### Coupled Inductor

**For SEPIC Applications**

- Developed for use with Texas Instruments TPS40210 SEPIC Converter; shown on PMP5143 reference design.
- 1 : 1 coupled inductor
- Can also be used as a flyback transformer or in Zeta applications
- Winding to winding isolation: 100 Vrms

**Core material** Ferrite  
**Terminations** RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 40.2 g  
**Ambient temperature** 
-40°C to +85°C  
**Storage temperature** Component: 
-40°C to +85°C.  
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

**PCB washing** Only pure water or alcohol recommended

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### Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance(^1) ±10% (µH)</th>
<th>DCR max(^2) (Ohms)</th>
<th>Leakage inductance(^3) min (µH)</th>
<th>Isat(^4) (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA4637-AL</td>
<td>250</td>
<td>0.10</td>
<td>0.20</td>
<td>2.5</td>
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</tbody>
</table>

1. Inductance is measured at 200 kHz, 1.0 Vrms.  
2. DCR is for each winding  
3. Leakage inductance measured from pin 6 to pin 1 with pins 3 and 4 shorted.  
4. Current at which inductance drops 10% from its value without current  
5. Electrical specifications at 25°C.

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**Recommended PC Board Layout**

Dimensions are in inches (mm)

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**Parts manufactured prior to February, 2012 may be marked differently.**

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**Coilcraft Inc. 2013**

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.