

## CAR AUDIO / NAVIGATION CHOKES

# PRODUCT SUMMARY

### Description

NC series amorphous choke cores are the ideal solutions for implementing noise suppression chokes that is generating from alternator, engine and ignition in car audio and car navigation systems. The NC series choke are manufactured with thin gauge iron-based amorphous alloy. This thin gauge ribbon offers a better frequency characteristics up to 1MHz than conventional materials like EI type silicon steel. Overall the audible frequency ranges, the inductance show a nearly constant. This type of iron-based amorphous alloys offer several properties and / or property combinations that are not parallel by other competing material such as silicon steel.

The geometrical shape of toroid offers a lowest spatial magnetic leakage flux densities around the choke core. Therefore, it can be easily mounted on car audio and / or car navigation circuit boards since these type of amorphous chokes are available in pin-type configurations. When the audio system is under the state of low output power and low sound density, the inductance of the choke is too low, the signal-to-noise ratio goes small. In this case it can be easily hear the unwanted sound noise form the system.

SHINHOM new launched NC series chokes shows high inductances even at high DC biasing current. So, it can be offer a good design solutions to eliminate the alternator noise in car audio and car navigation systems. Significant component size reduction is achieved using NC series noise suppression choke for automobile audio / navigation systems.

### Feature

- Toroidal shape without gap, therefore it have a lowest magnetic leakage flux density.
- Designable smaller / lighter component size /weight than EI choke core
- Designable in pin-type SMD components
- Higher inductance at medium / high alternator speed
- Optimized S/N ratio in all power ranges
- Superior frequency characteristics than EI choke
- Offer a good solution for high frequency harmonic noises
- Higher impulse attenuation properties
- Low DC resistance
- UL94-V0 compliant & UL746-B compliant

### Application

- Noise preventive use for alternator superposed to automobile mounting equipment such as car audio / navigation system
- LC filter choke for reduction of engine noise
- Normal mode choke for anti-EMI measurement
- Radio power system
- Smoothing chokes for switch-mode power supplies
- Impulse noise preventive use in DC power line of automobile
- Impulse noise preventive use in general purpose power supplies