

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-045-030-015-hfbk/>

Product datasheet: CCNT-045-030-015-HFBK

Product information

Nanocrystalline toroidal core 45x30x15 mm

Bare size: 45x30x15 mm

Finish: Black PBT Class B 130C

CCNT-045-030-015-HFBK is a 45x30x15 mm nanocrystalline toroidal core for UPS EMI filters, inverter common-mode chokes, and industrial power supply 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): 45 mm

Inner diameter (ID): 30 mm

Height (H): 15 mm

Cased / finished dimensions

Outer diameter (OD): 48.2 mm

Inner diameter (ID): 27.6 mm

Height (H): 17.9 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 : 11.8 cm

AL @ 1kHz: 170 uH/T²

AL @ 10kHz, 2mT: 78 uH/T²

AL @ 100kHz, 2mT: 20 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: 91 g

Applications

- UPS EMI filters
- inverter common-mode chokes
- industrial power supply filters
- motor drive line filters
- UPS/backup power common-mode EMI filters
- industrial inverter output chokes
- industrial power supply EMI suppression cores
- motor drive AC-line filter chokes