

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnt-016-010-006-hfwh/>

Product datasheet: CCNT-016-010-006-HFWH

Product information

Nanocrystalline toroidal core 16x10x6 mm

Bare size: 16x10x6 mm

Finish: White PBT Class B 130C

CCNT-016-010-006-HFWH is a 16x10x6 mm nanocrystalline toroidal core for line filter common-mode chokes, low-power SMPS EMI suppression, and small signal transformers. 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): 16 mm

Inner diameter (ID): 10 mm

Height (H): 6 mm

Cased / finished dimensions

Outer diameter (OD): 17.8 mm

Inner diameter (ID): 8.2 mm

Height (H): 7.9 mm

Tolerance: 0.2mm

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

Magnetic properties

Effective area A_e : 0.15 cm²

Mean path length L_e : 4.1 cm

AL @ 10kHz, 2mT: 44 uH/T²

AL @ 100kHz, 2mT: 11 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: 4.5 g

Applications

- line filter common-mode chokes
- low-power SMPS EMI suppression
- small signal transformers
- audio isolation transformers
- low-power AC line common-mode filter chokes
- SMPS input/output EMI suppression cores
- audio-frequency isolation transformers
- small current-sensing transformers