

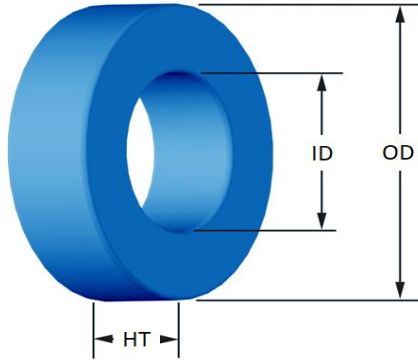


Part Number:

MS-520014-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	132.54	5.218
	(max.)	134.21	5.284
ID	(nom. - bare core)	78.59	3.094
	(min.)	77.04	3.033
HT	(nom. - bare core)	20.32	0.800
	(max.)	21.72	0.855
Mass	(approximate)	850	grams
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	5.35	cm ²
	L _e - Eff. Mag. Path Length	32.429	cm
	V _e - Eff. Core Volume	173	cm ³
	WA - Min. Eff. Window Area	46.6	cm ²
	sa - Surface Area	515	cm ²
	mlt - mean length per turn	13.9	cm
Inductance	μ _i (reference)	14	
	A _L value (nominal)	26	nH/N ²
	Test Winding	200 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	4.8	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=2.035E+08, c=3.969E+06, d=3.473E-14		
	B _{pk}	300	G
	frequency	100 k	Hz
	Core Loss (nominal)	168	mW/cm ³
	Core Loss (maximum)	193	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=1.065E-06, c=1.553, d=0.000		
	H _{DC}	200	Oe
	Percent Initial Perm(nom.)	71.5	%
	Percent Initial Perm(min.)	65.4	%
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	6 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	62	78	98	123	154	192	239	298	372	463	577
	Full Winding	Turns	244	378	584	905	1,400	2,167	3,354	5,191	8,035	12,436	19,248
		Rdc(Ω)	69.8 m	172.0 m	422.6 m	1.0	2.6	6.3	15.5	38.2	94.1	231.6	570.0

