

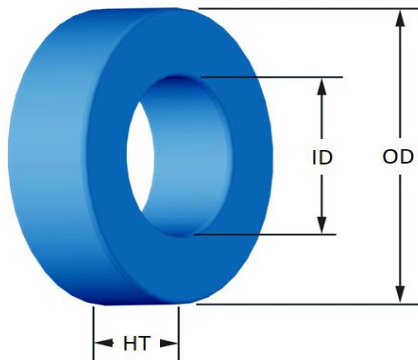


Part Number:

MS-185060-2

Revision:

2023-Dec-06



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

	mm	in
OD	(nom. - bare core)	46.74
	(max.)	47.63
ID	(nom. - bare core)	28.70
	(min.)	27.89
HT	(nom. - bare core)	15.24
	(max.)	16.13

Mass	(approximate)	90	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.34	cm ²
	L_e - Eff. Mag. Path Length	11.62	cm
	V_e - Eff. Core Volume	15.6	cm ³
	W_A - Min. Eff. Window Area	6.11	cm ²
	s_a - Surface Area	79.6	cm ²
	m_{lt} - mean length per turn	6.59	cm

Inductance	μ_i (reference)	60	
	A_L value (nominal)	86	nH/N ²
	Test Winding	80 Turns	AWG# 20
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.48	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
	Core Loss (maximum)	372	mW/cm ³

DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: $a=1.000E-02$, $b=2.151E-06$, $c=1.841$, $d=0.000$		
	H_{dc}	100	Oe
	Percent Initial Perm(nom.)	49.2	%
	Percent Initial Perm(min.)	40.9	%

Coating/Pkg	Coating Type: Blue Epoxy Voltage Breakdown (min.): 1000 Vrms Limit: 0.1 mA, 5 s Package Quantity: 100 Pcs/Box		
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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	21	27	34	43	54	68	85	106	133	166	207
	Full Winding	Turns	32	49	77	119	184	284	440	680	1,053	1,630	2,523
		Rdc(Ω)	2.8 m	5.8 m	11.7 m	23.5 m	46.8 m	93.8 m	186.5 m	369.9 m	738.1 m	1.5	2.9
		Rdc(Ω)	4.3 m	10.6 m	26.4 m	64.9 m	159.6 m	391.8 m	965.4 m	2.4	5.8	14.4	35.4

