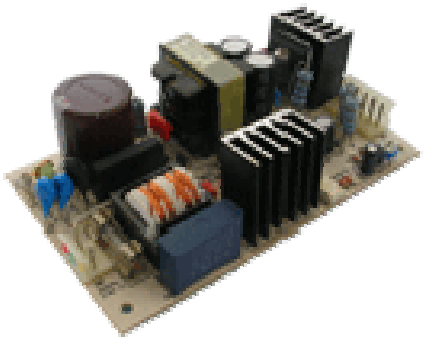
TRIAD MAGNETICS

Switch Mode Power Supplies
Single Output
AC/DC Power Supply

ALS50-3.3



Description:

The ALS50-3.3 is a single output power supply. It provides a DC output power in a cost-effective open frame package. Excellent performance specifications are provided, together with compliance to European EMC (EN55022, Class A), and Low Voltage directive (TUV EN60950).

Specifications (@25C)

Input Characteristics:

Input Voltage (5):	110/220Vac (90-260Vac, 120-370Vdc)
Input Frequency Range (1):	47-63Hz
Max Input Current:	1.0A @ 110Vac; 0.5A @ 220Vac
Max Inrush Current:	30A @ 220VAc
Hold-Up Time:	17ms typ @ 110Vac, 100% Load

Output Characteristics:

Output Voltage:	3.3Vdc
Output Current (1,6):	9.1A
Output Power (1):	30W
Ripple & Noise (20 MHz BW):	50mV
Line Regulation (4):	1.0%
Load Regulation (3):	2.0%
Temperature Drift:	0.02%/°C
Rise-up Time:	500ms max, 110Vac, 100% Load
Over Current Protection:	Shutdown, O.C.P Point>120%, recycle AC supply to recover
Over Voltage Protection:	>105% Zener across output
Short Circuit Protection:	Unit shutdown, recycle AC supply to recover
Adj. O/P Voltage Range (1,2):	±10%

Environmental Specifications:

EMI (Conducted RFI):	Built to comply with EN55022-B
EFT:	Built to comply with IEC61000-4-4
ESD:	Built to comply with IEC61000-4-2
Surge:	Built to comply with IEC61000-4-5
Operating Temperature:	Convection cooling 0 to 50°C:100%; 60°C:70%
Operating Humidity:	30% to 90% RH
Storage Temperature:	-25 to 85°C
Storage Humidity:	10% to 95% RH
Cooling:	Convection cooling
Vibration:	1min sweep 10-55Hz, 2G Amplitude, X,Y,Z axis 1hr each
Shock:	<20G

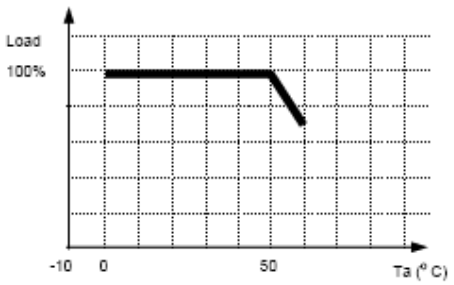
General Specifications:

Efficiency:	70% Typical
Dimensions (WxLxH):	76.20x127x35.56mm
Weight:	300g
Warranty:	2 years @ 40°C, 100% Load

Safety Standards:

Standard:	UL1950 (E204980) TUV EN60950 (50070245) Built to meet CSA 22.2
Dielectric Strength:	I/P-O/P:3kVac, I/P-FG:2.5kVac, <10mA, 1min
Insulation Resistance:	O/P-FG: 500VDC>100Mohms

DERATING CURVE



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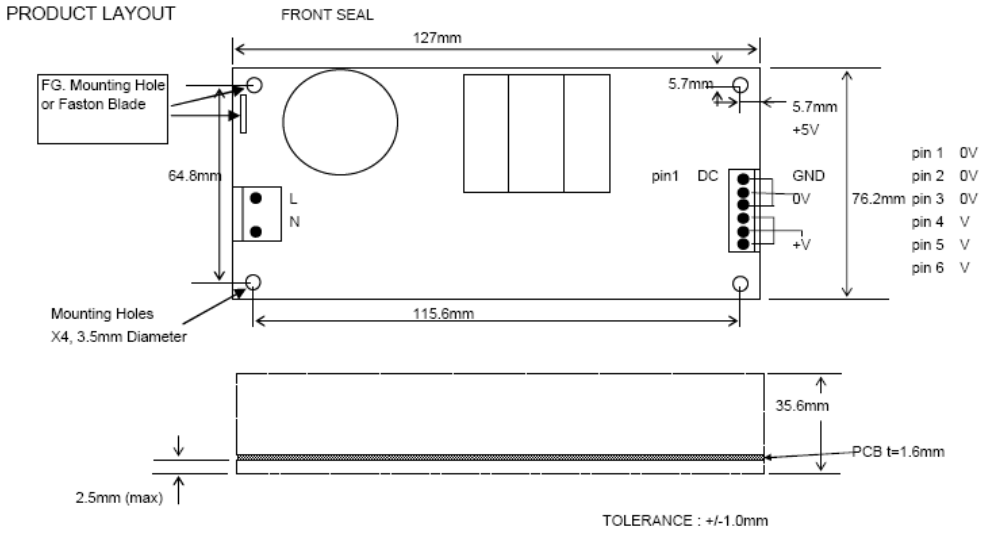
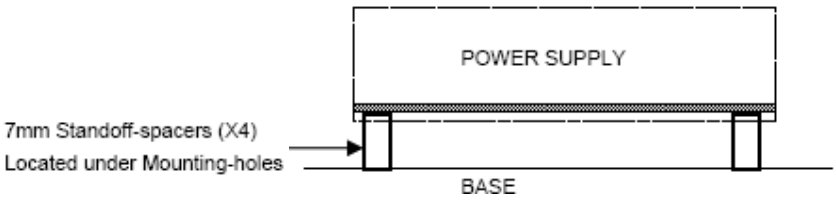
Technical Notes:

1. Throughout Vin range. Vout must be measured as near as possible to power supply.
2. Total output power by any combination of channel must not exceed Pou(m).
3. Vout deviation as Iout varies from Io(min)-Io(max).
4. Vout deviation as Vin varies from 90 – 260Vac.
5. Where UL and CSA is concerned, official rated input voltage range is 100-120Vac/200-240Vac.
6. Current derated to avoid issues with heat dissipation due to large load current at such low voltage.

Outline Dimensions (mm):



Mounting Method:



Connector Types:

AC Housing: Molex 09-50-3031
DC Housing: Molex 09-50-3061

Crimp Terminals: Molex 08-50-0105
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RoHS Compliance: As of manufacturing date February 2005, all standard products meet the requirements of 2011/65/EU, known as the RoHS initiative.

* Upon printing, this document is considered “uncontrolled”. Please contact Triad Magnetics’ website for the most current version.

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