Power Filter Inductor

For Zetex ZXCD1210
Analog Input Class D Modulator

This toroidal choke was developed for Zetex Semiconductors ZXCD1210 High performance analog input Class D modulator. This application provides up to 500 Wrms into 4 Ohms. The ED0006-AL is the low pass filter for the high frequency switching PWM signal, enabling recovery of the lower frequency audio signal.

Request free evaluation samples by contacting Coilcraft or visiting www.coilcraft.com.

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### Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance</th>
<th>DCR max²</th>
<th>SRF min</th>
<th>Isat³</th>
<th>Irms (A)²</th>
<th>20°C rise</th>
<th>40°C rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED0006-AL</td>
<td>20</td>
<td>42</td>
<td>13</td>
<td>36.0</td>
<td>5.1</td>
<td>7.2</td>
<td></td>
</tr>
</tbody>
</table>

1. Inductance measured at 100 kHz, 100 mVrms, 0 Adc using an Agilent/HP 4132 impedance analyzer or equivalent.
2. DCR measured on a Valhalla 4105 ATC digital ohmmeter or equivalent.
3. DC current at which the inductance drops 10% (typ) from its value without current.
4. Current that causes the specified temperature rise from 25°C ambient.
5. Ambient temperature range: -40°C to +125°C with Irms current +125°C to +165°C with derated current
6. Storage temperature range: Component: -40°C to +165°C
   Packaging: -40°C to +80°C.
7. Electrical specifications at 25°C.

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Weight: 30.8 g
Terminations: Tin-silver-copper over copper
Packaging: 25 per tray
Power Filter Inductor – ED0006-AL

L vs Current

L vs Frequency

Temperature Rise vs Current

ESR vs Frequency

Irms Derating