

CENTURACORES

Nanocrystalline Transformer Cores

<https://centuracores.com/products/ccnc-10-10-33-20-31-53-002-mfgr/>

Product datasheet: CCNC-10-10-33-20-31-53-002-MFGR

Product information

Nanocrystalline cut core 10x10x33x20x31x53x2 mm

Finish: Green Epoxy

CCNC-10-10-33-20-31-53-002-MFGR is a 10x10x33x20x31x53x2 mm nanocrystalline cut core for DC-DC converter output chokes, small telecom power inductors, and adapter/charger chokes. The 10x10 mm limb and 33 mm window length suit bobbin or form-wound coils where an openable core simplifies assembly. Choose this size when Ae, window, and overall length (53 mm) match the target inductor or reactor duty.

Bare core dimensions

Magnetic properties

Effective area Ae: 1.6 cm²

Mean path length Le: 12.8 cm

AL @ 1kHz, 2mT: 310 uH/T²

AL @ 10kHz, 2mT: 192 uH/T²

AL @ 100kHz, 2mT: 25 uH/T²

Saturation Bs: 1.25 Tesla

Initial permeability μ_i : 80000

Curie temperature: 560 C

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

Net weight: 135 g

Applications

- DC-DC converter output chokes
- small telecom power inductors
- adapter/charger chokes
- auxiliary UPS inductors
- telecom DC-DC converter output inductors (typically 50–150W class)
- USB-C PD fast-charger chokes
- auxiliary UPS inductors
- small high-frequency energy-storage inductors