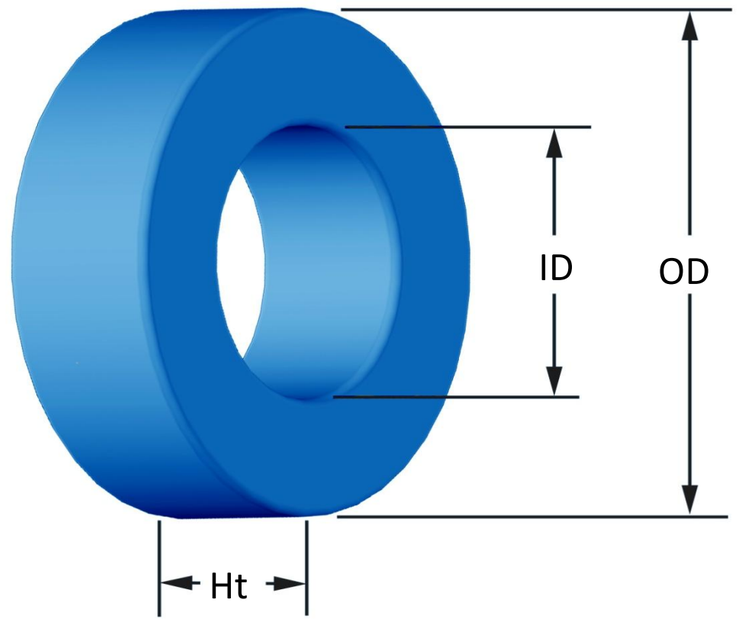
MICROMETALS™
POWDER CORE SOLUTIONS

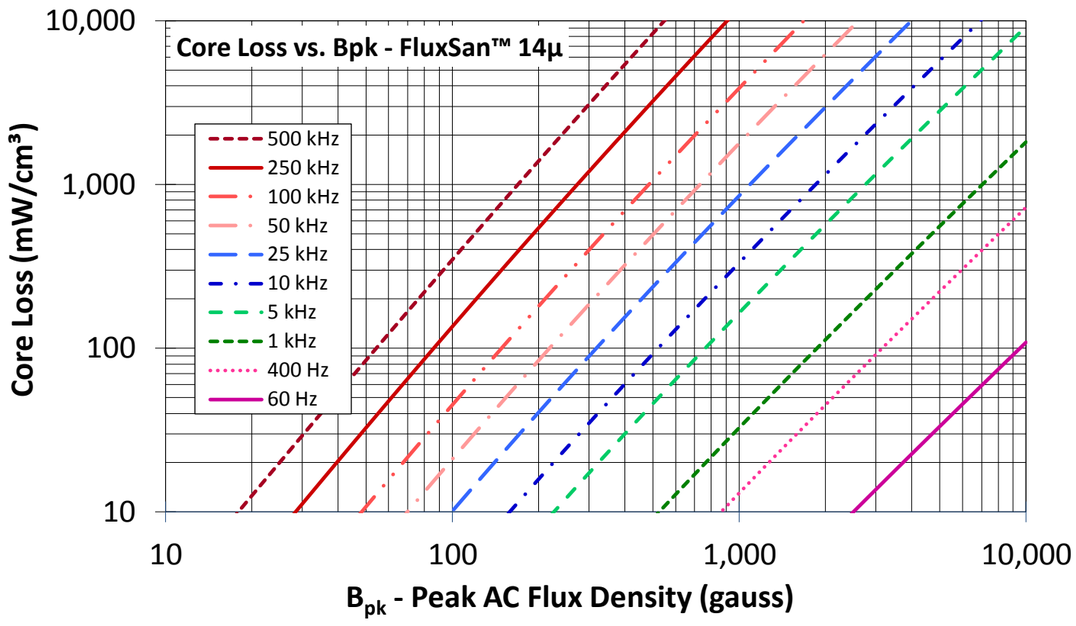
Part Number:	FS-092014-2

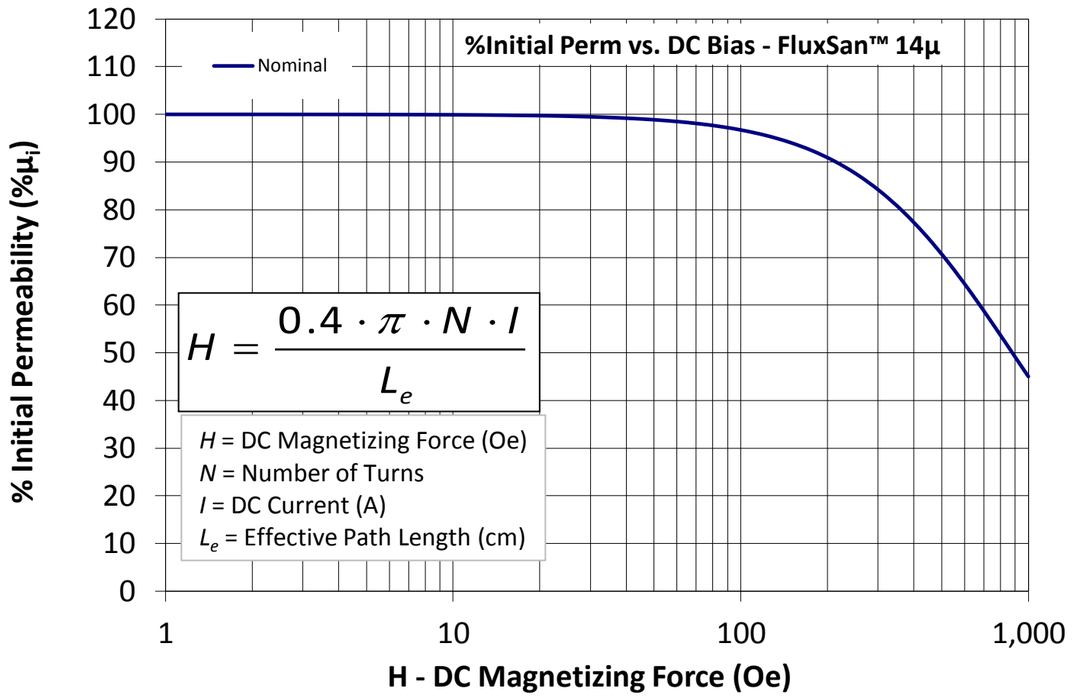
Revision 20190529 - Generated 2019-May-29

