Flyback Transformer
For ON Semiconductor
NCP1351 Controller

• Dual-output flyback transformer for ON Semiconductor's NCP1351 Variable Off Time PWM Controller.
• 32 V, 1.0 A and 16 V, 0.75 A Outputs. Output of the auxiliary winding is 16 V.
• Operates in discontinuous mode with a universal input
• 3000 Vrms, one minute isolation Pri and Aux to Sec1 and Sec2.
• 500 Vrms, one minute isolation Pri to Aux and between Sec1 and Sec2

Core material Ferrite
Terminations RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 23.5 g
Ambient temperature –40°C to +85°C
Storage temperature Component: –40°C to +85°C.
Tray 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)
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 Only pure water or alcohol recommended

<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0 A1 (µH) ±10%</th>
<th>L at Ip2 A (µH) min</th>
<th>DCR max (Ohms)</th>
<th>Leakage L3 (µH) max</th>
<th>Turns ratio Pri : sec1 : sec2 : aux</th>
<th>Ipk2 (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA0007-AL</td>
<td>270</td>
<td>243</td>
<td>0.25</td>
<td>0.027</td>
<td>0.045</td>
<td>0.26</td>
</tr>
</tbody>
</table>

1. Inductance is for the primary, measured at 45 kHz, 0.8 Vrms, 0 Adc.
2. Ipk is the peak current drawn at minimum input voltage.
3. Leakage inductance measured on the primary winding with all secondary pins shorted.
4. Ambient operating temperature range –40°C to +85°C.
5. Electrical specifications at 25°C.

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

Recommended Board Layout

Dimensions are in inches / mm

Secondary windings to be connected in series on the PC board.