

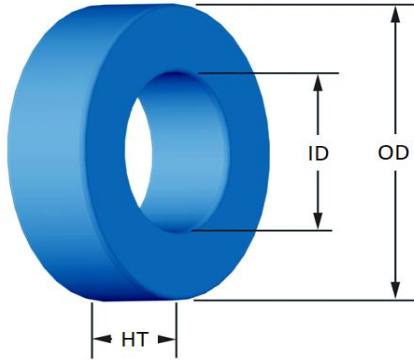


Part Number:

MS-199090-2

Revision:

2024-Jul-22



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

		mm	in
OD	(nom. - bare core)	50.80	2.000
	(max.)	51.69	2.035
ID	(nom. - bare core)	24.77	0.975
	(min.)	23.95	0.943
HT	(nom. - bare core)	20.83	0.820
	(max.)	21.72	0.855
Mass	(approximate)	180	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	2.65	cm ²
	L_e - Eff. Mag. Path Length	11.385	cm
	V_e - Eff. Core Volume	30.2	cm ³
	W_A - Min. Eff. Window Area	4.51	cm ²
	s_a - Surface Area	97.4	cm ²
Inductance	m_l - mean length per turn	8.32	cm
	μ_i (reference)	90	
	A_L value (nominal)	263	nH/N ²
	Test Winding	70 Turns	AWG# 20
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.82	V
	AL tolerance	±8%	
Core Loss	Core Loss(mW/cm ³)= $\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=7.890E+09$, $b=7.111E+08$, $c=8.980E+06$, $d=2.846E-14$		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	323	mW/cm ³
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=3.994E-06$, $c=1.883$, $d=0.000$		
	H_{DC}	50	Oe
	Percent Initial Perm(nom.)	61.3	%
Coating/Pkg	Percent Initial Perm(min.)	52.9	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000	Vrms
	Limit	0.1 mA, 5 s	
Winding Table	Package Quantity	48 Pcs/Box	
	Wire Size	8	10

	AWG	8	10	12	14	16	18	20	22	24	26	28
Winding Table	Wire Size	mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.315
	Single Layer	Turns	17	22	29	36	46	58	72	91	114	142
	Full Winding	Rdc(Ω)	2.9 m	6.0 m	12.5 m	24.8 m	50.3 m	100.9 m	199.2 m	400.4 m	797.7 m	1.6
		Rdc(Ω)	4.1 m	9.8 m	24.2 m	59.8 m	147.7 m	363.6 m	896.4 m	2.2	5.4	13.4

