## **MINT1065D**



65W Single Output Series

### Medical, 3<sup>rd</sup> Edition Certified Universal Input Power Supply

3 Year Warranty

- •65W Convection Cooled AC-DC Power Supply
- •Universal Input 90-264 VAC
- •Class I or Class II input versions
- •Less 0.5W No Load Power Dissipation
- •Rugged EMC Compliant Design
- •2" x 4" x 1.2" Package
- •ANSI AAMI ES/CSA/EN/IEC 60601-1, 3rd Edition Certified
- •Meets Efficiency Level IV Efficiency
- .C € Compliant (LVD, RoHS)







|   | OONDON  |  |
|---|---|--|
| <b>Specifications</b>   | All Specifications are typical at nominal input, full load at 25°C unless otherwise stated. |  |
| <b>AC Input</b><br>100-240VAC +/- 10%, 47-63 Hz single phase.   | Turn On Time Less than 1 second under all rated load conditions.                            |  |
| Input Current<br>115VAC: 1.5A, 230VAC: 0.7A.  | Hold-up Time <17 ms at 65W, nominal input (120VAC).   |  |
| Inrush Current The inrush at 264VAC, at a cold start, will not exceed 50A.  | Overvoltage Protection Built-in   |  |
| Input Fuses<br>F1, F2: 2.5A, 250VAC fuses provided on all models.   | Overload Protection Hiccup Mode   |  |
| Efficiency Up to 90% typical.   | Short Circuit Protection Hiccup Mode  |  |
| Earth Leakage Current Earth Leakage Current <300μA, NC; <500μA SFC @ 264Vac, 60 Touch Current is <100μA NC, <500μA SFC @ 264Vac, 60Hz, measured from output to ground | Isolation OHz Input-Output: 4000Vac/2 MOOP Input-Ground: 1500Vac/1MOOP                      |  |
| Output Power<br>65W continuous.   | Medical Safety Standards ANSI AAMI ES/CSA/EN/IEC 60601-1, 3rd Edition                       |  |
| Ripple and Noise 1% pk-pk max., 20MHz BW, differential mode. Measured with no probe directly across output terminals.   | Switching Frequency  oise Variable 50-75kHz typical.  |  |
| Output Voltage<br>See chart.  | Operating Temperature 0° to 70°C (derate from full rated power above 40°C).                 |  |
| <b>Voltage Adjustability</b><br>Voltage pre-set by fixed resistance.  | Cooling<br>Convection   |  |
| Minimum Load<br>Not required.   | Output Power Derating See derating chart  |  |
| Total Regulation<br>+/- 2%. See chart.  | Storage Temperature<br>-40 to +85°C.  |  |
| Transient Response<br>500μs max., 50% load step, typical.   | Relative Humidity 5% to 95%, non-condensing   |  |

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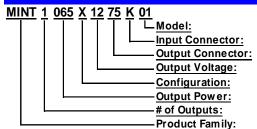
#### 3 Year Warranty

| Output Parameters |           |                        |                   |                   |                     |                         |
|-------------------|-----------|------------------------|-------------------|-------------------|---------------------|-------------------------|
| Model<br>Number   | Volts (V) | Output C<br>Open Frame | urrent<br>w/cover | Ripple<br>& Noise | Total<br>Regulation | OVP<br>Threshold        |
| MINT1065D1275K01  | 12V       | 5.25A                  | 4.00A             | 120mV             | ±2%                 | 15.0 ± 1.5V             |
| MINT1065D1375K01  | 13.2V     | 4.80A                  | 3.63A             | 140mV             | ±2%                 | 16.0 ± 1.5V             |
| MINT1065D1575K01  | 15V       | 4.33A                  | 3.20A             | 150mV             | ±2%                 | 18.0 ± 1.5V             |
| MINT1065D1875K01  | 18V       | 3.50A                  | 2.66A             | 180mV             | ±2%                 | $21.0 \pm 2.0 \text{V}$ |
| MINT1065D2475K01  | 24V       | 2.70A                  | 2.00A             | 240mV             | ±2%                 | 27.0 ± 2.0V             |
| MINT1065D4875K01  | 48V       | 1.35A                  | 1.00A             | 480mV             | ±2%                 | 55.0 ± 4.0V             |

| Specifications (continued)          |   |   |  |  |  |
|-------------------------------------|---|---|--|--|--|
| Vibration Operating: Non-Operating: | 0.003 g <sup>2</sup> /Hz, 1.5 g <sub>rms</sub> overall, 3 axes, 10 min. / axis 0.026 g <sup>2</sup> /Hz, 5.0 g <sub>rms</sub> overall, 3 axes, 1 hr. / axis | 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 |  |  |  |
| Pollution Degree 2                  |   | Overvoltage Category OVCII (2500V for Mains), OVCI (1500V for Secondary)  |  |  |  |
| Dimensions<br>W 2.0" x L 4.0" x     | H 1.17". See outline drawing.   | Operating Altitude Up to 4000m.   |  |  |  |
| Weight<br>150 grams                 |   | Non-operating Altitude<br>-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 |





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

"K" = 3 pin Header (class I input); "C" = 2 pin Header (class II input).

Output Connector: "75" = Output Connector, 4 pin header. Other options available, consult factory.

"12" = 12V, "24" = 24V, etc.

"D" = EN60601-1 3rd Edition Certified, "C" = Optional chassis & cover (class I only).

"065" = 65W "1" = Single output

"M" = Medical, "I" = Internal, "NT" = New Technology

## **MINT1065D**







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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

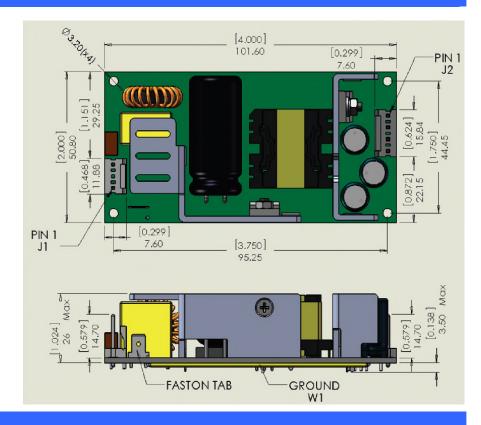
PIN 1) +Vout PIN 3) -Vout PIN 2) +Vout PIN 4) -Vout

#### MATING CONNECTORS:

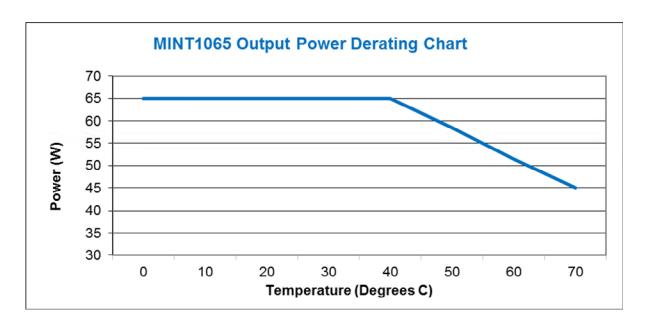
P1 Molex 09-50-3031 P2 Molex 09-50-3041 Pins: Molex 08-50-0105

**GND CONNECTION (Class I version)** 

0.250" FASTON TAB



#### **Output Power Derating Curve**



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