

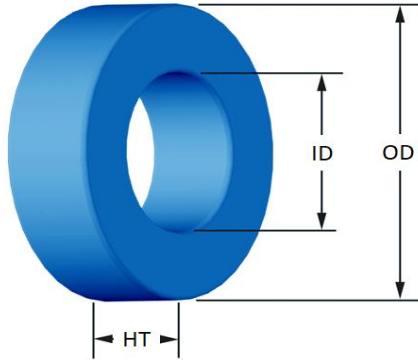


Part Number:

MS-185125-2

Revision:

2023-Dec-06



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

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OD	(nom. - bare core)		46.74	1.840		
	(max.)		47.63	1.875		
ID	(nom. - bare core)		28.70	1.130		
	(min.)		27.89	1.098		
HT	(nom. - bare core)		15.24	0.600		
	(max.)		16.13	0.635		
Mass	(approximate)		92	grams		
Magnetic Dimensions	A _e - Eff. Mag. Cross Section		1.34	cm ²		
	L _e - Eff. Mag. Path Length		11.62	cm		
	V _e - Eff. Core Volume		15.6	cm ³		
	W _A - Min. Eff. Window Area		6.11	cm ²		
	s _a - Surface Area		79.6	cm ²		
	mlt - mean length per turn		6.59	cm		
Inductance	μ _i (reference)		125			
	A _L value (nominal)		178	nH/N ²		
	Test Winding		80 Turns	AWG# 20		
	Frequency		10k	Hz		
	Voltage on Agilent 4284A		0.48	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			
	Percent Initial Perm.(nom.)	55.0	%			
	Percent Initial Perm.(min.)	46.4	%			
Coating/Pkg	Coating Type:		Blue Epoxy			
	Voltage Breakdown (min.)		1000 Vrms			
	Limit		0.1 mA, 5 s			
	Package Quantity		100 Pcs/Box			
Winding Table	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
	Single Layer	Turns	21	27	34	
		Rdc(Ω)	2.8 m	5.8 m	11.7 m	2
	Full Winding	Turns	32	49	77	
		Rdc(Ω)	4.3 m	10.6 m	26.4 m	

