

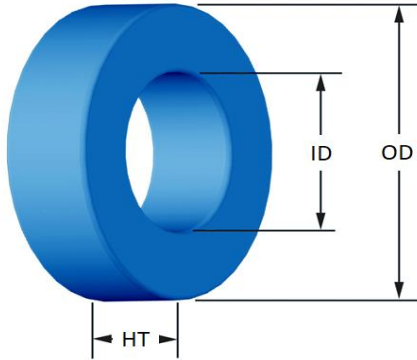


Part Number:

MS-134040-2

Revision:

2023-Dec-18



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

		mm	in
OD	(nom. - bare core)	33.02	1.300
	(max.)	33.83	1.332
ID	(nom. - bare core)	19.94	0.785
	(min.)	19.30	0.760
HT	(nom. - bare core)	18.00	0.709
	(max.)	19.00	0.748
Mass	(approximate)	49	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.10	cm ²
	L_e - Eff. Mag. Path Length	8.15	cm
	V_e - Eff. Core Volume	8.98	cm ³
	W_A - Min. Eff. Window Area	2.93	cm ²
	s_a - Surface Area	49.1	cm ²
	m_{lt} - mean length per turn	6.22	cm
Inductance	μ_i (reference)	40	
	A_L value (nominal)	68	nH/N ²
	Test Winding	70 Turns	AWG# 22
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.34	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:		
	$a=1.000E+06$, $b=6.961E+08$, $c=5.397E+06$, $d=4.127E-14$		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	441	mW/cm ³
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	$a=1.000E-02$, $b=2.655E-06$, $c=1.703$, $d=0.000$		
	H_{dc}	100	Oe
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	210 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	14	18	22	29	36	46	58	73	91	114	142
	Full Winding	Rdc(Ω)	1.8 m	3.7 m	7.1 m	14.9 m	29.4 m	59.8 m	120.0 m	240.2 m	476.2 m	948.7 m	1.9
	Winding	Turns	15	24	37	57	88	136	211	326	504	780	1,208
		Rdc(Ω)	1.9 m	4.9 m	12.0 m	29.3 m	72.0 m	176.9 m	436.5 m	1.1	2.6	6.5	16.0

