

CBR37HP1/4-50A5

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: 14.08 cm

Ae: 0.73 cm²

Weight: 0.19 lbs (87.0 grams)

Packing: 15 pc/layer, 4 layers/box

Box Quantity: 60 pieces

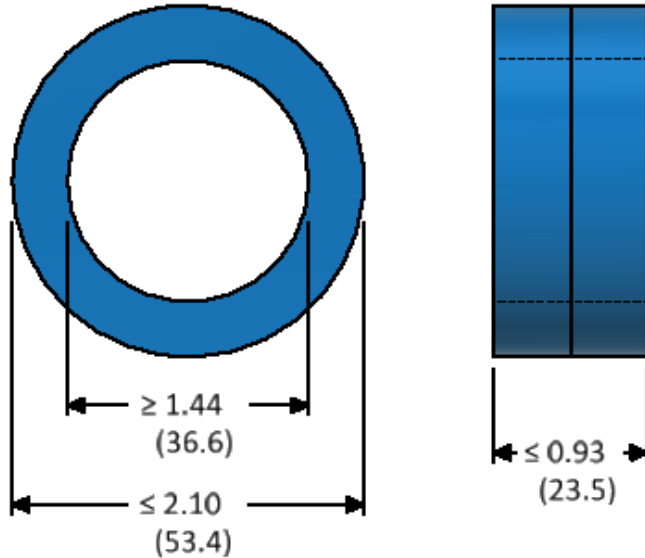
Core Material: Nanocrystalline

Currie Temp: 1,112°F (600 °C)

RTI Temp (0.81): 248°F (120°C)

Marking:

CBR37HP1/4-50A5



Dimensions = inches (mm)

Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3.0 mA/cm ~23,000

Permeability @ frequency = 10 KHz and Hpeak = 3.0. mA/cm ~16,000

Maximum Asymmetric
Current Isat *
(Sum Peak Current)

| Inspection Value | Measured Value | Measurement Limits | Frequency | L _{eff} * N (mA*turn) | Maximum Asymmetric Current Isat * (Sum Peak Current) | |
|------------------|-------------------------------------|--------------------|-----------|--------------------------------|--|----------|
| | A _L (μH/N ²) | 10.4 - 20.8 | 10 KHz | 30 | | 4.89 AMP |
| | A _L (μH/N ²) | 7.3 - 14.6 | 100 KHz | 30 | | 7.03 AMP |

*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 |
|-------|----------|----------------------------------|-------------------------|--------------------|
| 3 | 08/17/17 | Initial Issue | Engineering: D. Rollins | CBR37HP1/4-50A5 R4 |
| 4 | 04/07/21 | Updated to new datasheet format. | Sales: B. Wilson | |