Planar Transformer
For TI UCC2897A Active Clamp PWM Controller

- Developed for Texas Instruments PMP4804 and PMP5997 Demo Board/Reference Design
- Designed as active clamp in forward topology
- Auxiliary winding provides current to the chipset
- Input voltage range: 36 – 75 V

Core material: Ferrite
Terminations: RoHS matte tin over nickel over brass. Other terminations available at additional cost.
Weight: 11.6 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 reflows 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): 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging: 200 per 13” reel. Plastic tape: 44 mm wide, 0.37 mm thick, 32 mm pocket spacing, 9.35 mm pocket depth
PCB washing: Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

### Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Output power (W)</th>
<th>Output voltage (V)</th>
<th>Output current (Adc)</th>
<th>Primary inductance min (µH)</th>
<th>Leakage inductance max (µH)</th>
<th>DCR max (mOhms)</th>
<th>Turns ratio pri: sec1: sec2: aux</th>
<th>Pri/sec isolation (Vdc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA4309-AL_</td>
<td>100</td>
<td>3.3</td>
<td>30</td>
<td>67.5</td>
<td>0.35</td>
<td>20.0 pri: 20.0 sec: 0.5 aux: 160</td>
<td>6 : 1 : 1 : 4</td>
<td>1500</td>
</tr>
</tbody>
</table>

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

- **JA4309-AL_D**
  - Packaging: D = 13” machine ready reel. EIA-481 embossed plastic tape (200 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 D instead.

2. Inductance measured on an Agilent/HP 4284 between pins 2 and 4 at 200 kHz, 0.1 Vrms, 0 Adc.
3. Leakage inductance measured between pins 2 and 4 at 100 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.
4. DCR for the secondary is for each winding.
5. Electrical specifications at 25°C.

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### Dimensions

- **Dot indicates pin 1**
- **Dimensions are in inches / mm**

- **Recommended Land Pattern**
- **Parts manufactured prior to December 2011 may be marked differently.**