Forward Mode Transformers

For Texas Instruments
TPS23756 PoE Interface

1. When ordering, please specify a **packaging** code:

   **JA4667-AL**

   **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.

2. Inductance is measured at 250 kHz, 0.2 Vrms, 0 Adc.
3. DCR for the secondary is measured with the windings connected in parallel.
4. Leakage inductance is for the primary and is measured with the secondary shorted.
5. Maximum duty cycle at minimum input voltage is 0.72.
6. Turns ratio is with the primary windings and secondary windings connected in parallel.
7. Output is with the secondary windings connected in parallel. Bias winding output is 12 V, 20 mA.
8. Electrical specifications at 25°C.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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**Part number**

<table>
<thead>
<tr>
<th>Part number1</th>
<th>Inductance2 (µH)</th>
<th>DCR max (Ohms)3</th>
<th>Leakage inductance4 (µH)</th>
<th>Input voltage5 (V)</th>
<th>Turns ratio6</th>
<th>Output7</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA4249-CL_</td>
<td>90</td>
<td>0.0180, 0.015, 0.320</td>
<td>0.120</td>
<td>10 – 57</td>
<td>1 : 0.80</td>
<td>5 V, 5 A</td>
</tr>
<tr>
<td>JA4667-AL_</td>
<td>90</td>
<td>0.0175, 0.047, 0.320</td>
<td>0.085</td>
<td>10 – 57</td>
<td>1 : 1.9</td>
<td>12 V, 2 A</td>
</tr>
</tbody>
</table>

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**Core material** Ferrite
**Terminiations** RoHS tin-silver (96.5/3.5) over tin over nickel over phosphorus bronze. Other terminations available at additional cost.
**Weight** 12.1 – 13.1 g
**Ambient temperature** –40°C to +125°C
**Storage temperature** Component: –40°C to +125°C.
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)
**Packaging** 175 per 13″ reel. Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

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**Recommended Land Pattern**

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