

CoolTUBE® M-1231

Product Specification For Inductive Components



MH&W International Corp.

575 Corporate Drive Mahwah, NJ 07430 USA

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

Mechanical Specification

Part Number: M-1231

Nominal Core Dimensions:

6.30 x 5.12 x 1.18 inch X 10
160 x 130 x 30 mm x 10

Finished Core Dimensions:

OD1 = 7.68 inch (195 mm±1)
OD2 = 7.87 inch (200 mm±1)
ID ≥ 4.72 inch (120 mm)
H ≤ 16.33 inch (415 mm)
F = 14.84 inch (377 mm ±5)

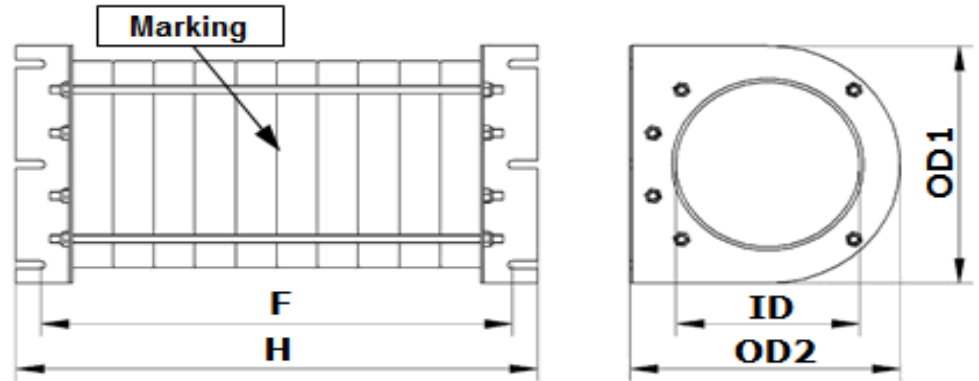
$\ell_E = 45.08$ cm $A_E = 32.8$ cm²

Currie Temp = 1,112°F (600 °C)

RTI Temp (0.81) = 248°F (120°C)

Core Material: Nanoperm®

Marking: CoolTUBE Magnetec M-1231-01 YM



Notes:

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

Electrical Core Performance

Permeability @ frequency = 10 KHz and Hpeak = 3mA/cm ~12,000

Inspection Value	Measured Value	Measurement Limits	Frequency	$L_{eff} * N$ (mA*turn)	Maximum Asymmetric Current $I_{sat} *$ (Sum Peak Current)
	A_e ($\mu H/N^2$)	77 - 154	10 KHz	96	
	A_e ($\mu H/N^2$)	57 min	100 KHz	96	40

*Saturation Current I_{sat} 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. I_{sat} 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

Bracket

TYPE:	RACK	Rack material:	Stainless steel 1.4301 with zinc plated threaded rod
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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	6/8/2016	INITIAL ISSUE	Engineering:	K. Giles
			Sales:	B. Wilson
Drawing Number: M-1231				