

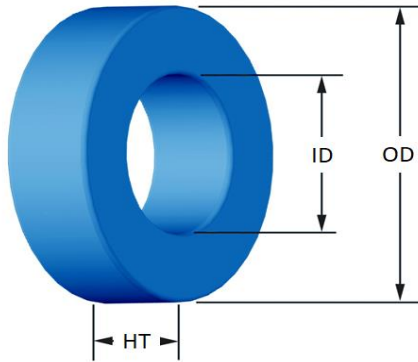


Part Number:

MS-306125-2

Revision:

2023-Dec-18



(If coated, Max./Min. includes coating)

		mm	in
OD	(nom. - bare core)	77.80	3.063
	(max.)	78.94	3.108
ID	(nom. - bare core)	39.34	1.549
	(min.)	38.34	1.509
HT	(nom. - bare core)	25.85	1.018
	(max.)	26.85	1.057
Mass	(approximate)	480	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	4.78	cm ²
	L_e - Eff. Mag. Path Length	17	cm
	V_e - Eff. Core Volume	81.5	cm ³
	W_A - Min. Eff. Window Area	11.5	cm ²
	s_a - Surface Area	211	cm ²
Inductance	m_l - mean length per turn	11.3	cm
	μ_i (reference)	125	
	A_L value (nominal)	425	nH/N ²
	Test Winding	120 Turns	AWG# 18
	Frequency	10k	Hz
Core Loss	Voltage on Agilent 4284A	2.5	V
	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.394E+10$, $b=1.034E+09$, $c=1.244E+07$, $d=4.007E-14$		
	B_{pk}	1000	G
DC Saturation	frequency	50 k	Hz
	Core Loss (nominal)	276	mW/cm ³
	Core Loss (maximum)	318	mW/cm ³
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=7.884E-06$, $c=1.883$, $d=0.000$		
Coating/Pkg	H_{dc}	40	Oe
	Percent Initial Perm(nom.)	55.0	%
	Percent Initial Perm(min.)	46.4	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000	Vrms
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	18 Pcs/Box	
	Wire Size	AWG	8
		mm	3.150
	Single Layer	Turns	30
		Rdc(Ω)	7.0 m
	Full Winding	Turns	60
		Rdc(Ω)	14.0 m

