Toroidal Transformer – Q3903-AL

- Specified by ON Semiconductor for use with their NCP1605 PFC Controller. Referenced as X25, pulse transformer on evaluation board NCP1605FORWGEVB and Application Note AND8292.
- Recommended by Texas Instruments for use with their UC3875 Phase Shift Resonant Controller.
- Three 1:1 windings
- 500 Vrms, one minute winding-to-winding isolation.

Core material: Ferrite
Terminations: RoHS compliant tin-silver over tin over nickel over brass. Other terminations available at additional cost.
Weight: 4.3 g
Ambient temperature: -40°C to +85°C
Storage temperature: Component: -40°C to +85°C.
Tray packaging: -40°C to +80°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: 49 per tray
PCB washing: Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

### Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance1 (µH)</th>
<th>DCR max2 (Ohms)</th>
<th>Inter-winding isolation (Vrms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3903-AL</td>
<td>210</td>
<td>0.090</td>
<td>500</td>
</tr>
</tbody>
</table>

1. Inductance measured between pins 1 and 6, at 15.75 kHz, 0.015 Vrms, 0 Adc using an Agilent/HP 4192A impedance analyzer.
2. DCR is per winding, measured on Cambridge Technology micro-ohmmeter or equivalent.
3. Electrical specifications at 25°C.

### PCB Layout

Notch indicates pin1

Recommended PC Board Layout

Dimensions are in inches

---

Coilcraft

www.coilcraft.com

US  +1-847-639-6400  sales@coilcraft.com
UK  +44-1236-730595  sales@coilcraft-europe.com
Taiwan +886-2-2264 3646  sales@coilcraft.com.tw
China  +86-21-6218 8074  sales@coilcraft.com.cn
Singapore  + 65-6484 8412  sales@coilcraft.com.sg

© Coilcraft Inc. 2013

This product may not be used in medical or high risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check web site for latest information.