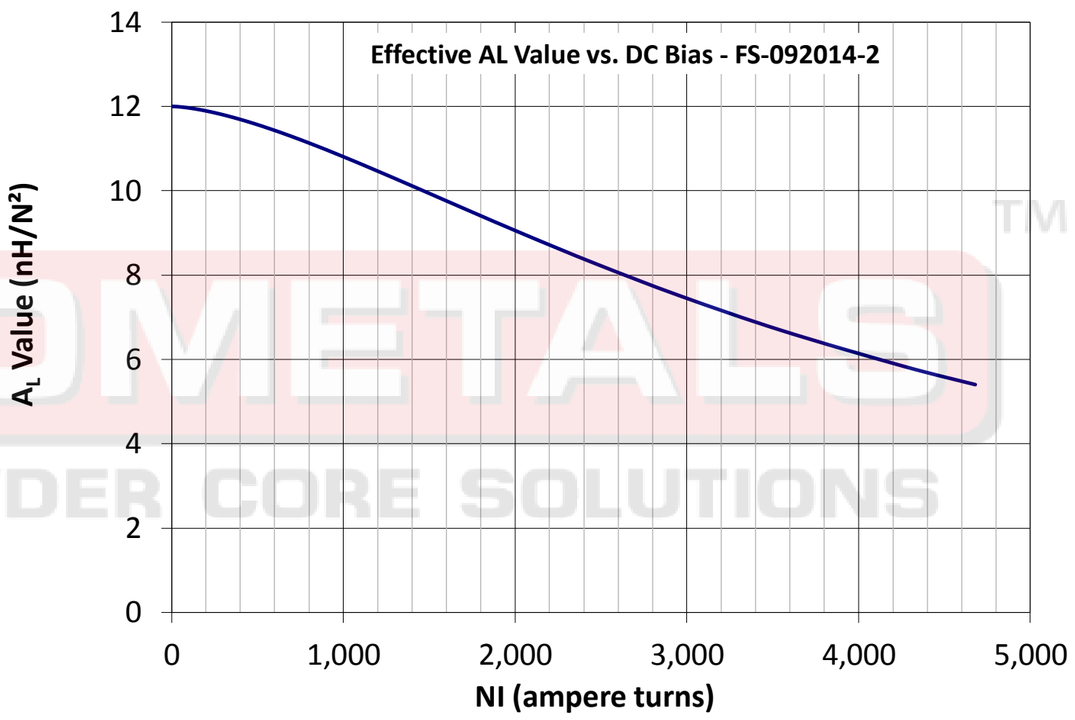


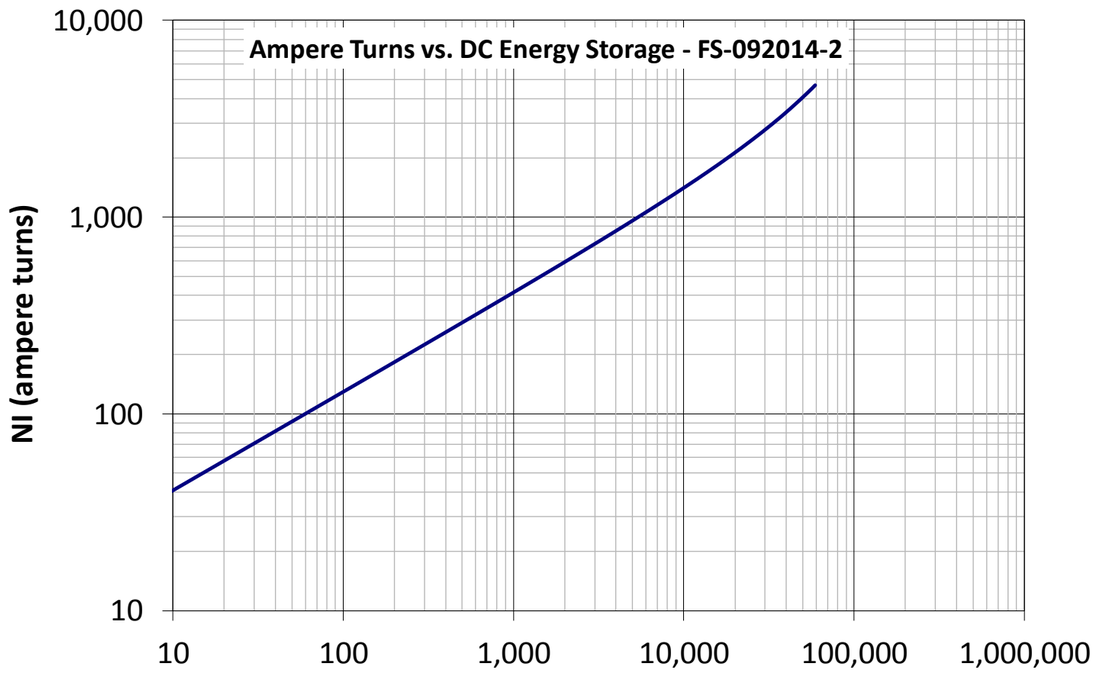
(If coated, Max./Min. includes coating)

OD	(nom. - bare core)	23.57 mm	0.928 in
	(max.)	24.28 mm	0.956 in
ID	(nom. - bare core)	14.40 mm	0.567 in
	(min.)	13.77 mm	0.542 in
HT	(nom. - bare core)	8.89 mm	0.350 in
	(max.)	9.70 mm	0.382 in
Mass	(approximate)	13 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.388 cm²	
	L_e - Eff. Mag. Path Length	5.88 cm	
	V_e - Eff. Core Volume	2.28 cm³	
	WA - Min. Eff. Window Area	1.49 cm²	
	sa - Surface Area	21.8 cm²	
	mlt - mean length per turn	3.68 cm	
Inductance	μ_i(reference)	14	
	A_L value (nominal)	12 nH/N²	
	Test Winding	N=80, #26 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.14 V	
	AL tolerance	±8%	
Core Loss	Core Loss(mW/cm³)= $\frac{f}{\frac{a}{Bpk^{3}}+\frac{b}{Bpk^{2.3}}+\frac{c}{Bpk^{1.65}}}+d\cdot Bpk^{2}\cdot f^{2}$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	a=1.000E+06, b=6.131E+07, c=2.047E+06, d=6.095E-14		
	B_{pk}	300 G	
	frequency	100 kHz	
	Core Loss (nominal)	399 mW/cm³	
	Core Loss (maximum)	459 mW/cm³	
DC Saturation	$\%\mu_i = \frac{1}{a+b\cdot H^{c}}+d$		
	where H expressed in oersteds, and:		
	a=1.000E-02, b=2.600E-07, c=1.557, d=0.000		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	90.9%	
	Percent Initial Perm(min.)	88.3%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	1,089 Pcs/Box	









Winding Table													
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

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