**Flyback Transformer**

For ON Semiconductor

NCP1072DIPGEVB

- Designed specifically for use with ON Semiconductor’s 6W SMPS Evaluation board for NCP1072 (NCP1072DIPGEVB)
- 12 V, 0.5 A output; 85 – 265 Vac universal input
- Operates in continuous conduction mode at 30 kHz
- 2000 Vrms, one minute isolation (hipot) pri to sec; 500 Vrms pri to aux

**Core material** Ferrite

**Terminations** ROHS compliant tin-silver over matte tin over copper

**Weight** 16.5 g

**Ambient temperature** 
-40°C to +85°C

**Maximum part temperature** +125°C (ambient + temp rise)

**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** 64 parts per tray

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

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**Inductance**

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance</th>
<th>Turns ratio</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5597-AL</td>
<td>3.4 ±10% (mH)</td>
<td>pri: 2.22 sec: 0.047 aux: 0.376 max (µH) 58.32 pri: 0.125 sec: 1.0133</td>
<td>pri: sec: 1:1 pri: aux: 1:1</td>
<td>12V, 0.5A (sec) 12.85V, 0.02A (aux)</td>
<td></td>
</tr>
</tbody>
</table>

1. Inductance is for the primary, measured at 10 kHz, 0.1 Vrms, 0 Adc
2. Leakage inductance tested at 100 kHz, 0.1 Vrms is for the primary winding with the secondary winding shorted
3. Electrical specifications at 25°C.

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**Dimensions are in inches**

**Recommended Board Layout**