

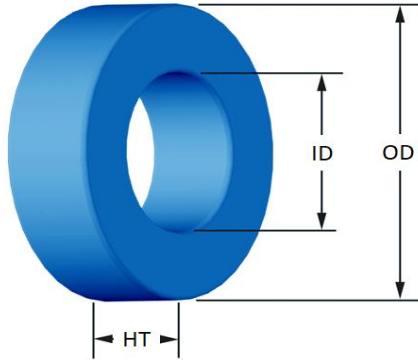


Part Number:

MS-200125-2

Revision:

2023-Dec-06



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

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OD	(nom. - bare core)		50.80	2.000		
	(max.)		51.69	2.035		
ID	(nom. - bare core)		31.75	1.250		
	(min.)		30.94	1.218		
HT	(nom. - bare core)		13.46	0.530		
	(max.)		14.35	0.565		
Mass	(approximate)		94	grams		
Magnetic Dimensions	A _e - Eff. Mag. Cross Section		1.25	cm ²		
	L _e - Eff. Mag. Path Length		12.733	cm		
	V _e - Eff. Core Volume		15.9	cm ³		
	W _A - Min. Eff. Window Area		7.52	cm ²		
	s _a - Surface Area		88.2	cm ²		
	mlt - mean length per turn		6.49	cm		
Inductance	μ _i (reference)		125			
	A _L value (nominal)		152	nH/N ²		
	Test Winding		70 Turns	AWG# 18		
	Frequency		10k	Hz		
	Voltage on Agilent 4284A		0.39	V		
	AL tolerance		±8%			
Core Loss	$\text{Core Loss(mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$					
	where <i>B_{pk}</i> expressed in gauss, <i>f</i> expressed in hertz, and:					
	<i>a</i> =1.394E+10, <i>b</i> =1.034E+09, <i>c</i> =1.244E+07, <i>d</i> =4.007E-14					
	B _{pk}	1000	G			
	frequency	50 k	Hz			
	Core Loss (nominal)	276	mW/cm ³			
Core Loss (maximum)	318	mW/cm ³				
DC Saturation	$\% \mu_i \frac{1}{a + b \cdot H^c} + d$					
	where H expressed in oersteds, and:					
	<i>a</i> =1.000E-02, <i>b</i> =7.884E-06, <i>c</i> =1.883, <i>d</i> =0.000					
	H _{DC}	40	Oe			
Coating/Pkg	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		60 Pcs/Box			
	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
Single Layer	Turns	23	30	38		
	Rdc(Ω)	3.1 m	6.4 m	12.8 m		
	Full Winding	Turns	39	61	94	
		Rdc(Ω)	5.2 m	12.9 m	31.7 m	

