GENERAL SPECIFICATION

The purpose of the document is to specify the functional requirements of an 8W switching AC adaptor.

Features:
- Two pin wall mount input plug
- Wide range AC input
- Level B EMI filter
- Fully enclosed plastic case
- Fully regulated output
- High efficiency
- High Quality

1) INPUT

<table>
<thead>
<tr>
<th>Description</th>
<th>Min.</th>
<th>Nominal</th>
<th>Max.</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>90VAC</td>
<td>100/240VAC</td>
<td>264VAC</td>
<td>Auto Range, 50/60Hz</td>
</tr>
<tr>
<td>Input Current(rms)</td>
<td>1.0 Arms Max.</td>
<td>At any input voltage and Max. DC output rated load.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Frequency</td>
<td>47Hz</td>
<td>50/60Hz</td>
<td>63Hz</td>
<td>-</td>
</tr>
<tr>
<td>Inrush Current</td>
<td>70 Amps Max.</td>
<td>Cold start at 230 Vac input, with rated load and 25 °C ambient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Leakage Current</td>
<td>1 mA Max.</td>
<td>At 240Vac input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficiency</td>
<td>70% typ.</td>
<td>At full load and 115 VAC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) OUTPUT

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Nominal Voltage</th>
<th>Nominal Power</th>
<th>Output Current (MIN, MAX)</th>
<th>Line Regulation</th>
<th>Load Regulation</th>
<th>Ripple &amp; Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFE-9FD</td>
<td>9V</td>
<td>8W</td>
<td>9.0V, 0.6A</td>
<td>±1%</td>
<td>±5%</td>
<td>90mVp-p</td>
</tr>
<tr>
<td>SFE-5FD</td>
<td>5V</td>
<td>8W</td>
<td>5.0V, 1.0A</td>
<td>±1%</td>
<td>±5%</td>
<td>40mVp-p</td>
</tr>
<tr>
<td>SFE-12FD</td>
<td>12V</td>
<td>8W</td>
<td>12.0V, 0.5A</td>
<td>±1%</td>
<td>±5%</td>
<td>120mVp-p</td>
</tr>
</tbody>
</table>

NOTE: The ripple and noise are as follows when measure with Max. Bandwidth of 20 MHz and parallel 10uF/0.1uF, crossed connected at testing point.

2.1) Hold up time: 12ms typical at full load @ 115VAC
2.2) Turn On Delay: 100mS Max. At 115Vac input and output Max. Load.
2.3) Rise Time: 20mS Max. At 115Vac input and output Max. Load.
2.4) Overshoot: 12% Max. When power supply at turn on or turn off.
3) PROTECTION:

3.1) Short Circuit Protection:

The power supply will be auto recovery when short circuit faults remove.

3.2) Over Power Protection:

120% ~ 180% active for 10.5W rated of power.
Total power protection at normal AC input voltage,
The power supply will be auto recovery.

3.3) Over Voltage Protection:

Build-in.

4) ENVIRONMENT

4.1) Operating Temperature:

5°C to 55°C, Full load, Normal operation.

4.2) Storage Temperature:

-20°C to 85°C Without package

4.3) Relative Humidity:

5%(0℃) ~ 90%(40℃) RH, 72Hrs, Full load, Normal operating

4.4) Vibration: 4.4.1) Operating: IEC 721-3-3 3M3

5~9Hz, A=1.5mm 9~200Hz,
Acceleration 5m/s²

4.4.2) Transportation: IEC 721-3-2 2M2

5~9Hz, A=3.5mm 9~200Hz, Acceleration=5m/s²
200~500Hz, Acceleration=15m/s² 3 Axes, 10 cycles
per axis. (No permanent damage may occur during testing.
The product has to restore to its original situation after power off/on.)

4.5) Dropping (packed):

1 corner, 3 edges, and 6 surfaces (Height: 76 cm)
5) **SAFETY REQUIREMENTS**

5.1) EMI Requirement:
- FCC Class B
- VCCI Class B
- CISPR 22 Class B

5.2) **Dielectric Strength (Hi-Pot):**
- Primary to secondary, 3500Vac/10mA/1Seconds
- Or 4242Vdc/10mA/1Seconds

6) **MECHANICAL REQUIREMENT:**

6.1) **Enclosure:**
- The adaptor size L:58•W:25.0•H:41mm

6.2) **Input Connector:**
- Two pin wall mount input plug

6.3) Outline Drawing:  5.5/2.5/12