ADSL2 Transformer
For Broadcom BCM6348 Router Chip

- Designed for use with the Broadcom BCM6348 router chip
- Low leakage inductance and 1875 V interwinding isolation
- Evaluated and approved by UL to meet 60950 under a Supplementary Insulation System with a working voltage of 250 Vrms, 353.5 V peak.

Core material: Ferrite

Terminations: RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight: 6.2 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 reflo ws at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL): 1 (unlimited floor life at <30°C / 85% relative humidity)

Mean Time Between Failures (MTBF): 26,315,789 hours

Packaging: 175 per 13” reel. Plastic tape: 32 mm wide, 0.42 mm thick, 28 mm pocket spacing, 12.9 mm pocket depth.

PCB washing: Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

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### ADSL2 Transformer Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Turns ratio line:chip</th>
<th>Line side inductance±5% (µH)</th>
<th>Leakage inductance max (µH)</th>
<th>Capacitance max (pF)</th>
<th>DCR max (Ohms)</th>
<th>Longitudinal balance min (dB)</th>
<th>THD max (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B0727-BL_</td>
<td>2:1</td>
<td>409.5</td>
<td>6.5</td>
<td>65.0</td>
<td>0.645 (1-4)</td>
<td>50.0 (1.1 MHz)</td>
<td>-80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.284 (10-7)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.371 ((9-6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. When ordering, please specify termination and packaging coded:

   - Termination: L = RoHS tin-silver over tin over nickel over phos bronze.
     Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

   - Packaging: D = 13” machine-ready reel. EIA-481 embossed plastic tape (175 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 measured at 10 kHz, 0.1 Vrms, 0 Adc with windings connected in series.
3. Leakage inductance measured at 100 kHz, 0.1 Vrms, 0 Adc from pins 1 to 5 with pins 4 and 2 connected and all chip side pins shorted.
4. Capacitance measured at 100 kHz, 0.1 Vrms, 0 Adc from chip side to line side.
5. Electrical specifications at 25°C.

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

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**Dimensions are in inches**

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- Other terminations available at additional cost.
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- Storage temperature: Component: -40°C to +85°C. Tape and reel packaging: -40°C to +80°C
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