

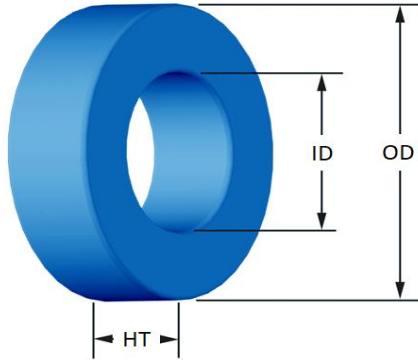


Part Number:

MS-225060-2

Revision:

2023-Dec-06



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

	mm	in
OD	(nom. - bare core)	57.15
	(max.)	58.04
ID	(nom. - bare core)	35.56
	(min.)	34.75
HT	(nom. - bare core)	13.97
	(max.)	14.86

Mass	(approximate)	120	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.44	cm ²
	L_e - Eff. Mag. Path Length	14.296	cm
	V_e - Eff. Core Volume	20.7	cm ³
	W_A - Min. Eff. Window Area	9.48	cm ²
	s_a - Surface Area	109	cm ²
	m_{lt} - mean length per turn	7.04	cm

Inductance	μ_i (reference)	60	
	A_L value (nominal)	75	nH/N ²
	Test Winding	80 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.51	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: 60 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	27	34	43	54	68	85	106	133	166	207	259
	Full Winding	Turns	50	77	119	184	285	441	682	1,056	1,635	2,530	3,916
		Rdc(Ω)	3.9 m	7.8 m	15.7 m	31.4 m	63.0 m	125.2 m	248.2 m	495.3 m	983.2 m	1.9	3.9
		Rdc(Ω)	7.2 m	17.7 m	43.6 m	107.1 m	263.9 m	649.4 m	1.6	3.9	9.7	23.8	58.7

