

CoolTUBE® CT54X360HP41-100A18

Product Specification For Inductive Components



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Mechanical Specification

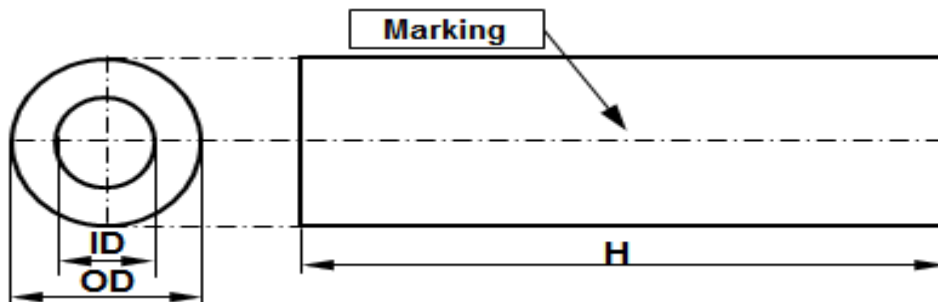
Part Number: CT54X360HP41-100A18

Nominal Core Dimensions:

3.15 x 2.48 x 1.18 inch x 10
80 x 63 x 30 mm x 10

Finished Core Dimensions:

OD ≤ 3.54 inch (90 mm)
ID ≥ 2.13 inch (54 mm)
H ≤ 14.17 inch (360 mm)



$$\ell_{\epsilon} = 22.04 \text{ cm} \quad A_{\epsilon} = 18.6 \text{ cm}^2$$

Currie Temp = 1,112°F (600 °C)

RTI Temp (0.81) = 248°F (120°C)

Core Material: Nanoperm®

Marking: CT54X360HP41-100A18

Notes:

Packing: 1 pc per layer, 1 layers/box; Box Quantity = 1 pcs

Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3 mA/cm ~8,000

Inspection Value	Measured Value	Measurement Limits	Frequency	L _{eff} * N (mA*turn)	Maximum Asymmetric Current I _{sat} * (Sum Peak Current)
	A _e (μH/N ²)	89 - 178	10 KHz	47	
	A _e (μH/N ²)	66 min	100 KHz	47	18

*Saturation Current Isat of NANOPERM®: 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:	BLUE Case	Case material:	Zytel FR70G25 V0 NNC10 with RAL 5012 Blue Pigment
Case UL file Number:	E41938	Voltage Breakdown:	2,500 volts rms between two copper wires on the core

Shell Finishing

Type:	Blue Tubing	Case material:	ShrinkTech STS Flexible heat shrinkable Polyolefin
Case UL file Number:	E360058	Application Temp:	-55°C to 125°C

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

Revision #	DATE	Alteration	Drawing Approval	
1	6/17/2016	INITIAL ISSUE	Engineering:	K. Giles
			Sales:	B. Wilson
Drawing Number: CT54X360HP41-100A18				