1 Photos
The photographs below show the PMP8968 Rev A prototype assembly. This circuit was built on a PMP8852 Rev A PCB.

2 Standby Power
With no load attached to the output of the supply, the unit draws less than 10mW of input power with a 230VAC/50Hz input.

3 Efficiency

![Efficiency Graph](image_url)

- 230VAC/50Hz
### 4 Current Limit

A plot of the output voltage versus load current is shown below.

![Plot of output voltage versus load current](image)

<table>
<thead>
<tr>
<th>Iout</th>
<th>Vout</th>
<th>Vin</th>
<th>Iin</th>
<th>Pin</th>
<th>PF</th>
<th>Pout</th>
<th>Losses</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>5.64</td>
<td>229.8</td>
<td>0.004</td>
<td>0.009</td>
<td>0.00</td>
<td>0.01</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>0.025</td>
<td>5.52</td>
<td>229.8</td>
<td>0.004</td>
<td>0.31</td>
<td>0.37</td>
<td>0.14</td>
<td>0.17</td>
<td>44.4%</td>
</tr>
<tr>
<td>0.050</td>
<td>5.49</td>
<td>229.8</td>
<td>0.006</td>
<td>0.52</td>
<td>0.40</td>
<td>0.27</td>
<td>0.25</td>
<td>52.8%</td>
</tr>
<tr>
<td>0.075</td>
<td>5.46</td>
<td>229.8</td>
<td>0.007</td>
<td>0.72</td>
<td>0.43</td>
<td>0.41</td>
<td>0.31</td>
<td>57.2%</td>
</tr>
<tr>
<td>0.100</td>
<td>5.45</td>
<td>229.8</td>
<td>0.009</td>
<td>0.90</td>
<td>0.45</td>
<td>0.55</td>
<td>0.36</td>
<td>60.6%</td>
</tr>
<tr>
<td>0.125</td>
<td>5.45</td>
<td>229.8</td>
<td>0.010</td>
<td>1.11</td>
<td>0.46</td>
<td>0.68</td>
<td>0.43</td>
<td>61.4%</td>
</tr>
<tr>
<td>0.150</td>
<td>5.44</td>
<td>229.8</td>
<td>0.012</td>
<td>1.33</td>
<td>0.48</td>
<td>0.82</td>
<td>0.51</td>
<td>61.4%</td>
</tr>
<tr>
<td>0.175</td>
<td>5.45</td>
<td>229.8</td>
<td>0.014</td>
<td>1.53</td>
<td>0.49</td>
<td>0.95</td>
<td>0.58</td>
<td>62.3%</td>
</tr>
<tr>
<td>0.198</td>
<td>5.45</td>
<td>229.8</td>
<td>0.015</td>
<td>1.73</td>
<td>0.50</td>
<td>1.08</td>
<td>0.65</td>
<td>62.4%</td>
</tr>
<tr>
<td>0.223</td>
<td>5.46</td>
<td>229.8</td>
<td>0.016</td>
<td>1.93</td>
<td>0.51</td>
<td>1.22</td>
<td>0.71</td>
<td>63.1%</td>
</tr>
<tr>
<td>0.256</td>
<td>5.46</td>
<td>229.8</td>
<td>0.018</td>
<td>2.21</td>
<td>0.52</td>
<td>1.40</td>
<td>0.81</td>
<td>63.2%</td>
</tr>
</tbody>
</table>
5 Thermal Images

The ambient temperature was 25°C. The output was loaded with 250mA. The input was 230VAC/50Hz.
6  Startup

6.1  230VAC/50Hz Startup – 0A Load

6.2  230VAC/50Hz Startup – 22Ω Load
7 Output Ripple Voltage

The output was loaded with 250mA. The input was 230VAC/50Hz.

8 Load Transients

8.1 0A to 250mA Transient – 230VAC/50Hz Input
8.2 30mA to 250mA Transient – 230VAC/50Hz Input

9 Switching Waveforms

The images below show the voltage waveforms on the switching devices within the supply. The input was 265VAC/50Hz. The output was loaded 0.25A.

9.1 Primary Waveforms

The image below shows the drain-to-source voltage on Q1.
9.2 Secondary Waveforms

The image below shows the voltage on the anode of D3.
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