

MINT1065

65W Single Output Series

Medical & ITE – Universal Input Power Supply



3 Year Warranty

- 65W Convection Cooled AC-DC Power Supply
- Universal Input 90-264 VAC
- Less than 0.5W No Load Power Dissipation
- Rugged EMC Compliant Design
- 2" x 4" x 1.2" Package
- Approved to EN/IEC/UL60601-1, 2nd Edition
- Approved to EN/IEC/UL60950-1, 2nd Edition
- Meets Efficiency Level IV Efficiency
- CE Compliant (LVD, RoHS)



International Safety Standard Approvals



Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

| | |
|--|--|
| AC Input 100-240VAC +/- 10%, 47-63 Hz single phase. | Turn On Time Less than 1 second under all rated load conditions. |
| Input Current 115VAC: 0.7A, 230VAC: 1.5A. | Hold-up Time <17 ms at 65W, nominal input (120VAC). |
| Inrush Current The inrush at 264VAC, at a cold start, will not exceed 40A. | Overvoltage Protection Built-in |
| Input Fuses F1, F2: 2.5A, 250VAC fuses provided on all models. | Overload Protection Hiccup Mode |
| Earth Leakage Current <300µA @ 264Vac, 60Hz, normal; <500µA SFC. | Short Circuit Protection Hiccup Mode |
| Efficiency Up to 90% typical. | Switching Frequency Variable 50-75kHz typical. |
| Output Power 65W continuous. | Medical Safety Standards EN/IEC/UL 60601-1, 2 nd Edition, EN/IEC/UL60950-1, 2 nd Edition |
| Ripple and Noise 1% pk-pk max., 20MHz BW, differential mode. Measured with noise probe directly across output terminals. | Isolation Input-Output: 4000VAC, Input-Ground: 1800VAC, Output-Ground: 500VAC |
| Output Voltage See chart. | Operating Temperature 0° to 70°C (derate from full rated power above 40°C). |
| Voltage Adjustability Voltage pre-set by fixed resistance. | Cooling Convection |
| Minimum Load Not required. | Output Power Derating See derating chart |
| Total Regulation +/- 2%. See chart. | Storage Temperature -40 to +85°C. |
| Transient Response 500µs max., 50% load step, typical. | Relative Humidity 5% to 95%, non-condensing |

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| Model Number | Volts (V) | Output Parameters | | | Total Regulation | OVP Threshold |
|------------------|-----------|-------------------|------------------------|----------------|------------------|---------------|
| | | Open Frame | Output Current w/cover | Ripple & Noise | | |
| MINT1065X1275C01 | 12V | 5.25A | 4.00A | 120mV | ±2% | 15.0 ± 1.5V |
| MINT1065X1375C01 | 13.2V | 4.80A | 3.63A | 140mV | ±2% | 16.0 ± 1.5V |
| MINT1065X1575C01 | 15V | 4.33A | 3.20A | 150mV | ±2% | 18.0 ± 1.5V |
| MINT1065X1875C01 | 18V | 3.50A | 2.66A | 180mV | ±2% | 21.0 ± 2.0V |
| MINT1065X2075C01 | 20V | 3.25A | 2.40A | 200mV | ±2% | 23.0 ± 2.0V |
| MINT1065X2475C01 | 24V | 2.70A | 2.00A | 240mV | ±2% | 27.0 ± 2.0V |
| MINT1065X4875C01 | 48V | 1.35A | 1.00A | 480mV | ±2% | 55.0 ± 4.0V |

Specifications (continued)

Vibration

Operating: 0.003 g²/Hz, 1.5 g_{rms} overall, 3 axes, 10 min. / axis
 Non-Operating: 0.026 g²/Hz, 5.0 g_{rms} overall, 3 axes, 1 hr. / axis

Dimensions

W 2.0" x L 4.0" x H 1.17". See outline drawing.

Weight

150 grams

Shock

Operating: Half-sine, 20 g_{pk}, 10 ms, 3 axes, 6 shocks total
 Non-Operating: Half-sine, 40 g_{pk}, 10 ms, 3 axes, 6 shocks total

Operating Altitude

-500 to 10,000 ft.

Non-operating Altitude

-500 to 40,000 ft.

