

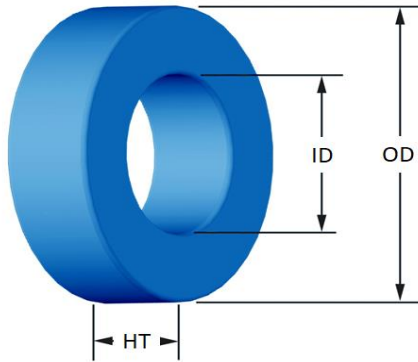


Part Number:

MS-185160-2

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)	160				
	A _L value (nominal)	228	nH/N ²			
	Test Winding	80 Turns	AWG# 20			
	Frequency	10k	Hz			
	Voltage on Agilent 4284A	0.48	V			
	AL tolerance	±8%				
Core Loss	$\text{Core Loss(mW/cm}^3\text{)} = \frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$					
	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> =4.439E-05, <i>c</i> =1.627, <i>d</i> =0.000					
	H _{DC}	40	Oe			
Coating/Pkg	Percent Initial Perm.(nom.)	35.8	%			
	Percent Initial Perm.(min.)	29.3	%			
	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	

