Planar Transformer

For Maxim MAX17599 PWM Controller

- Forward mode transformer for the Maxim MAX17599 Active Clamp Current-Mode PWM Controller
- 18 – 36 V input; 12 V, 3.3 A output
- 1500 Vrms, one minute isolation from primary to secondary and gate windings
- Specified on reference design MAXREFDES41#

Core material Ferrite
Terminations Matte tin over nickel over brass.
Weight 10.6 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 200/13" 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

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A² ±20% (µH)</th>
<th>DCR max (mOhms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA6998-BL_</td>
<td>80</td>
<td>15.0</td>
<td>22.0</td>
<td>45.0</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1:1.125</td>
<td>1:0.375</td>
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1. When ordering, please specify a packaging code:
   RA6998-BLD
   Packaging: D = 13” machine ready reel. EIA-481 embossed plastic tape (200 parts 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 is measured at 250 kHz, 0.1 Vrms.
3. Output is for the secondary winding. Output of the gate winding is 4 V, 0.25 A
4. Electrical specifications at 25°C.

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

**Recommended Land Pattern**

Dimensions are in inches / mm

- Dot indicates pin 1

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