

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-040-025-015-hfwh/>

Product datasheet: CCNT-040-025-015-HFWH

Product information

Nanocrystalline toroidal core 40x25x15 mm

Bare size: 40x25x15 mm

Finish: White PBT Class B 130C

CCNT-040-025-015-HFWH is a 40x25x15 mm nanocrystalline toroidal core for EV charger AC-input filters, industrial drive EMI chokes, and solar inverter filters. Its nanocrystalline HF characteristic supports common-mode and EMI filter designs where impedance and winding window matter as much as size. Choose this size when the filter or choke needs this window and OD, not the next larger footprint.

Bare core dimensions

Outer diameter (OD): 40 mm

Inner diameter (ID): 25 mm

Height (H): 15 mm

Cased / finished dimensions

Outer diameter (OD): 44.2 mm

Inner diameter (ID): 21.6 mm

Height (H): 18.9 mm

Tolerance: 0.4mm

Size marking on the case is the bare core dimension, not the cased or finished size.

Magnetic properties

Effective area A_e : 0.92 cm²

Mean path length L_e : 10.2 cm

AL @ 10kHz, 2mT: 103 uH/T²

AL @ 100kHz, 2mT: 24 uH/T²

Saturation B_s : 1.25 Tesla

Initial permeability μ_i : 80000

Curie temperature: 560 C

Operating temperature: -40 deg C to +130 deg C

Net weight: 68 g

Applications

- EV charger AC-input filters
- industrial drive EMI chokes
- solar inverter filters
- UPS/backup power filters
- EV charging station AC-input common-mode filters
- industrial VFD/drive EMI suppression cores
- solar/wind inverter input filters
- UPS/backup power system EMI filter chokes