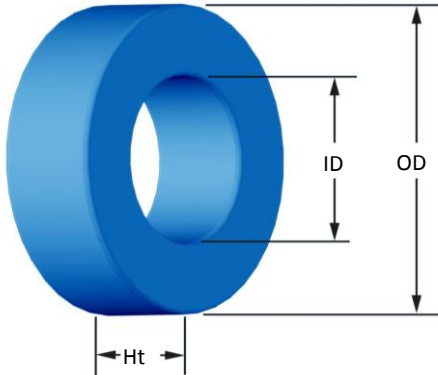
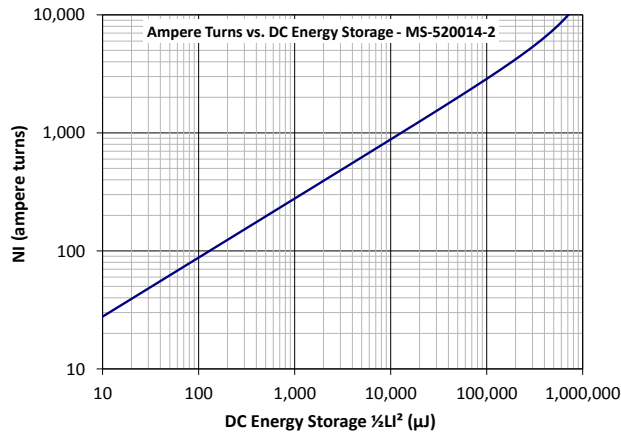
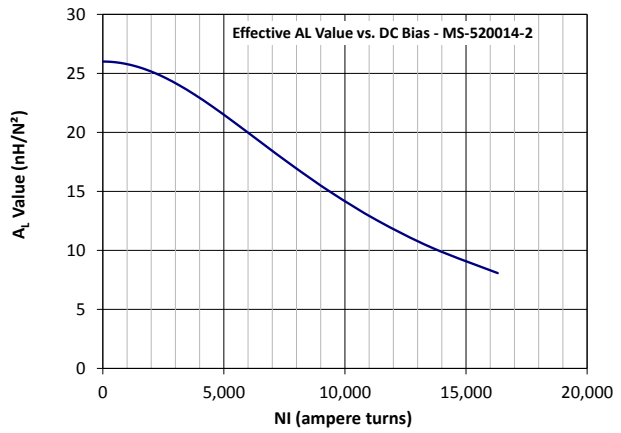
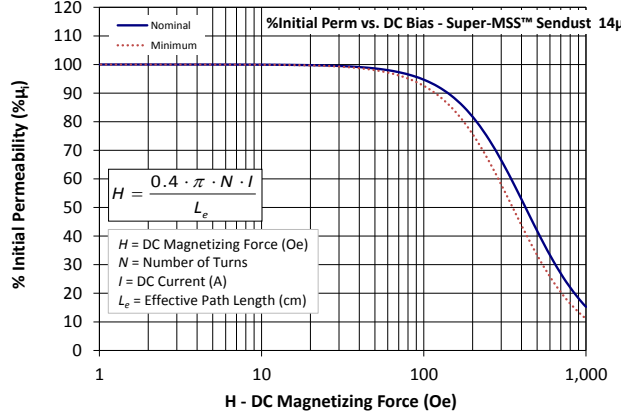
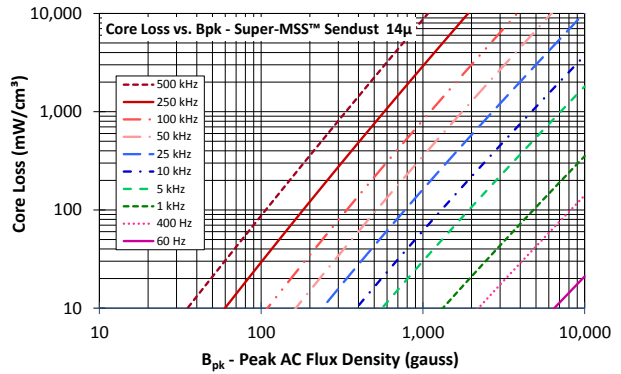




Part Number: **MS-520014-2**
Revision 20140225 - Generated 12-Mar-2014



OD	(nom. - bare core)	132.54 mm	5.218 in
	(max. - after coating)	134.21 mm	5.284 in
ID	(nom. - bare core)	78.59 mm	3.094 in
	(min. - after coating)	77.04 mm	3.033 in
Ht	(nom. - bare core)	20.32 mm	0.800 in
	(max. - after coating)	21.72 mm	0.855 in
Mass	(approximate)	850 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	5.35 cm ²	
	L_e - Eff. Mag. Path Length	32.429 cm	
	V_e - Eff. Core Volume	173 cm ³	
	WA - Min. Eff. Window Area	46.6 cm ²	
	sa - Surface Area	515 cm ²	
	mlt - mean length per turn	13.9 cm	
Inductance	μ_i (reference)	14	
	A_L value (nominal)	26 nH/N ²	
	Test Winding	N=200, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	4.7 V	
	AL tolerance	±8%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.000E+09$, $b=4.213E+08$, $c=1.032E+07$, $d=2.297E-14$		
	B_{pk}	300 G	
	frequency	100 kHz	
	Core Loss (nominal)	79 mW/cm ³	
Core Loss (maximum)	90 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=5.722E-08$, $c=1.995$, $d=0.000$		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	81.7%	
Percent Initial Perm(min.)	75.7%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	4 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	62	78	98	123	154	192	239	298	372	463	577
		Rdc(Ω)	17.7 m	35.5 m	70.9 m	141.5 m	281.8 m	558.8 m	1.1	2.2	4.4	8.6	17.1
Full Winding	Turns	244	378	584	905	1,400	2,167	3,354	5,191	8,035	12,436	19,248	
	Rdc(Ω)	69.8 m	172.0 m	422.6 m	1.0	2.6	6.3	15.5	38.2	94.1	231.6	570.0	