Current Sense Transformers
FIS 1X5 Series

- Current sense transformers provide output feedback to the pulse control circuitry allowing low-cost regulation of switch-mode power supplies
- Fully encapsulated construction
- Isolation primary to secondary: 4000V AC
- 25A maximum primary current, 500kHz maximum frequency
- Applications: switch-mode power supplies, lighting, switch controls

Electrical Specifications @ 25°C - Operating Temperature -40°C to +125°C

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Prim/Sec Ratio</th>
<th>Sec L (mH MIN)</th>
<th>Sec DCR (Ω MAX)</th>
<th>V x τ (MAX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIS105NL</td>
<td>1:50</td>
<td>4.7</td>
<td>0.5</td>
<td>175 µVS</td>
</tr>
<tr>
<td>FIS115NL</td>
<td>1:100</td>
<td>18</td>
<td>2.0</td>
<td>350 µVS</td>
</tr>
<tr>
<td>FIS125NL</td>
<td>1:200</td>
<td>76</td>
<td>4.5</td>
<td>700 µVS</td>
</tr>
<tr>
<td>FIS155NL</td>
<td>1:500</td>
<td>470</td>
<td>16.0</td>
<td>1750 µVS</td>
</tr>
<tr>
<td>FIS105NL</td>
<td>1:1000</td>
<td>1900</td>
<td>50.0</td>
<td>3500 µVS</td>
</tr>
</tbody>
</table>

Notes:
- L: Inductance: (1-5) tested at 10 KHz & 10 mV
- V x τ: V = Rt x Is
- τ = \( \frac{1}{2\pi f} \)
- Rt (Ω): Recommended Terminating Resistance
- Is (A): sec. current
- F(Hz): Frequency

Mechanicals

Schematics

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