# MENB1040

Universal 40 Watt Series

Medical Switch-Mode Power Supply

- Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II
- Desktop Style
- Certified to UL/EN60601-1
- 5V to 24V Single Output Models, up to 40W
- Modified and Custom Designs Available
- Regulated Output with Low Ripple
- Impact-Resistant Polycarbonate Enclosure
- No load Power Consumption <0.3W

## RoHS Specifications

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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Input</td>
<td>100-240VAC, -/-10%, 47-63 Hz, 1Ø</td>
</tr>
<tr>
<td>Input Current</td>
<td>100VAC: 1.1A</td>
</tr>
<tr>
<td>Inrush Current</td>
<td>60 A peak, 264 V, cold start</td>
</tr>
<tr>
<td>Input Fuse</td>
<td>3.15A, 250V Internal Primary Current Fuse is provided</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Meets EISA2007, CEC Efficiency Level V, EU (EC) No 278/2009 Phase II</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>See chart</td>
</tr>
<tr>
<td>Output Power</td>
<td>See chart</td>
</tr>
<tr>
<td>Ripple and Noise</td>
<td>1% pk-pk max., 20MHz BW</td>
</tr>
<tr>
<td>Line &amp; Load Voltage Regulation</td>
<td>Line: +/- 1%, Load: +/-5%</td>
</tr>
<tr>
<td>Transient Response</td>
<td>500µs max., 50% load step, typical</td>
</tr>
<tr>
<td>Minimum Load</td>
<td>Not required</td>
</tr>
<tr>
<td>Case Material</td>
<td>Black 94V0 Polycarbonate</td>
</tr>
<tr>
<td>Case Dimensions</td>
<td>102 x 60 x 32mm. See outline drawing</td>
</tr>
<tr>
<td>Weight</td>
<td>250g</td>
</tr>
</tbody>
</table>

## EMC Specifications

- Conducted Emissions
  - EN55011 Class B, FCC Part 15, Class B.
- Radiated Emissions
  - EN55011 Class B, FCC Part 15, Class B.
- Line Frequency Harmonics
  - EN61000-3-2, Class A
- Voltage Fluctuations/Flicker
  - EN61000-3-3
- 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, Criteria A

## Safety Standards

- EN/IEC/CSA/UL60601-1
- See chart below

## Storage Temperature

- -30 to +85°C

## Operating Temperature

- 0° to 40°C, no derating

## Relative Humidity

- 5% to 95%, non-condensing

## Altitude

- 0 to 10,000 ft

## Output Cable

- #18AWG (UL1185), 1,500mm, 2 conductor

## Output Connector

- 2.5mm barrel type (Ault #3), center positive (+)
MENB1040
Universal 40 Watt Series
Medical Switch Mode Power Supply
3 Year Warranty

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Volts (V)</th>
<th>Output Current (max)</th>
<th>Max Watts</th>
<th>Ripple (Vp-p max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENB1040A0503F01</td>
<td>5 V</td>
<td>5.00 A</td>
<td>25.0 W</td>
<td>50mV</td>
</tr>
<tr>
<td>MENB1040A0903F01</td>
<td>9 V</td>
<td>4.00 A</td>
<td>36.0 W</td>
<td>90mV</td>
</tr>
<tr>
<td>MENB1040A1203F01</td>
<td>12 V</td>
<td>3.40 A</td>
<td>40.8 W</td>
<td>120mV</td>
</tr>
<tr>
<td>MENB1040A1503F01</td>
<td>15 V</td>
<td>2.76 A</td>
<td>40.5 W</td>
<td>150mV</td>
</tr>
<tr>
<td>MENB1040A1803F01</td>
<td>18 V</td>
<td>2.20 A</td>
<td>39.6 W</td>
<td>180mV</td>
</tr>
<tr>
<td>MENB1040A2403F01</td>
<td>24 V</td>
<td>1.70 A</td>
<td>40.8 W</td>
<td>240mV</td>
</tr>
</tbody>
</table>

Notes: Part numbers above include #3 output connector and IEC320 C14 grounded input receptacle. See below for other options.

Model Number Key

MENB 1 040 A VV 03 F 01

- **Model**: "01" = Standard, "02" and higher indicates a modified model.
- **Input Connector**: "F" = IEC320 C14 grounded, Other options available, see next page.
- **Output Connector**: "03" = 2.5mm Barrel Type Connector. Other options available, contact factory.
- **Output Voltage**: "05" = 5Vdc, "12" = 12Vdc, "24" = 24Vdc, etc.
- **Model**: "A" = Original Configuration
- **Output Power**: "040" = 40 Watts
- **# of Outputs**: "1" = Single Output
- **Product Family**: "M" = Medical, "E" = External, "NB" = Model Series Designator

Input Receptacle Options

<table>
<thead>
<tr>
<th>IEC320 - C14</th>
<th>IEC320 - C18</th>
<th>IEC320 - C8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I Class II</td>
<td>Class II</td>
<td></td>
</tr>
<tr>
<td>Grounded (F) Ungrounded (G)</td>
<td>&quot;Shaver&quot; (N)</td>
<td></td>
</tr>
</tbody>
</table>

Output Connector

Outline Drawing

Dimensions are in mm

Data Sheet © 2010 SL Power Electronics Corp. The information and specifications contained herein are believed to be correct at the time of publication. Rev. 12-22-2010
However, SL Power accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.