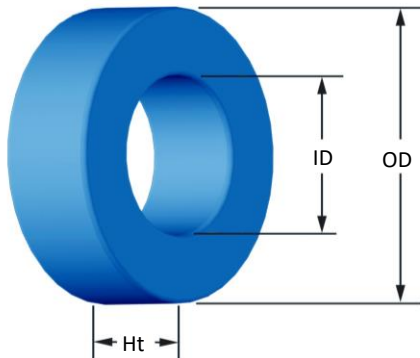




Part Number:

MS-090147-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	22.86 mm 23.62 mm	0.900 in 0.930 in
ID	(nom. - bare core) (min.)	13.97 mm 13.39 mm	0.550 in 0.527 in
HT	(nom. - bare core) (max.)	7.62 mm 8.38 mm	0.300 in 0.330 in
Mass	(approximate)	11 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.331 cm ²	
	L _e - Eff. Mag. Path Length	5.67 cm	
	V _e - Eff. Core Volume	1.88 cm ³	
	WA - Min. Eff. Window Area	1.41 cm ²	
	sa - Surface Area	19.8 cm ²	
Inductance	mlt - mean length per turn	3.37 cm	
	μ _i (reference)	147	
	A _L value (nominal)	106 nH/N ²	
	Test Winding	N=80, #26 AWG	
	Frequency	10 kHz	
Core Loss	Voltage on Agilent 4284A	0.12 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 kHz	
	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	1,260 Pcs/Box	
	Wire Size	AWG	10 12 14 16 18 20 22 24 26 28 30
	Single Layer	Turns	2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315 0.250
	Full Winding	Rdc(Ω)	1.2 m 2.6 m 5.3 m 10.6 m 21.8 m 43.7 m 89.1 m 175.8 m 351.6 m 702.7 m 1.4

