

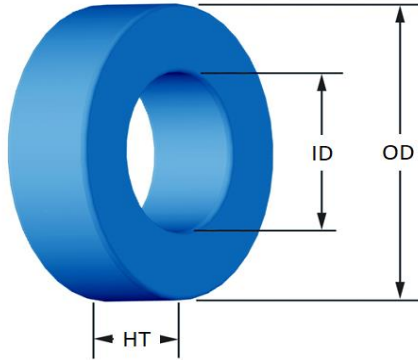


Part Number:

MS-226090-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	57.15	2.250
	(max.)	58.04	2.285
ID	(nom. - bare core)	26.39	1.039
	(min.)	25.58	1.007
HT	(nom. - bare core)	15.24	0.600
	(max.)	16.13	0.635
Mass	(approximate)	170	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	2.29	cm ²
	L_e - Eff. Mag. Path Length	12.506	cm
	V_e - Eff. Core Volume	28.6	cm ³
	W_A - Min. Eff. Window Area	5.14	cm ²
	s_a - Surface Area	105	cm ²
	m_{lt} - mean length per turn	7.75	cm
Inductance	μ_i (reference)	90	
	A_L value (nominal)	207	nH/N ²
	Test Winding	60 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.61	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:		
	$a=1.000E-02$, $b=3.994E-06$, $c=1.883$, $d=0.000$		
	H_{dc}	50	Oe
	Percent Initial Perm(nom.)	61.3	%
	Percent Initial Perm(min.)	52.9	%
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	60 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	19	24	31	39	49	62	78	97	122	152	190
	Full Winding	Turns	27	42	64	100	154	239	370	572	886	1,371	2,122
		Rdc(Ω)	3.0 m	6.1 m	12.5 m	25.0 m	50.0 m	100.5 m	201.2 m	397.8 m	795.8 m	1.6	3.1
		Rdc(Ω)	4.3 m	10.6 m	25.8 m	64.1 m	157.0 m	387.5 m	954.2 m	2.3	5.8	14.2	35.0

