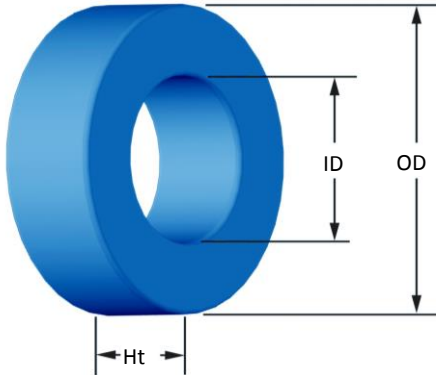




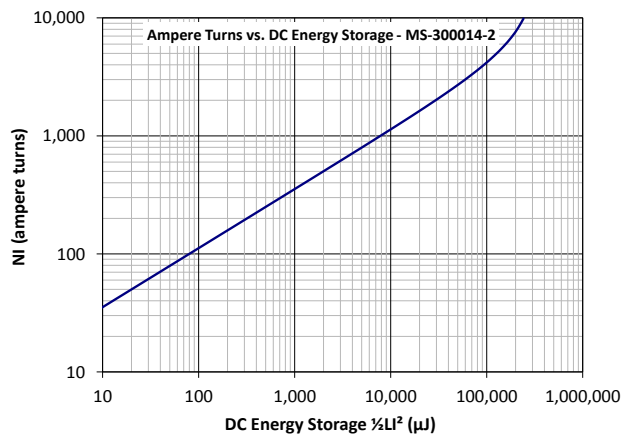
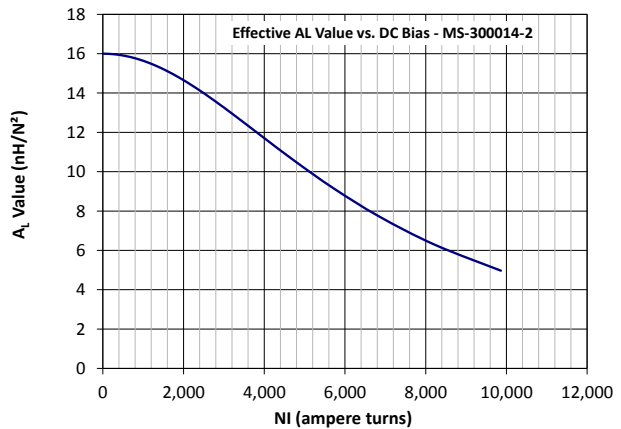
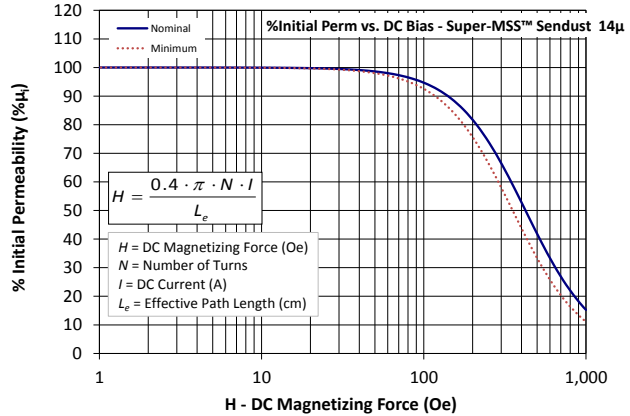
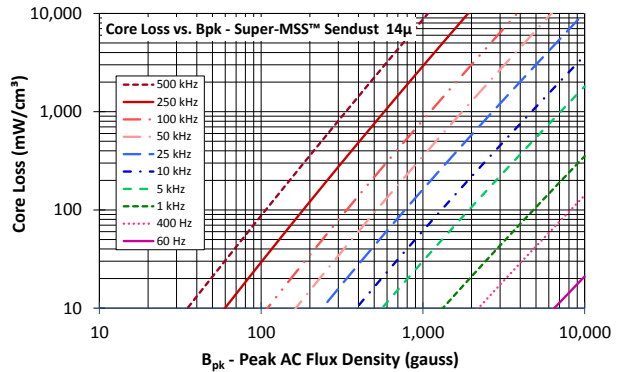
Part Number:

MS-300014-2

Revision 20140225 - Generated 12-Mar-2014



OD	(nom. - bare core)	77.80 mm	3.063 in			
	(max. - after coating)	78.94 mm	3.108 in			
ID	(nom. - bare core)	49.23 mm	1.938 in			
	(min. - after coating)	47.96 mm	1.888 in			
Ht	(nom. - bare core)	12.70 mm	0.500 in			
	(max. - after coating)	13.97 mm	0.550 in			
Mass	(approximate)	170 grams				
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.77 cm ²				
	L _e - Eff. Mag. Path Length	19.612 cm				
	V _e - Eff. Core Volume	34.8 cm ³				
	W _A - Min. Eff. Window Area	18.1 cm ²				
	s _a - Surface Area	184 cm ²				
	mlt - mean length per turn	8.29 cm				
Inductance	μ _i (reference)	14				
	A _L value (nominal)	16 nH/N ²				
	Test Winding	N=120, #18 AWG				
	Frequency	10 kHz				
	Voltage on Agilent 4284A	0.94 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		45 Pcs/Box				
Winding Table	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
	Single Layer	Turns	38	48	60	
		Rdc(Ω)	6.5 m	13.0 m	25.9 m	
	Full Winding	Turns	95	146	227	
		Rdc(Ω)	16.2 m	39.6 m	97.9 m	



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