LTCC
High Temperature Inductors
0.15x0.15 inch (3.8x3.8 mm)

NASCENTechnology, Inc. has developed a series of high temperature, RoHS compliant inductors using low temperature co-fired ceramic (LTCC) ferrite usable to 300°C that feature low profile, rugged packaging, and self shielding characteristics. See individual data sheets for part dimensions.

Electrical Parameters at 25 °C unless otherwise noted

<table>
<thead>
<tr>
<th>Part No.</th>
<th>No Load Inductance†</th>
<th>100 mA Inductance</th>
<th>100 mA Tolerance</th>
<th>Nominal DC Resistance ohms</th>
<th>Rated Current†† mA</th>
<th>Saturation Current* mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>85093</td>
<td>0.9</td>
<td>0.9</td>
<td>25%</td>
<td>0.4</td>
<td>-</td>
<td>275</td>
</tr>
<tr>
<td>85092</td>
<td>5.5</td>
<td>4.7</td>
<td>25%</td>
<td>1</td>
<td>-</td>
<td>225</td>
</tr>
<tr>
<td>85091</td>
<td>7.0</td>
<td>6.0</td>
<td>25%</td>
<td>0.5</td>
<td>-</td>
<td>225</td>
</tr>
<tr>
<td>85078</td>
<td>8.5</td>
<td>7.0</td>
<td>25%</td>
<td>0.25</td>
<td>-</td>
<td>275</td>
</tr>
<tr>
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<td>1.4</td>
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<tr>
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<td>80.0</td>
<td>50.0</td>
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<td>3.75</td>
<td>-</td>
<td>225</td>
</tr>
</tbody>
</table>

†Tolerance for no load inductance is ±25 %
††Current will cause a 35 °C temperature rise over ambient (measured 20 to 55 °C)
*Saturation Current is the current that results in a 35% decrease in inductance over the 100 mA Inductance.
Thickness varies by part; the range is 0.032-0.100 in [0.8-2.54 mm]

Common termination options (please add option to the end of the part number when inquiring):
- A0 Thick film AgPt with side terminations, solderable
- B0 Leads, gold plated
- C0 Thick film Au, Au wirebonding
- D0 Au over Ni, solderable
- D1 Au over Ni, Al wirebonding

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This product is protected under US Patent #6054914, #6198374 and other international patents.
Specifications subject to change without notice. 07/11