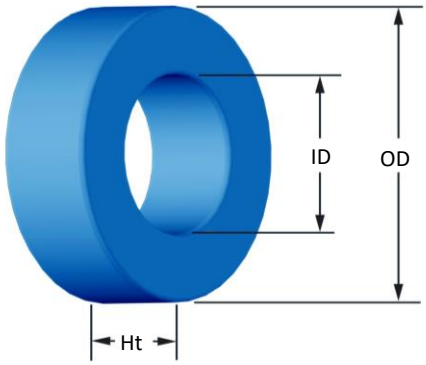
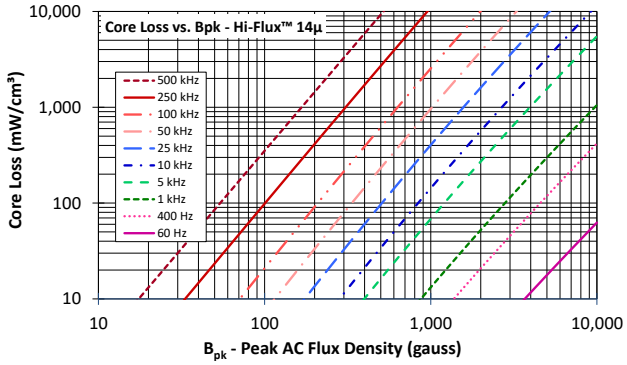
Part Number:	HF-014014-8

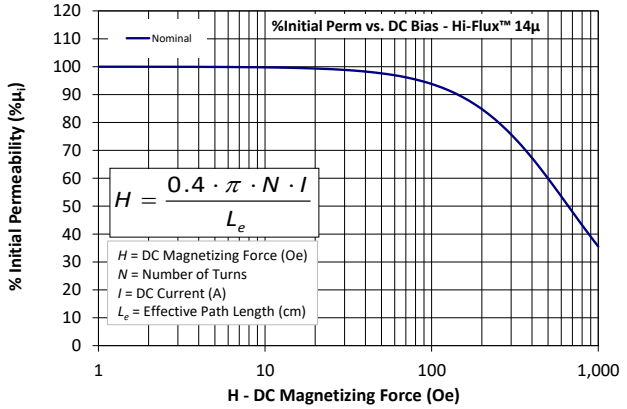
Revision 2021-Dec-01 - Generated 2021-Dec-01

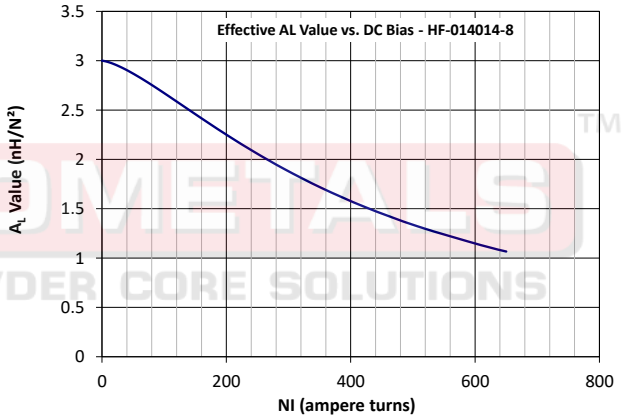


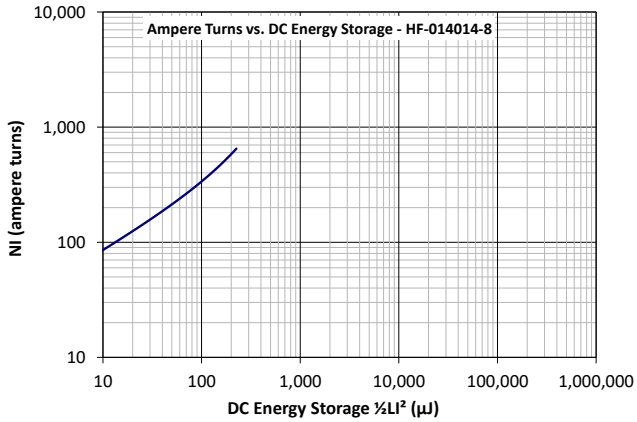
(If coated, Max./Min. includes coating)

OD	(nom. - bare core)	3.56 mm	0.140 in
	(max.)	3.76 mm	0.148 in
ID	(nom. - bare core)	1.78 mm	0.070 in
	(min.)	1.52 mm	0.060 in
HT	(nom. - bare core)	1.52 mm	0.060 in
	(max.)	1.73 mm	0.068 in
Mass	(approximate)	0.07 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0137 cm²	
	L_e - Eff. Mag. Path Length	0.817 cm	
	V_e - Eff. Core Volume	0.0107 cm³	
	WA - Min. Eff. Window Area	0.0181 cm²	
	sa - Surface Area	0.523 cm²	
	mlt - mean length per turn	0.646 cm	
Inductance	μ_i(reference)	14	
	A_L value (nominal)	3 nH/N²	
	Test Winding	N=30, #36 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.002 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=2.058E+09, b=3.239E+08, c=3.003E+06, d=1.233E-13		
	B_{pk}	300 G	
	frequency	100 kHz	
	Core Loss (nominal)	214 mW/cm³	
	Core Loss (maximum)	246 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=8.808E-07, c=1.438, d=0.000		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	84.8%	
	Percent Initial Perm(min.)	81.1%	
Coating/Pkg	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	36,000 Pcs/Box	









Winding Table													
	Wire Size	AWG	30	32	34	36	38	40	42	44	-	-	-
		mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-	-	-
	Single Layer	Turns	11	15	19	25	31	40	50	63	-	-	-
		Rdc(Ω)	24.1 m	52.2 m	105.1 m	219.9 m	433.7 m	890.0 m	1.8	3.5	-	-	-
	Full Winding	Turns	12	18	28	43	67	103	159	247	-	-	-
		Rdc(Ω)	26.2 m	62.6 m	154.9 m	378.3 m	937.3 m	2.3	5.6	13.9	-	-	-