

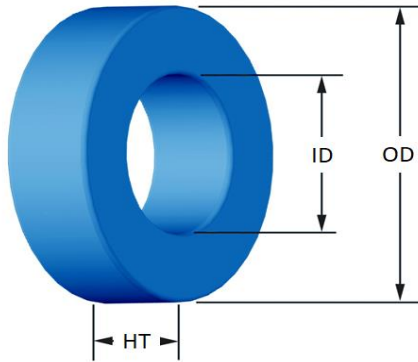


Part Number:

MS-185075-2

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)	91	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)	75				
	A _L value (nominal)	107	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> =7.890E+09, <i>b</i> =7.111E+08, <i>c</i> =8.980E+06, <i>d</i> =2.846E-14					
	B _{pk}	1000	G			
	frequency	50 k	Hz			
	Core Loss (nominal)	323	mW/cm ³			
	Core Loss (maximum)	372	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> =3.414E-06, <i>c</i> =1.841, <i>d</i> =0.000					
	H _{DC}	80	Oe			
	Percent Initial Perm.(nom.)	47.9	%			
	Percent Initial Perm.(min.)	39.6	%			
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	

