Flyback Transformer GA0007-AL

- Optimized for ON Semiconductor’s NCP1351 Variable Off Time PWM Controller and Microchip’s HV96001 LED 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 refloows 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 ±10% (µH)</th>
<th>L at Ipk2 min (µH)</th>
<th>DCR max (Ohms) pri</th>
<th>sec1</th>
<th>sec2</th>
<th>aux</th>
<th>Leakage L3 max (µH) pri</th>
<th>sec1</th>
<th>sec2</th>
<th>aux</th>
<th>Turns ratio</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>
<td>8.16</td>
<td>5 : 1</td>
<td>1 : 1</td>
<td>1 : 1</td>
<td>3.0</td>
<td></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

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

Dimensions are in inches

Dimensions are in millimeters

Dot indicates pin 1

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Dimensions are in inches

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