

Switch Mode Power Supplies Single Output AC/DC Power Supply

# ALS50-5

### **Description:**

The ALS50-5 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): Input Frequency Range (1): Max Input Current: Max Inrush Current: Hold-Up Time:

110/220Vac (90-260Vac, 120-370Vdc) 47-63Hz 1.0A @ 110Vac; 0.5A @ 220Vac 30A @ 220VAc 17ms typ @ 110Vac, 100% Load

# **Output Characteristics:**

**Output Voltage:** 5.0Vdc Output Current (1,6): 9.0A Output Power (1): 45.0W Ripple & Noise (20 MHz BW): 75mV Line Regulation (4): 1.0% Load Regulation (3): 2.0% 0.02%/°C Temperature Drift: 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): EFT: ESD: Surge: Operating Temperature: Operating Humidity: Storage Temperature: Storage Humidity: Cooling: Vibration: Shock: Built to comply with EN55022-B Built to comply with IEC61000-4-4 Built to comply with IEC61000-4-2 Built to comply with IEC61000-4-5 Convection cooling 0 to 50°C:100%; 60°C:70% 30% to 90% RH -25 to 85°C 10% to 95% RH Convection cooling 1min sweep 10-55Hz, 2G Amplitude, X,Y,Z axis 1hr each <20G

# General Specifications:

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

#### Safety Standards: Standard:

Dielectric Strength: Insulation Resistance:



Web: www.TriadMagnetics.com Phone 951-277-0757 Fax 951-277-2757

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



# DERATING CURVE



460 Harley Knox Blvd. Perris, California 92571

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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 lout varies from lo(min)-lo(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 Crimp Terminals: Molex 08-50-0105

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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