

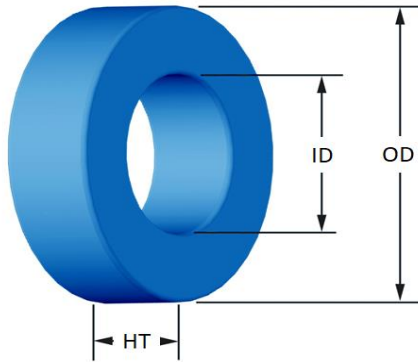


Part Number:

MS-107014-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	26.92	1.060
	(max.)	27.69	1.090
ID	(nom. - bare core)	14.73	0.580
	(min.)	14.10	0.555
HT	(nom. - bare core)	8.64	0.340
	(max.)	9.45	0.372
Mass	(approximate)	15	grams
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.497	cm ²
	L _e - Eff. Mag. Path Length	6.35	cm
	V _e - Eff. Core Volume	3.16	cm ³
	WA - Min. Eff. Window Area	1.56	cm ²
	sa - Surface Area	26.3	cm ²
	mlt - mean length per turn	3.95	cm
Inductance	μ _i (reference)	14	
	A _L value (nominal)	13.8	nH/N ²
	Test Winding	80 Turns	AWG# 26
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.18	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
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	630 Pcs/Box	

Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	12	16	20	26	33	41	52	66	82	103	129
	Full Winding	Rdc(Ω)	1.6 m	3.3 m	6.5 m	13.5 m	27.3 m	53.9 m	108.8 m	219.6 m	433.9 m	866.9 m	1.7
		Turns	13	20	30	47	73	112	174	269	417	645	998
		Rdc(Ω)	1.7 m	4.1 m	9.8 m	24.4 m	60.4 m	147.3 m	364.0 m	895.1 m	2.2	5.4	13.4

