



CCNT-013P5-007P5-004P5-LFBL

Nanocrystalline toroidal core 13.5x7.5x4.5 mm

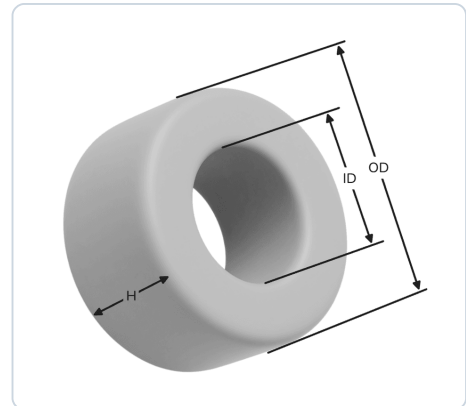
DIMENSIONS

Parameter	Bare (mm)	Cased (mm)
Outside diameter (OD)	13.5	14.5
Inside diameter (ID)	7.5	6.7
Height (H)	4.5	5.4

Dimensions Summary: Bare OD 13.5mm x ID 7.5mm x H 4.5mm; Cased OD 14.5mm x ID 6.7mm x H 5.4mm

Finished tolerance: 0.2mm

Case marking uses bare core dimensions.



CORE PROPERTIES

A_{Fe}	0.11 cm ²	L_{Fe}	3.3 cm	B_s	1.25 T	μ_i	50,000 (nominal)
Working temp	-40°C – +150°C	Curie	560 °C	Casing	Powder Coating	Weight	4 g

INDUCTANCE FACTOR AL ($\mu H/N^2$)

1kHz @ 0.3V, N=1 ($\mu H/N^2$)	10kHz @ 0.3V, N=1 ($\mu H/N^2$)	100kHz @ 0.3V, N=1 ($\mu H/N^2$)
15	9	1.5

DESIGN NOTE

Published AL is one turn through the window (Kelvin clips) at 0.3 V, not a 2 mT small-signal AL. At 1 kHz this drive saturates the smaller cores. Estimate inductance as $L \approx AL \times N^2$ on a wound part, then verify. Size the winding to the finished inside diameter when it is published, not the bare ID. Keep peak flux within 1.25 T. The finish is powder coating; keep continuous duty within the coating rating.

RECOMMENDED USAGE

Compact Current Sensing | Small Transformers | Prototype Magnetics

DIY AND R&D

Diy Current-Sensing Builds | Benchtop Transformer Prototyping | Hobbyist Magnetics Experiments

TECHNICAL APPLICATIONS

Compact Current Sensing (powder-Coated Lf Toroid) | Small Transformers (powder-Coated Lf Toroid) | Prototype Magnetics (powder-Coated Lf Toroid)

DOCUMENT CONTROL

Author	Created	Approver	Approved
CCNT-013P5-007P5-004P5-LFBL Aditya R.	https://centuracores.com/products/ccnt-013p5-007p5-004p5-lfbl/ 2 Mar 2026	Mahavir S.	2026-10-16 21 Mar 2026