# Dual Inductor for Class-D

**YA9245-AL**

**ZA9336-AL**

- Dual inductor for use in Class-D output filters
- A single shielded package contains both coils
- Very low magnetic coupling
- Designed for low distortion and the best sound quality
- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver (96.5/3.5) over copper.

**Weight** 4.6 – 4.86 g

**Ambient temperature** –40°C to +125°C with Irms current

**Maximum part temperature** +165°C (ambient + temp rise)

**Storage temperature** Component: –40°C to +125°C.

**Tape and reel packaging**:
- Component: –40°C to +165°C.
- Tape and reel packaging: –40°C to +80°C

**Moisture Sensitivity Level (MSL)**
1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging**
- 250/13″ reel
- Plastic tape: 24 mm wide, 0.5 mm thick, 20 mm pocket spacing, 11.6 mm pocket depth

**PCB washing**
- Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance</th>
<th>DCR max</th>
<th>SRF typ</th>
<th>Isat (A) 10% drop</th>
<th>Isat (A) 20% drop</th>
<th>Isat (A) 30% drop</th>
<th>Irms (A) 20°C rise</th>
<th>Irms (A) 40°C rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>YA9245-ALD</td>
<td>9.0</td>
<td>0.022</td>
<td>40</td>
<td>7.9</td>
<td>8.3</td>
<td>8.8</td>
<td>4.0</td>
<td>5.6</td>
</tr>
<tr>
<td>ZA9336-ALD</td>
<td>21.0</td>
<td>0.035</td>
<td>40</td>
<td>4.9</td>
<td>5.2</td>
<td>5.4</td>
<td>2.5</td>
<td>3.5</td>
</tr>
</tbody>
</table>

1. **Packaging**: D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
2. Inductance measured at 100 kHz, 1.0 Vrms, 0 Adc using an Agilent/HP 4284A impedance analyzer.
3. DCR is for each winding, measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 8753D network analyzer.
5. DC current (typical) at which the inductance drops the specified amount from its value without current.
6. Current applied to both windings at the same time that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.