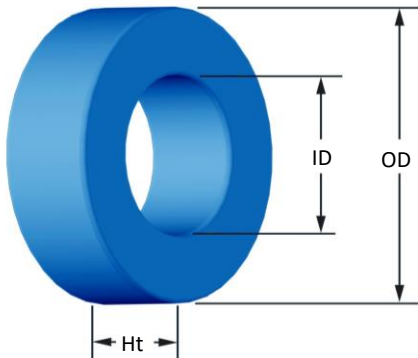




**Part Number: MS-092147-2**

Revision 2022-Apr-28



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

<b>OD</b>	(nom. - bare core) (max.)	23.57 mm 24.28 mm	0.928 in 0.956 in
<b>ID</b>	(nom. - bare core) (min.)	14.40 mm 13.77 mm	0.567 in 0.542 in
<b>HT</b>	(nom. - bare core) (max.)	8.89 mm 9.70 mm	0.350 in 0.382 in
<b>Mass</b>	(approximate)	13 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.388 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	5.88 cm	
	V <sub>e</sub> - Eff. Core Volume	2.28 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	1.49 cm <sup>2</sup>	
	sa - Surface Area	21.8 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	147	
	A <sub>L</sub> value (nominal)	124 nH/N <sup>2</sup>	
<b>Core Loss</b>	Test Winding	N=80, #26 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.14 V	
	AL tolerance	±8%	
	Core Loss(mW/cm <sup>3</sup> ):	$\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$	
<b>DC Saturation</b>	where B <sub>pk</sub> 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 <sub>pk</sub>	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	276 mW/cm <sup>3</sup>	
	Core Loss (maximum)	318 mW/cm <sup>3</sup>	
<b>DC Saturation</b>	%μ <sub>i</sub> $\frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.000E-02, b=4.732E-05, c=1.539, d=0.000		
	H <sub>DC</sub>	40 Oe	
<b>Coating/Pkg</b>	Percent Initial Perm(nom.)	42.0%	
	Percent Initial Perm(min.)	35.3%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
<b>Winding Table</b>	Limit	0.1 mA, 5 s	
	Package Quantity	1,080 Pcs/Box	

Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
	mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
Single Layer	Turns	12	15	20	25	32	40	51	64	80	101	126
	Rdc(Ω)	1.4 m	2.9 m	6.1 m	12.1 m	24.6 m	49.0 m	99.3 m	198.2 m	394.0 m	791.0 m	1.6
Full Winding	Turns	12	19	29	45	69	107	166	257	397	615	952
	Rdc(Ω)	1.4 m	3.6 m	8.8 m	21.8 m	53.1 m	131.0 m	323.2 m	795.8 m	2.0	4.8	11.9

