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

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance¹ min (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>
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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.