

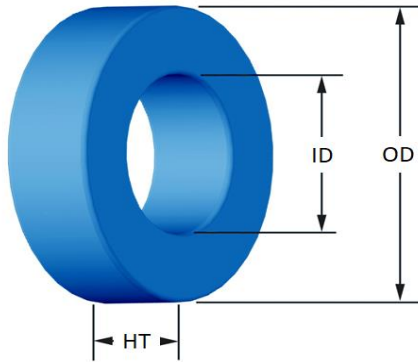


Part Number:

MS-225014-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	57.15	2.250
	(max.)	58.04	2.285
ID	(nom. - bare core)	35.56	1.400
	(min.)	34.75	1.368
HT	(nom. - bare core)	13.97	0.550
	(max.)	14.86	0.585
Mass	(approximate)	100	grams
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.44	cm ²
	L _e - Eff. Mag. Path Length	14.296	cm
	V _e - Eff. Core Volume	20.7	cm ³
	WA - Min. Eff. Window Area	9.48	cm ²
	sa - Surface Area	109	cm ²
	mlt - mean length per turn	7.04	cm
Inductance	μ _i (reference)	14	
	A _L value (nominal)	18	nH/N ²
	Test Winding	80 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.51	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	60 Pcs/Box	

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	27	34	43	54	68	85	106	133	166	207	259
	Full Winding	Turns	50	77	119	184	285	441	682	1,056	1,635	2,530	3,916
		Rdc(Ω)	3.9 m	7.8 m	15.7 m	31.4 m	63.0 m	125.2 m	248.2 m	495.3 m	983.2 m	1.9	3.9
		Rdc(Ω)	7.2 m	17.7 m	43.6 m	107.1 m	263.9 m	649.4 m	1.6	3.9	9.7	23.8	58.7

