate, installed on
customer chassis or heatsink

MTBF

150,000 hours @ 45°C

Indicators

None

Control Input

None

Alarm Outputs

None

Environmental Protection

Full potting

Packaging / Dimensions (WxHxL)

P99: 81 x 71 x 156mm
(3.2" x 2.8" x 6.2")
including terminal block

Weight

0.8 kg (1.8 lbs.)

Connections

Barrier type terminal block, 6 poles,
with 3/8" spacing

RoHS Compliance

Fully compliant

Warranty

Twelve months subject to application
within good engineering practice

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