

# CBO68HP51-100A6

Product Specification For Inductive Common Mode Nanotech® Cores



**MH&W International Corp.**

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## Mechanical Specification

### Bare Core Dimensions:

3.15 x 2.48 x 1.18 inch  
(80 x 63 x 30 mm)

le: 22.36 cm

Ae: 1.86 cm<sup>2</sup>

Weight: 0.74 lbs (335 grams)

Packing: 6 pc/layer, 2 layers/box

Box Quantity: 12 pieces

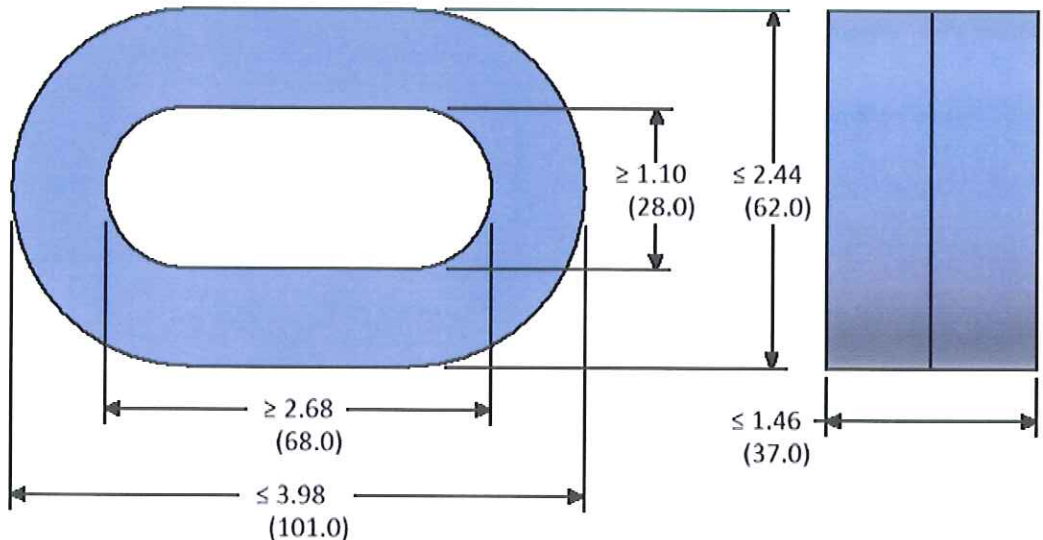
Core Material: Nanocrystalline

Currie Temp: 1,112°F (600 °C)

RTI Temp (0.81): 248°F (120°C)

Marking:

CBO68HP51-100A6



Dimensions = inches (mm)

## Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3.16 mA/cm ~30,000

Inspection Value	Measured Value	Measurement Limits	Frequency	$L_{eff} * N$ (mA*turn)	Maximum Asymmetric Current $I_{sat}^*$ (Sum Peak Current)
	$A_L$ ( $\mu H/N^2$ )	24.1 - 48.2	10 KHz	50	
	$A_L$ ( $\mu H/N^2$ )	12.0 min	100 KHz	50	

\*Saturation Current ( $I_{sat}$ ) 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.  $I_{sat}$  is calculated @  $B = 1.0 T - \mu_{nom} - N = 1$ .

## Core Finishing

Type:	Plastic Case	Case Material Alternatives:	Zytel FR70G25	Rynite FR530	Longlite 4130	PA66-R11G25
Voltage Breakdown:	2,500 VRMS	Case UL file Number:	E41938	E41938	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
2	08/17/17	Initial Issue	Engineering: D. Rollins	CBO68HP51-100A6 R3
3	05/03/21	Updated to new datasheet format.	Sales: B. Wilson	

# N29HP41-102

Product Specification For Inductive Differential Mode Nanotech® Cores



**MH&W International Corp.**

575 Corporate Drive, Suite 4200, Mahwah, NJ 07430 USA

Phone 201-252-8125 Email: sales@mhw-intl.com

## Mechanical Specification

**Bare Core Dimensions:**

1.57 x 1.26 x 0.59 inch  
(40 x 32 x 15 mm)

le: 11.26 cm

Ae: 0.47 cm<sup>2</sup>

**Weight:** 0.09 lbs (40 grams)

**Packing:** 24 pc/layer, 5 layers/box

**Box Quantity:** 120 pieces

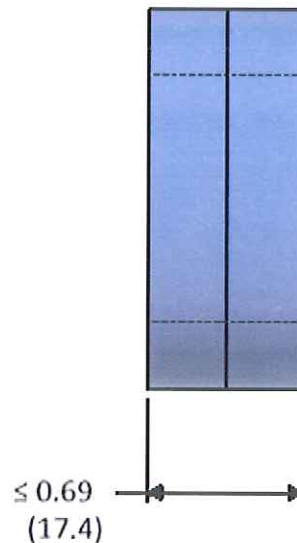
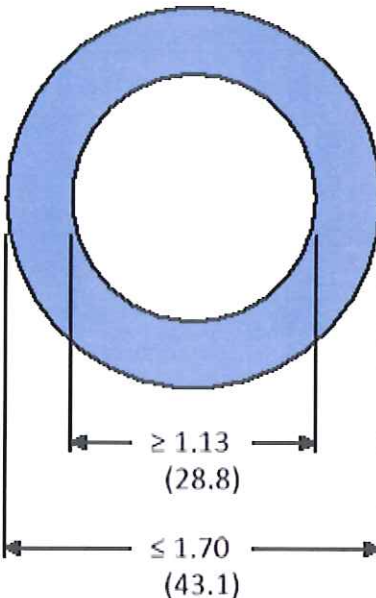
**Core Material:** Nanocrystalline

**Currie Temp:** 1,112°F (600 °C)

**RTI Temp (0.81):** 248°F (120°C)

**Marking:**

N29HP41-102



Dimensions = inches (mm)

## Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3.14 mA/cm ~90,000

Inspection Value	Measured Value	Measurement Limits	Frequency	L <sub>eff</sub> * N (mA*turn)
	A <sub>L</sub> (μH/N <sup>2</sup> )	33.0 - 66.0	10 KHz	25
	A <sub>L</sub> (μH/N <sup>2</sup> )	8.4 min.	100 KHz	25

\*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	Rynite FR530	Longlite 4130	PA66-R11G25
Voltage Breakdown:	2,500 VRMS	Case UL file Number:	E41938	E41938	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	08/17/17	Initial Issue	Engineering: D. Rollins	N29HP41-102 R5
5	04/06/21	Updated to new datasheet format.	Sales: B. Wilson	