

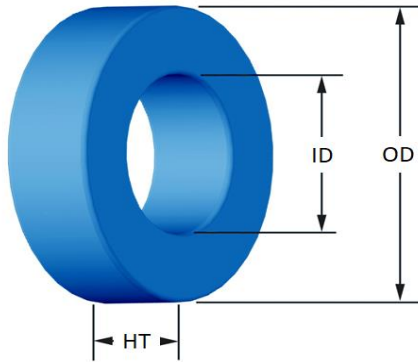


Part Number:

MS-601090-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	152.40	6.000
	(max.)	153.90	6.059
ID	(nom. - bare core)	81.28	3.200
	(min.)	79.65	3.136
HT	(nom. - bare core)	25.40	1.000
	(max.)	26.80	1.055
Mass	(approximate)	1,870	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	8.81	cm ²
	L_e - Eff. Mag. Path Length	35.97	cm
	V_e - Eff. Core Volume	317	cm ³
	W_A - Min. Eff. Window Area	49.8	cm ²
	s_a - Surface Area	674	cm ²
	mlt - mean length per turn	16.8	cm
Inductance	μ_i (reference)	90	
	A_L value (nominal)	286	nH/N ²
	Test Winding	200 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	7.8	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:		
	$a=7.890E+09$, $b=7.111E+08$, $c=8.980E+06$, $d=2.846E-14$		
	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:		
	$a=1.000E-02$, $b=4.807E-05$, $c=1.349$, $d=0.000$		
	H_{dc}	50	Oe
	Percent Initial Perm(nom.)	51.5	%
	Percent Initial Perm(min.)	45.4	%
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	3 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	65	81	102	127	159	198	247	309	385	479	597
	Full Winding	Turns	261	404	625	967	1,497	2,316	3,585	5,549	8,589	13,293	20,574
		Rdc(Ω)	90.0 m	221.5 m	545.0 m	1.3	3.3	8.1	20.0	49.2	121.2	298.3	734.3

