

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)

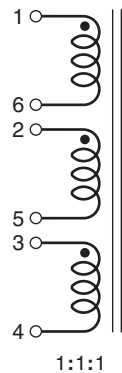
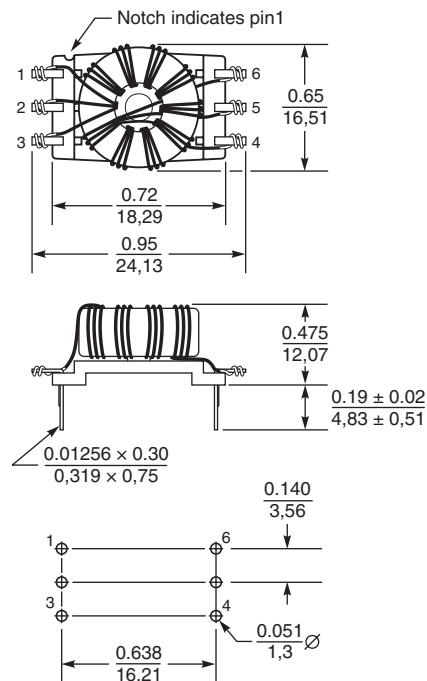
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 49 per tray

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number	Inductance ¹ min (µH)	DCR max ² (Ohms)	Inter-winding isolation (Vrms)
Q3903-AL	210	0.090	500

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.



Recommended PC Board Layout

Dimensions are in $\frac{\text{inches}}{\text{mm}}$