

# CBR18HP.0-1A2

Product Specification For Inductive Common 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:**

1.18 x 0.79 x 0.39 inch  
(30 x 20 x 10 mm)

le: 7.75 cm  
Ae: 0.36 cm<sup>2</sup>

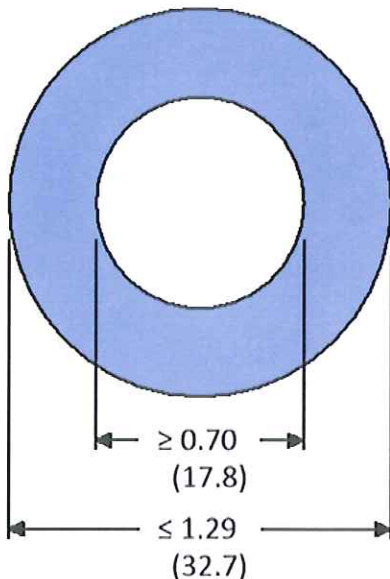
**Weight:** 0.05 lbs (23 grams)

**Packing:** 35 pc/layer, 6 layers/box  
**Box Quantity:** 120 pieces

**Core Material:** Nanocrystalline  
**Curie Temp:** 1,112°F (600 °C)  
**RTI Temp (0.81):** 248°F (120°C)

**Marking:**

**CBR18HP.0-1A2**



Dimensions = inches (mm)

## Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3.65 mA/cm ~30,000

Inspection Value	Measured Value	Measurement Limits	Frequency	I <sub>eff</sub> * N (mA*turn)	Maximum Asymmetric Current I <sub>sat</sub> * (Sum Peak Current)
	A <sub>L</sub> (μH/N <sup>2</sup> )	13.6 - 27.2	10 KHz	20	
A <sub>L</sub> (μH/N <sup>2</sup> )	6.7 min.	100 KHz	20		

\*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
1	08/17/17	Initial Issue	Engineering: D. Rollins	CBR18HP.0-1A2 R2
2	04/06/21	Updated to new datasheet format.	Sales: B. Wilson	

# N9HP1

## Product Specification For Inductive Differential Mode Nanotech® Cores



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

### Mechanical Specification

**Bare Core Dimensions:**

0.63 x 0.43 x 0.20 inch  
(16 x 11 x 5 mm)

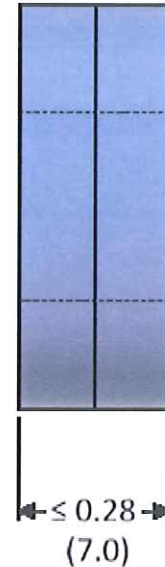
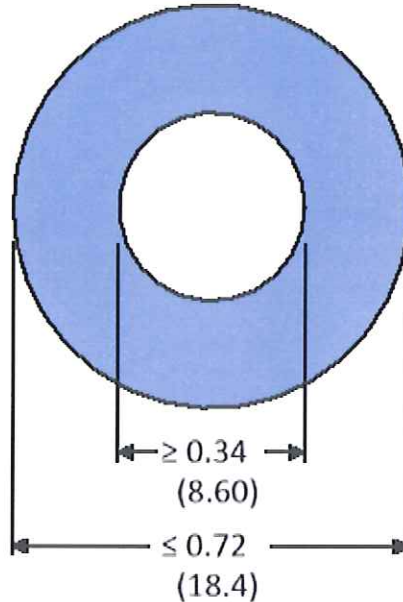
le: 4.14 cm  
Ae: 0.10 cm<sup>2</sup>

Weight: 0.009 lbs (4.0 grams)

Packing: 110 pc/layer, 9 layers/box  
Box Quantity: 990 pieces

Core Material: Nanocrystalline  
Curie Temp: 1,112°F (600 °C)  
RTI Temp (0.81): 248°F (120°C)

Marking:  
N9HP1



Dimensions = inches (mm)

### Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3.4 mA/cm ~90,000

Inspection Value	Measured Value	Measurement Limits	Frequency	I <sub>eff</sub> * N (mA*turn)
	A <sub>L</sub> (μH/N <sup>2</sup> )	18.4 - 36.8	10 KHz	10
	A <sub>L</sub> (μH/N <sup>2</sup> )	4.6 min	100 KHz	10

\*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.

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Rev #	Date	Description	Drawing Approval	Drawing Number
2	08/17/17	Initial Issue	Engineering: D. Rollins	N9HP1 R3
3	04/06/21	Updated to new datasheet format.	Sales: B. Wilson	