

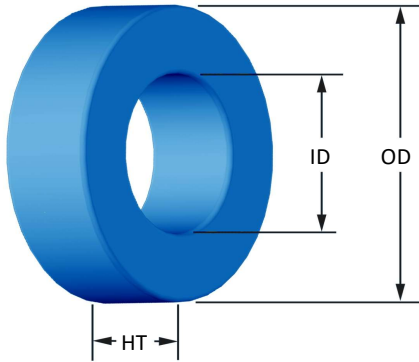


Part Number:

MS-040125-2

Revision

2023-Jan-05



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

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OD	(nom. - bare core)	10.16	0.400			
	(max.)	10.80	0.425			
ID	(nom. - bare core)	5.08	0.200			
	(min.)	4.57	0.180			
HT	(nom. - bare core)	3.96	0.156			
	(max.)	4.57	0.180			
Mass	(approximate)	1.4	grams			
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.100	cm ²			
	L _e - Eff. Mag. Path Length	2.38	cm			
	V _e - Eff. Core Volume	0.238	cm ³			
	W _A - Min. Eff. Window Area	0.164	cm ²			
	s _a - Surface Area	4.20	cm ²			
	mlt - mean length per turn	1.77	cm			
Inductance	μ _i (reference)	125				
	A _L value (nominal)	66	nH/N ²			
	Test Winding	55 Turns	AWG# 30			
	Frequency	10k	Hz			
	Voltage on Agilent 4284A	0.024	V			
	AL tolerance	±12%				
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 <i>H</i> 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.)	42.0%				
Coating/Pkg	Coating Type:	Blue Epoxy				
	Voltage Breakdown (min.)	1000 Vrms				
	Limit	0.1 mA, 5 s				
	Package Quantity	9,000 Pcs/Box				
Winding Table	Wire Size	AWG	20	22	24	
		mm	0.800	0.630	0.500	
	Single Layer	Turns	12	15	19	
		Rdc(Ω)	7.0 m	14.0 m	28.2 m	
	Full Winding	Turns	12	18	28	
		Rdc(Ω)	7.0 m	16.8 m	41.6 m	

