### Surface Mount Wideband RF Transformers

- Developed for use with Analog Devices digital to analog high-speed converters
- 400 V interwinding isolation, 1/4 Watt RF input power
- 250 mA max current rating.

#### Specifications

- **Core material**: Ferrite
- **Terminations**: RoHS compliant tin-silver-copper over silver-platinum-glass frit. Other terminations available at additional cost.
- **Weight**: 0.4 g
- **Ambient temperature**: -40°C to +85°C
- **Storage temperature**: Component: -40°C to +85°C.
  - Tape and reel packaging: -40°C to +80°C
- **Resistance to soldering heat**: Max three 40 second refloows at +260°C; parts cooled to room temperature between cycles
- **Moisture Sensitivity Level (MSL)**: 1 (unlimited floor life at <30°C / 85% relative humidity)
- **Failures in Time (FIT) / Mean Time Between Failures (MTBF)**: 60 per billion hours / 16,666,667 hours, calculated per Telcordia SR-332
- **Packaging**:
  - 250/7″ reel; 1000/13″ reel; Plastic tape: 16 mm wide, 0.343 mm thick, 12 mm pocket spacing, 4.83 mm pocket depth
- **PCB washing**: Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCBt_Washing.pdf.

#### Table: Part Numbers and Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Impedance ratio</th>
<th>3 dB frequency response (MHz)</th>
<th>Irms (mA)</th>
<th>Insertion loss typ (dB)</th>
<th>Pins 1-3 L min (µH)</th>
<th>DCR max (Ohms)</th>
<th>Pins 6-4 L min (µH)</th>
<th>DCR max (Ohms)</th>
<th>Color dot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z9280-AL__</td>
<td>1:1</td>
<td>0.250–450</td>
<td>250</td>
<td>0.58</td>
<td>9.5</td>
<td>0.075</td>
<td>9.5</td>
<td>0.075</td>
<td>Orange</td>
</tr>
<tr>
<td>Z9314-AL__</td>
<td>1:6.25</td>
<td>0.350–1700</td>
<td>250</td>
<td>1.10</td>
<td>30</td>
<td>0.080</td>
<td>4.5</td>
<td>0.038</td>
<td>Black</td>
</tr>
</tbody>
</table>

1. When ordering, please specify **termination** and **packaging** codes:

- **Termination**: L = RoHS compliant tin-silver-copper over silver-platinum-glass frit. Special order: S = non-RoHS tin-lead (63/37).
- **Packaging**: C = 7″ machine ready reel. EIA-481 embossed plastic tape (250 parts per full reel).
  - B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
  - D = 13″ machine ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

2. Impedance ratio is for the full primary winding to the full secondary winding.
3. Electrical specifications at 25°C. Measurements are referenced to 50 Ohms. Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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For Analog Devices D/A High-Speed Converters

**Manufacturer’s Note:** This product may not be used in medical or high-risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

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Surface Mount Wideband RF Transformers

Frequency Response Curves

Z9280-AL

Z9314-AL

Attenuation measured on a network analyzer (re: 50 Ohms)