

CBO43HP1/4-50A4

Product Specification For Inductive Common Mode Nanotech® Cores



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Mechanical Specification

Bare Core Dimensions:

1.97 x 1.57 x 0.79 inch
(50 x 40 x 20 mm)

le: 14.1 cm

Ae: 0.8 cm²

Weight: 0.18 lbs (82.0 grams)

Packing: 12 pc/layer, 5 layers/box

Box Quantity: 60 pieces

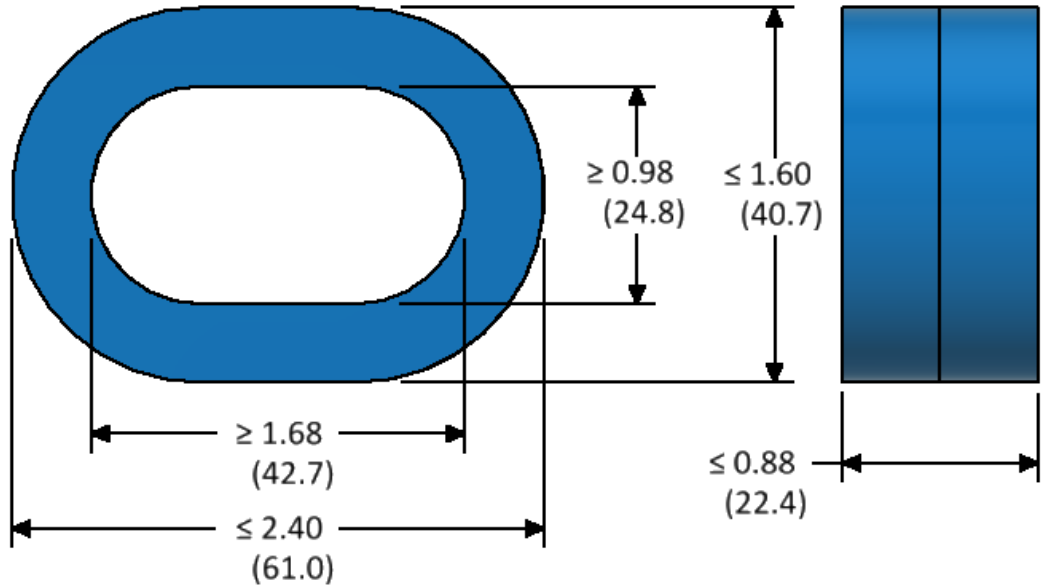
Core Material: Nanocrystalline

Curie Temp: 1,112°F (600 °C)

RTI Temp (0.81): 248°F (120°C)

Marking:

CBO43HP1/4-50A4



Dimensions = inches (mm)

Electrical Core Performance

Permeability @ frequency = 10 KHz and H_{peak} = 3.0 mA/cm ~30,000

Inspection Value	Measured Value	Measurement Limits	Frequency	I _{eff} * N (mA*turn)	Maximum Asymmetric Current I _{sat} * (Sum Peak Current) 3.75 AMP
	A _L (μH/N ²)	12.6 - 28.4	10 KHz	30	
	A _L (μH/N ²)	6.3 min	100 KHz	30	

*Saturation Current (Isat) of nanocrystalline material: Peak value of the exiting current when the initial inductance level is dropped to 10 per cent. Saturation behaviour is dependant on frequency, signal shape and leakage field. The current value is a calculated value for design help only and cannot be guaranteed. Isat is calculated @ B = 1.0 T - μnom - N = 1.

Core Finishing

Type:	Plastic Case	Case Material Alternatives:	Zytel FR70G25	VAMPAMID 66 3028 VO	Longlite 4130	PA66-R11G25
Voltage Breakdown:	2,500 VRMS	Case UL file Number:	E41938	E140692	E59481	E484599

Certification

MH&W International certifies that the manufacturing and the quality process meet all requirements of IEC Part 1: General Specification for "Fixed Inductors For Electromagnetic Interference Suppression", IEC 60938-1:1999 + A1:2006. This International Standard is used in lieu of requirements/documents pertaining to UL, CE, CSA, DIN and other individual agencies. The flame insulation rating meets UL-94V-0.

MH&W International certifies the product described herein is in compliance with the Directive 2011/65/EU of the European Parliament and of the council of 8 June, 2011 on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS2 Directive).

Rev #	Date	Description	Drawing Approval	Drawing Number
4	05/03/21	Updated to new datasheet format.	Engineering: D. Rollins	CBO43HP1/4-50A4 R5
5	07/07/23	Replaced Ryton materail with VAMPAMID	Sales: B. Wilson	