

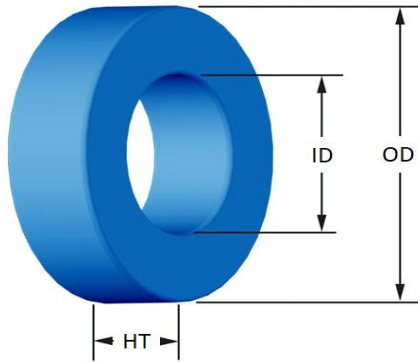


Part Number:

MS-185014-2

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)	76	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			
	WA - Min. Eff. Window Area	6.11	cm ²			
	sa - Surface Area	79.6	cm ²			
	mlt - mean length per turn	6.59	cm			
Inductance	μ _i (reference)	14				
	A _L value (nominal)	20	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 B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.000E+06$, $b=1.814E+08$, $c=3.377E+06$, $d=2.628E-14$					
	B _{pk}	300	G			
	frequency	100 k	Hz			
	Core Loss (nominal)	180	mW/cm ³			
	Core Loss (maximum)	207	mW/cm ³			
DC Saturation	$\% \mu_i \frac{1}{a+b\cdot H^c}+d$					
	where H expressed in oersteds, and: $a=1.000E-02$, $b=9.443E-07$, $c=1.533$, $d=0.000$					
	H _{DC}	200	Oe			
	Percent Initial Perm.(nom.)	75.9	%			
	Percent Initial Perm.(min.)	70.4	%			
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	
	Full Winding	Turns	32	49	77	
		Rdc(Ω)	4.3 m	10.6 m	26.4 m	

