

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-020-012-008-hfwh/>

Product datasheet: CCNT-020-012-008-HFWH

Product information

Nanocrystalline toroidal core 20x12x8 mm

Bare size: 20x12x8 mm

Finish: White PBT Class B 130C

CCNT-020-012-008-HFWH is a 20x12x8 mm nanocrystalline toroidal core for mid-power EMI filter chokes, SMPS common-mode filters, and small motor drive 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): 20 mm

Inner diameter (ID): 12 mm

Height (H): 8 mm

Cased / finished dimensions

Outer diameter (OD): 22.6 mm

Inner diameter (ID): 10.6 mm

Height (H): 10 mm

Tolerance: 0.3mm

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

Magnetic properties

Effective area A_e : 0.269 cm²

Mean path length L_e : 5.02 cm

AL @ 10kHz, 2mT: 63 uH/T²

AL @ 100kHz, 2mT: 15 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: 9.7 g

Applications

- mid-power EMI filter chokes
- SMPS common-mode filters
- small motor drive filters
- LED driver EMI suppression
- mid-power (10–50W class) common-mode EMI filter chokes
- SMPS/LED driver differential-mode filters
- small VFD/motor controller EMI suppression cores
- auxiliary power filter chokes