SMT Planar Transformer

For TI UCC2897 12 V/150 W
Active Clamp Forward

• Developed for Texas Instruments UCC2897 Active Clamp Forward (PMP9720 reference design)
• Designed for 48 – 60 Vdc input; 12 V, 13 A
• High efficiency; excellent DCR; very low leakage inductance; 1500 Vrms, one minute primary to secondary isolation.
• Provides 0.009” (0.229 mm) clearance above the seating plane

Core material Ferrite
Terminations Matte tin over nickel over brass.
Weight 12.7 g
Ambient temperature –40°C to +125°C
Maximum part temperature +165°C (ambient + temp rise)
Storage temperature Component: –40°C to +125°C.
Tray packaging: –40°C to +80°C
Resistance to soldering heat Max three 40 second refows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
Packaging 36 per tray
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

### Table: Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Turns</th>
<th>Primary inductance1</th>
<th>Leakage inductance2</th>
<th>DCR max (mOhms)</th>
<th>Volt-time product typ4</th>
<th>Output5</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA7040-AL</td>
<td>6 6 3 3</td>
<td>50</td>
<td>0.55</td>
<td>10.75</td>
<td>Pri² Sec Aux</td>
<td>100</td>
</tr>
</tbody>
</table>

1. Inductance is for the primary, measured on Agilent/HP 4284A at 200 kHz, 0.5 Vrms, 0 Adc with primary windings connected in parallel.
2. Leakage Inductance is for the primary, measured at 200 kHz, 0.5 Vrms, 0 Adc with primary windings connected in parallel and all secondary pins shorted.
3. Primary DCR measured with primary windings connected in parallel
4. Volt-time product is based on primary windings connected in parallel.
5. Output of the secondary, 12 V 13 A, is from pins 11 – 8. Output of the aux winding is 12 V.
6. Electrical specifications at 25°C.

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

Primary windings to be connected in parallel on the PC board.

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This product may not be used in medical or high risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check website for latest information.
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Dimensions are in mm