

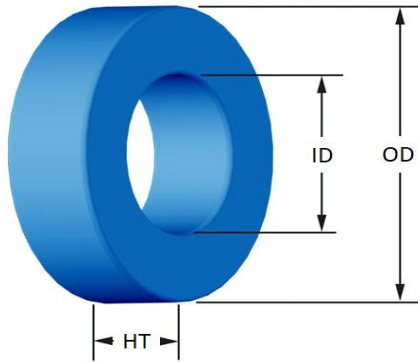


Part Number:

MS-130147-2

Revision:

2023-Dec-06



(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)	10.67	0.420
	(max.)	11.61	0.457
Mass	(approximate)	32	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.672	cm ²
	L_e - Eff. Mag. Path Length	8.15	cm
	V_e - Eff. Core Volume	5.48	cm ³
	W_A - Min. Eff. Window Area	2.93	cm ²
	s_a - Surface Area	40.1	cm ²
Inductance	m_l - mean length per turn	4.74	cm
	μ_i (reference)	147	
	A_L value (nominal)	150	nH/N ²
	Test Winding	70 Turns	AWG# 22
	Frequency	10k	Hz
Core Loss	Voltage on Agilent 4284A	0.21	V
	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	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
DC Saturation	frequency	50 k	Hz
	Core Loss (nominal)	276	mW/cm ³
	Core Loss (maximum)	318	mW/cm ³
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=4.732E-05$, $c=1.539$, $d=0.000$		
Coating/Pkg	H_{dc}	40	Oe
	Percent Initial Perm(nom.)	42.0	%
	Percent Initial Perm(min.)	35.3	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000	Vrms
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	336 Pcs/Box	
	Wire Size	AWG	8
		mm	3.150
	Single Layer	Turns	14
		Rdc(Ω)	1.4 m
	Full Winding	Turns	15
		Rdc(Ω)	1.5 m

