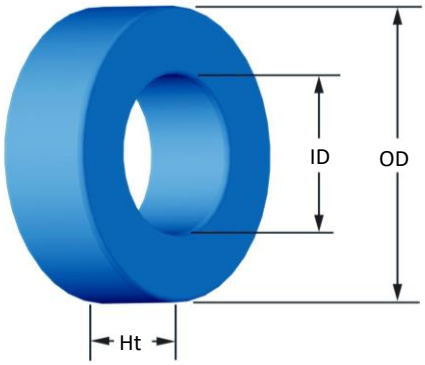
MICROMETALS™
POWDER CORE SOLUTIONS

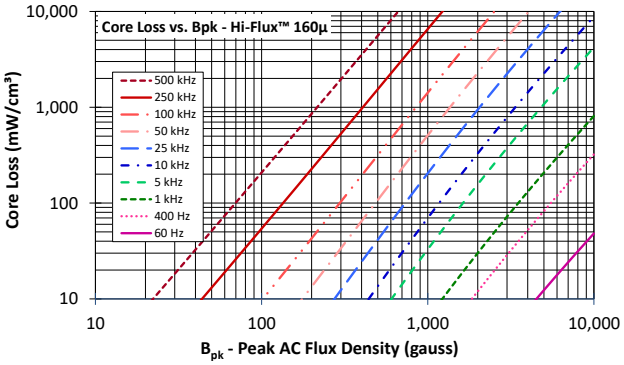
Part Number:	HF-065160-2

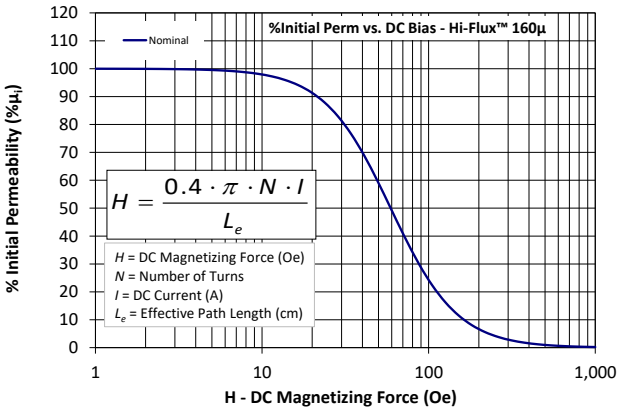
Revision 2021-Dec-01 - Generated 2021-Dec-01

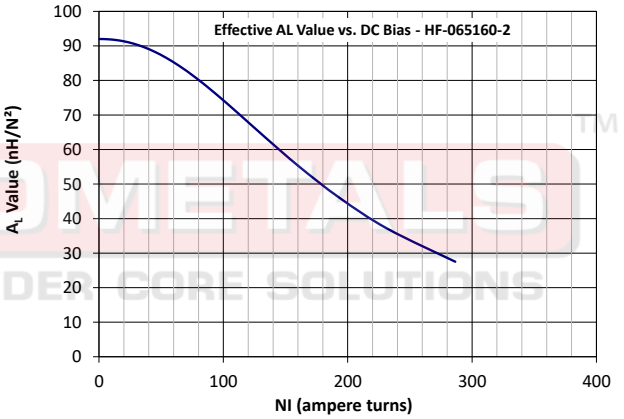


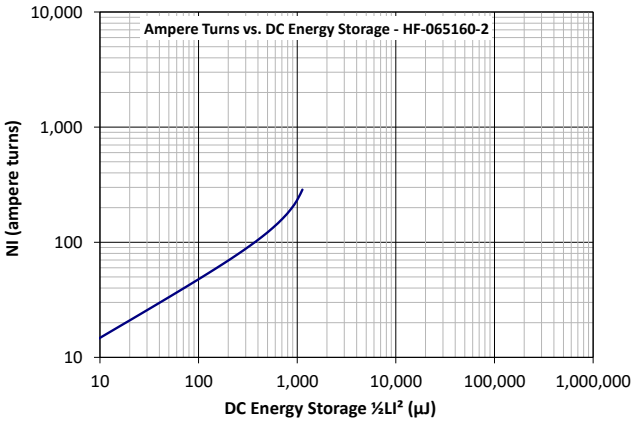
(If coated, Max./Min. includes coating)

OD	(nom. - bare core)	16.64 mm	0.655 in
	(max.)	17.40 mm	0.685 in
ID	(nom. - bare core)	10.16 mm	0.400 in
	(min.)	9.53 mm	0.375 in
HT	(nom. - bare core)	6.35 mm	0.250 in
	(max.)	7.11 mm	0.280 in
Mass	(approximate)	6.1 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.192 cm²	
	L_e - Eff. Mag. Path Length	4.11 cm	
	V_e - Eff. Core Volume	0.789 cm³	
	WA - Min. Eff. Window Area	0.713 cm²	
	sa - Surface Area	11.2 cm²	
	mlt - mean length per turn	2.69 cm	
Inductance	μ_i(reference)	160	
	A_L value (nominal)	92 nH/N²	
	Test Winding	N=70, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.060 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=4.299E+10, b=6.671E+08, c=3.114E+06, d=8.003E-14		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	509 mW/cm³	
	Core Loss (maximum)	585 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=1.434E-06, c=2.169, d=0.000		
	H_{DC}	40 Oe	
	Percent Initial Perm(nom.)	70.0%	
	Percent Initial Perm(min.)	61.1%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	2,880 Pcs/Box	









Winding Table	**Wire Size**	AWG	12	14	16	18	20	22	24	26	28	30	32
		mm	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200
	Single Layer	Turns	10	13	17	21	27	34	44	55	69	86	108
		Rdc(Ω)	1.4 m	2.9 m	6.0 m	11.8 m	24.1 m	48.3 m	99.4 m	197.7 m	394.4 m	781.8 m	1.6
	Full Winding	Turns	9	14	21	33	51	79	123	190	295	456	706
		Rdc(Ω)	1.3 m	3.1 m	7.4 m	18.5 m	45.6 m	112.3 m	278.0 m	682.9 m	1.7	4.1	10.2