Coupled Inductors/Transformers

LPH8045

- Three 1:1 windings can be wired in a variety of ways: As a 1:1, 2:1 or 1:2 transformer; as a 1:1 transformer with an aux winding; as a gate drive transformer; as a SEPIC inductor, etc.
- Low DCR; excellent current handling
- 200 Vrms, one minute isolation (hipot) between windings

Core material: Ferrite
Environmental: RoHS compliant, halogen free
Terminations: RoHS compliant matte tin over nickel over silver. Other terminations available at additional cost.
Weight: 825 – 875 mg
Ambient temperature: –40°C to +85°C with (40°C rise).
Maximum part temperature: +125°C (ambient + temp rise).
Resistance to soldering heat: Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles.

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

Packaging:
- 250/7" reel; 1000/13" reel; Plastic tape: 16 mm wide, 0.28 mm thick, 12 mm pocket spacing, 4.83 mm pocket depth

Recommended pick and place nozzle: OD: 8 mm; ID: 4 mm


Inductance
- ±20% (µH) typ max

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance</th>
<th>DCR (Ohms)</th>
<th>SRF typ</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>typ max</td>
<td>MHz</td>
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<tr>
<td>LPH8045-682MR_</td>
<td>6.8</td>
<td>0.208 0.223</td>
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<tr>
<td>LPH8045-822MR_</td>
<td>8.2</td>
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<td>0.390 0.395</td>
<td>15.0</td>
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</tbody>
</table>

1. When ordering, please specify packaging code:
   LPH8045-105MR\text{C}

Packaging: C = 7” machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel). Quantities less than full real available: in tape (not machine ready) or with leader and trailer ($25 charge).

D = 13” machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (1000 parts per full reel).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. Inductance is for each winding, measured at 200 kHz, 0.1 Vrms, 0 Adc.
3. DCR is for each winding.
4. DC current at 25°C that causes the specified inductance drop from its value without current.
5. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
6. Electrical specifications at 25°C.

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