

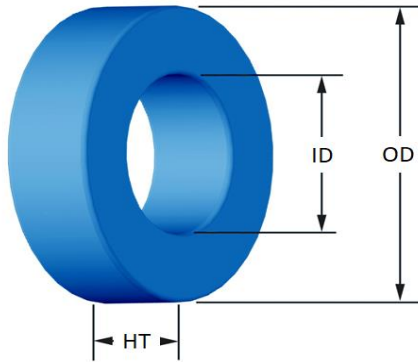


Part Number:

MS-306014-2

Revision:

2023-Dec-18



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

		mm	in
OD	(nom. - bare core)	77.80	3.063
	(max.)	78.94	3.108
ID	(nom. - bare core)	39.34	1.549
	(min.)	38.34	1.509
HT	(nom. - bare core)	25.85	1.018
	(max.)	26.85	1.057
Mass	(approximate)	400	grams
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	4.78	cm ²
	L _e - Eff. Mag. Path Length	17	cm
	V _e - Eff. Core Volume	81.5	cm ³
	W _A - Min. Eff. Window Area	11.5	cm ²
	s _a - Surface Area	211	cm ²
	mlt - mean length per turn	11.3	cm
Inductance	μ _i (reference)	14	
	A _L value (nominal)	47	nH/N ²
	Test Winding	120 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	2.5	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
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	18 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	30	38	47	60	75	94	118	147	184	229	286
	Full Winding	Turns	60	94	145	224	347	537	831	1,286	1,990	3,080	4,767
		Rdc(Ω)	7.0 m	14.1 m	27.7 m	56.3 m	111.9 m	223.1 m	445.5 m	882.6 m	1.8	3.5	6.9
		Rdc(Ω)	14.0 m	34.9 m	85.6 m	210.2 m	517.9 m	1.3	3.1	7.7	19.0	46.8	115.1

