

CLF12577NIT-D Series

Automotive Grade Wound Ferrite Power Inductors

TDK's newly developed CLF-NI-D series power inductors are magnetically shielded, wire wound inductors with a magnetic ferrite core, designed for use in automotive applications. This series features a robust high-reliability design with highly heat-resistant wire and wire connections, resulting from the use of welding material that does not melt during the reflow process. A fully automated manufacturing process also ensures that all finished CLF-NI-D products are of uniform high quality. CLF-NI-D series power inductors are available in a variety of case sizes and inductance values and are AEC-Q200 compliant, meaning they can be used in a wide temperature range and in extreme environments such as the automotive engine bay.

Features

- Robust design—Generic use for Automotive applications
- High magnetic shield construction features low EMI
- Wide inductance range—1.0µH-470µH, E-6 Series lineup
- Operating temperature and storage temperature range of –55°
 C to +150°C (including self temperature rise)

Power

Wire wound

AEC-Q200









Datasheet Link

Applications

- ECM/ECU
- SRS Air bag
- · Head light module

- Transmission control
- Power steering control
- ADAS etc.

CLF12577NIT-D Series Automotive Power Inductors

Case Size: 12.8x12.5x7.7mm

Inductance Range: 1.0uH-6.8uH +/- 30%, 10uH-470uH+ /- 20%

Isat*: 1.0-22.0A **Itemp*:** 1.1-11.5A

DC Resistance: $4.8-708m\Omega$ max.

*Isat: Depends on Inductance Saturation. (-30% Reduction from Nominal L Value)

*Itemp : Depends on Self Temperature Rise (40deg.C)

500 pieces per reel