**Features**

Applies to high Q below 40 MHz, for utilization of band transformer range within 200-400 MHz

**Electrical Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit/Symbol</th>
<th>Condition</th>
<th>Value</th>
<th>Tol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L&lt;sub&gt;n&lt;/sub&gt;</td>
<td>nH/N&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Typ.</td>
<td>4.9</td>
<td>±5%</td>
</tr>
<tr>
<td>L&lt;sub&gt;e&lt;/sub&gt;</td>
<td>cm&lt;sup&gt;2&lt;/sup&gt;</td>
<td>N/A</td>
<td>3.19</td>
<td>Typ.</td>
</tr>
<tr>
<td>A&lt;sub&gt;n&lt;/sub&gt;</td>
<td>cm&lt;sup&gt;2&lt;/sup&gt;</td>
<td>N/A</td>
<td>0.112</td>
<td>Typ.</td>
</tr>
<tr>
<td>Approx. Material Density</td>
<td>g/cm&lt;sup&gt;3&lt;/sup&gt;</td>
<td>N/A</td>
<td>5.0</td>
<td>Typ.</td>
</tr>
<tr>
<td>Permeability</td>
<td>µ&lt;sub&gt;B&lt;/sub&gt;</td>
<td>N/A</td>
<td>10</td>
<td>±5%</td>
</tr>
</tbody>
</table>

**Resonant Circuit (---) and Broadband Frequency Range (+++)**

Mix | Range (MHz) | 2-50 MHz | 50-250 MHz | 250-500 MHz | 500MHz-2MHz | 2-10 MHz | 10-40 MHz | 40-150 MHz | 150-250 MHz | 250-500 MHz | 500 MHz to 1GHz |
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
42 | 0.3-80 | | | | | | | | | | |
3 | 0.02-1 | | | | | | | | | | |
8 | 0.02-1 | | | | | | | | | | |
1 | 0.15-3 | | | | | | | | | | |
15 | 0.15-3 | | | | | | | | | | |
2 | 0.25-10 | | | | | | | | | | |
7 | 1-25 | | | | | | | | | | |
4 | 3-40 | | | | | | | | | | |
6 | 3-40 | | | | | | | | | | |
10 | 15-100 | | | | | | | | | | |
17 | 20-200 | | | | | | | | | | |
12 | 30-250 | | | | | | | | | | |
0 | 50-350 | | | | | | | | | | |

**Temperature Rise : ΔT(°C) = [Total Power Dissipation (milliwatts)]⁻¹ · [Surface Area (cm<sup>2</sup>)]**

**Required turns = [desired L (nH)]⁻¹ · [L<sub>n</sub> (nH/N<sup>2</sup>)]**

**Peak AC Flux Density: B<sub>pk</sub> = 4A<sub>n</sub>F**

**Magnetizing Force: H = 0.4nI / l**

For additional detail, specifications and charts see:

http://www.bytemark.com/products/IPCores_index.html

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**REVISION HISTORY**

<table>
<thead>
<tr>
<th>REV</th>
<th>ECN</th>
<th>DESCRIPTION</th>
<th>SIGN &amp; DATE</th>
<th>AP DATE</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td></td>
<td>Production release</td>
<td>EO 3/7/13</td>
<td>JL 3/7/13</td>
</tr>
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</table>