

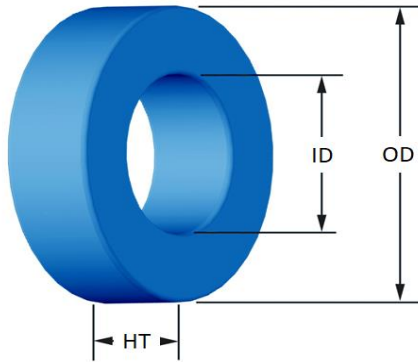


Part Number:

MS-226160-2H305

Revision:

2023-Dec-18



(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)	30.48	1.200
	(max.)	31.37	1.235

Magnetic Dimensions	Mass (approximate)	340	grams
	A_e - Eff. Mag. Cross Section	4.57	cm ²
	L_e - Eff. Mag. Path Length	12.506	cm
	V_e - Eff. Core Volume	57.2	cm ³
	W_A - Min. Eff. Window Area	5.14	cm ²
	s_a - Surface Area	136	cm ²
	m_{lt} - mean length per turn	10.8	cm

Inductance	μ_i (reference)	160	
	A_L value (nominal)	736	nH/N ²
	Test Winding	60 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	1.2	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: $a=1.394E+10$, $b=1.034E+09$, $c=1.244E+07$, $d=4.007E-14$		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	276	mW/cm ³
	Core Loss (maximum)	318	mW/cm ³

DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=4.439E-05$, $c=1.627$, $d=0.000$		
	H_{dc}	40	Oe
	Percent Initial Perm(nom.)	35.8	%
	Percent Initial Perm(min.)	29.3	%

Coating/Pkg	Coating Type:	Blue Epoxy
	Voltage Breakdown (min.)	1000 Vrms
	Limit	0.1 mA, 5 s
	Package Quantity	36 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
		Rdc(Ω)	4.2 m	8.5 m	17.4 m	34.8 m	69.6 m	140.1 m	280.3 m	554.3 m	1.1	2.2	4.4
	Full Winding	Turns	27	42	64	100	154	239	370	572	886	1,371	2,122
		Rdc(Ω)	6.0 m	14.8 m	35.9 m	89.3 m	218.8 m	539.9 m	1.3	3.3	8.1	19.8	48.8

