**Transformer Parameters**

<table>
<thead>
<tr>
<th>Core</th>
<th>Power</th>
<th>Weight</th>
<th>Dielectric Isolation</th>
<th>Voltage</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER32</td>
<td>1kW</td>
<td>40G</td>
<td>2.5kV</td>
<td>500V</td>
<td>50A</td>
</tr>
</tbody>
</table>

**Topologies**
- Full Bridge
- Half Bridge
- Boost
- Resonant
- Push Pull
- Buck
- Flyback

**Inductor Application**

![Inductor Application Diagram]

**Transformer Technical Information**

- **Isolation Voltage:**
  - Primary - Secondary: 4kVrms
  - Primary - Core: 2.5kVrms
  - Secondary - Core: 2.5kVrms
- **Switching Frequencies:** 20kHz-3MHz
- **Total AL (in kT):**
  - Y-axis: 1x10^4
  - X-axis: 100 - 1000

**Transformer Specification Example**

- **Total Output Power:** 24W
- **Topology:** Full Bridge
- **PSU Output DC Voltage & Current:** 12Vdc @ 20Adc (max)
- **Primary Inductance:** 9µH ± 25%
- **Primary Winding Current:** 20A rms
- **Secondary Winding Current:** 20A rms
- **Switching Frequency:** 125kHz
- **Minimum Bus Voltage:** 9V
- **Maximum Bus Voltage:** 16V
- **Turns Ratio:** Primary to Secondary: 1:2 (+2 bias on primary & secondary sides)
- **Cooling:** Heat sink
- **Ambient Temperature:** -20°C to +80°C
- **Insulation Test Voltage:**
  - Primary to Secondary: 1000Vrms
  - Primary to Core: 500Vrms
  - Secondary to Core: 500Vrms
- **Standard:** EN60950

**Dimension Diagram**

![Dimension Diagram]

1: Bias
2: Primary
3: Secondary
4: Bias
5: Secondary
6: Primary
7: Bias
8: Bias
9: Bias

**1kW Max Power**** SIZE 140**