EMI/EMC Compliance

| | |
|---|---|
| Conducted Emissions | EN55011 Class B, FCC Part 15, Class B. |
| Radiated Emissions | EN55011 Class A, FCC Part 15, Class A. |
| Static Discharge Immunity | EN61000-4-2, 6kV Contact Discharge, 8kV air discharge |
| Radiated RF Immunity | EN61000-4-3, 3V/m. |
| EFT/Burst Immunity | EN61000-4-4, 2kV/5kHz.. |
| Line Surge Immunity | EN61000-4-5, 1kV differential, 2kV common-mode |
| Conducted RF Immunity | EN61000-4-6, 3Vrms |
| Power Frequency Magnetic Field Immunity | EN61000-4-8, 3A/m |
| Voltage Dip Immunity | EN61000-4-11 240VAC, 0%/0.5 cycle, 40%/5cycles, 70%/25 cycles |

Model Number Key

MINT 1 065 X 12 75 C 01

01 = Standard Model, 02 and higher indicates a modified model.

Input Connector - "C" = 2 pin header

"75" = Output Connector - 4 pin header

Output Voltage: "12" = 12V output, "24" = 24V output, etc.

Model Configuration: "A" = Class I (grounded); "B" = Class II (ungrounded); "C" =

Chassis/cover provided (class I only)

Output Power (Watts) - "065" = 65W

of Outputs

Product Family: "M" = Medical, "I" = Internal, "NT" = New Technology

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Mechanical Drawings and Connector Information

MINT1065 Series Connectors

INPUT:

J1 AMP P/N 641937-1

PIN 1) AC LINE

PIN 2) AC NEUTRAL

OUTPUT:

J2 AMP P/N 640445-4

PIN 1) +Vout PIN 3) -Vout

PIN 2) +Vout PIN 4) -Vout

MATING CONNECTORS:

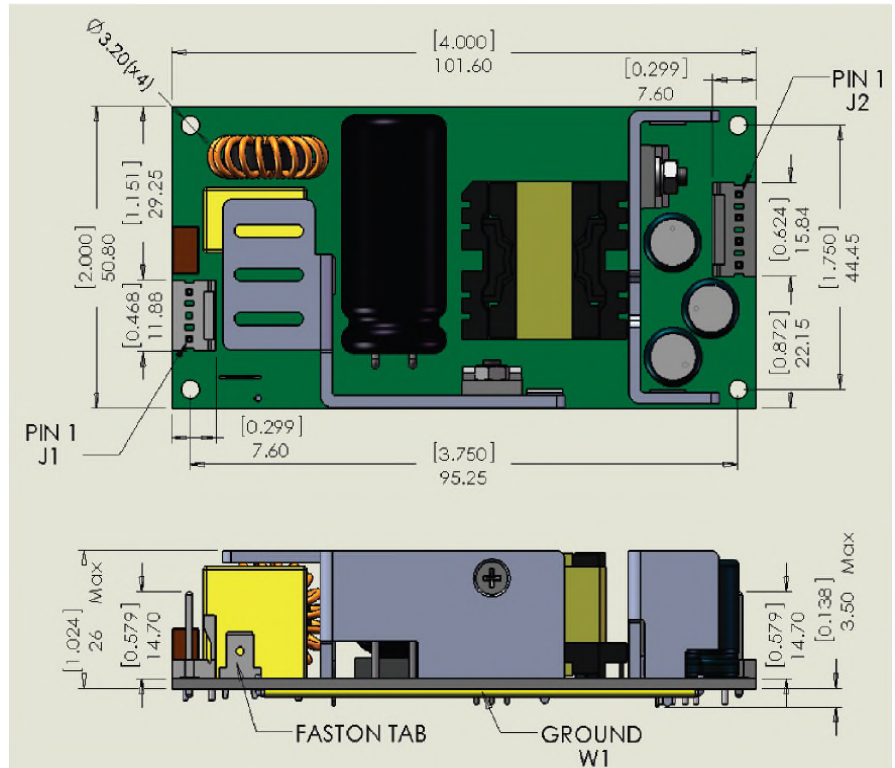
P1 Molex 09-50-3031

P2 Molex 09-50-3041

Pins: Molex 08-50-0105

GND CONNECTION (Class I version)

0.187" FASTON TAB



Output Power Derating Curve

