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>
</tbody>
</table>

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). 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, 0.1 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.

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*Note: The diagram includes recommended land pattern dimensions and dot indicators for pin 1.*