Flyback Transformer

For ON Semiconductor NCP1236 PWM Controller and NCP4305FBDAP AC/DC Adapter

- Flyback transformer for ON Semiconductor NCP1236 Fixed Frequency PWM Controller and NCP4305FBDAP 65W Off-Line AC/DC Adapter
- Referenced on Akros Silicon Application Note AN006
- Universal input; 66 W output
- 3000 Vrms, one minute isolation primary to secondary windings
- AEC-Q200 Grade 3 (−40°C to +85°C)
- Copper shield minimizes EMI radiation

Core material Ferrite
Terminations RoHS tin-silver over tin over copper over steel. Other terminations available at additional cost.
Weight 60.2 g
Ambient temperature −40°C to +85°C with (40°C rise) Irms current
Storage temperature Component: −40°C to +125°C.
Tray packaging: −40°C to +125°C
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 36 per tray
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

### Electrical Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A ±10% (µH)</th>
<th>Inductance at Ipk (µH)</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio</th>
<th>Ipk (A)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>KA5038-BL</td>
<td>560</td>
<td>480</td>
<td>0.198</td>
<td>0.007</td>
<td>0.236</td>
<td>5.6</td>
<td>1:0.188:0.156</td>
</tr>
</tbody>
</table>

1. Inductance is measured at 50 kHz, 0.1 Vrms.
2. Peak primary current drawn at minimum input voltage.
3. DCR is with the primary windings connected in series and the secondary windings connected in parallel.
4. Leakage inductance is for both windings of the primary with the secondary windings shorted.
5. Turns ratios are with the primary windings connected in series and the secondary windings connected in parallel.
6. Output is with the secondary windings connected in parallel. Output of the aux winding is 15.5 V, 20 mA.
7. Electrical specifications at 25°C.

### Dimensions

- Primary windings to be connected in series and secondary windings to be connected in parallel on PC board.
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Embed image of transformer and layout.