

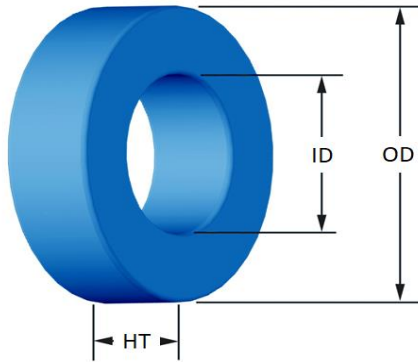


Part Number:

MS-184125-2

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)	24.13	0.950			
	(min.)	23.32	0.918			
HT	(nom. - bare core)	18.03	0.710			
	(max.)	18.92	0.745			
Mass	(approximate)	130	grams			
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.99	cm ²			
	L _e - Eff. Mag. Path Length	10.743	cm			
	V _e - Eff. Core Volume	21.4	cm ³			
	W _A - Min. Eff. Window Area	4.27	cm ²			
	s _a - Surface Area	81.7	cm ²			
Inductance	mlt - mean length per turn	7.38	cm			
	μ _i (reference)	125				
	A _L value (nominal)	281	nH/N ²			
	Test Winding	70 Turns	AWG# 20			
	Frequency	10k	Hz			
Core Loss	Voltage on Agilent 4284A	0.62	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 <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			
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: <i>a</i> =1.000E-02, <i>b</i> =7.884E-06, <i>c</i> =1.883, <i>d</i> =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	80 Pcs/Box				
	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
	Single Layer	Turns	17	22	28	
Rdc(Ω)		2.6 m	5.3 m	10.7 m		
Full Winding	Turns	22	35	54		
	Rdc(Ω)	3.3 m	8.4 m	20.7 m		

