## Flyback Transformers
For TI TPS23754 PoE Interface

- Developed for Texas Instruments TPS23754 High Power, High Efficiency PoE Interface and DC/DC Controller
- Input: 33 – 57 V
- 1500 Vrms isolation from primary and bias to secondary

### Core material
Ferrite

### Terminations
RoHS tin-silver (96.5/3.5) over tin over nickel over phosph bronze.

### Weight
12.0 g

### Ambient temperature
\(-40^\circ\text{C}\) to \(+125^\circ\text{C}\)

### Storage temperature
Component: \(-40^\circ\text{C}\) to \(+125^\circ\text{C}\).

### Tape and reel packaging
\(-40^\circ\text{C}\) to \(+80^\circ\text{C}\), parts cooled to room temperature between cycles

### Moisture Sensitivity Level (MSL)
1 (unlimited floor life at \(<30^\circ\text{C} / 85\%\) relative humidity)

### Packaging
175 per 13” reel
- Plastic tape: 44 mm wide, 0.4 mm thick, 28 mm pocket spacing, 11.9 mm pocket depth

### PCB washing
Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

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<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0 A²</th>
<th>LatIpk</th>
<th>DCR max (Ohms)</th>
<th>Leakage L</th>
<th>Turns ratio</th>
<th>Ipk</th>
<th>Output*</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA4372-AL_</td>
<td>75</td>
<td>67.5</td>
<td>0.143</td>
<td>0.0045</td>
<td>0.122</td>
<td>0.072</td>
<td>3.0</td>
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<tr>
<td>JA4387-AL_</td>
<td>75</td>
<td>66.0</td>
<td>0.077</td>
<td>0.0098</td>
<td>0.096</td>
<td>0.070</td>
<td>0.756</td>
</tr>
</tbody>
</table>

1. When ordering, please specify a packaging code: JA4387-AL_D

### Packaging
D = 13” machine ready reel. EIA-481 embossed plastic tape (175 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).

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 D.

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- Inductance is measured at 250 kHz, 0.1 Vrms, 0 Adc.
- Peak primary current drawn at minimum input voltage.
- DCR for the primary and the secondary is measured with windings connected in parallel.
- Leakage inductance is for the primary, measured with the windings connected in parallel and the secondary windings shorted.
- Turns ratio is with the primary windings and secondary windings connected in parallel.
- Output is with the secondary windings connected in parallel. Output of the drive winding is 6 V, 10 mA. Output of the bias winding is 11.2 V, 20 mA.
- Electrical specifications at 25°C

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

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**Dimensions are in inches/mm**

**Primary windings and secondary windings to be connected in parallel on PC board**

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**Recommended Land Pattern**