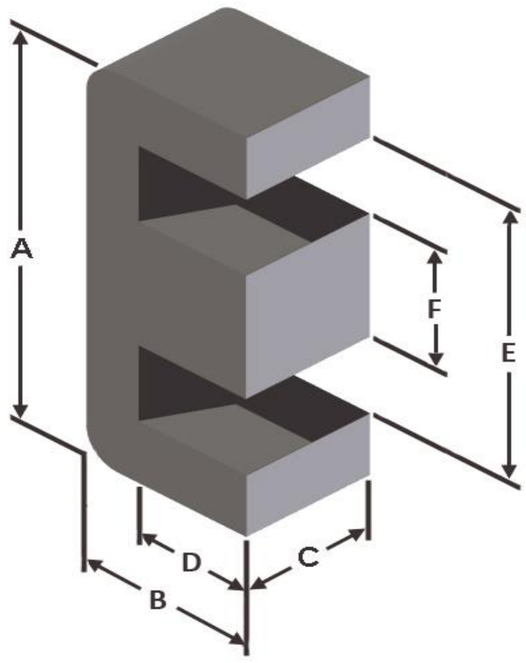
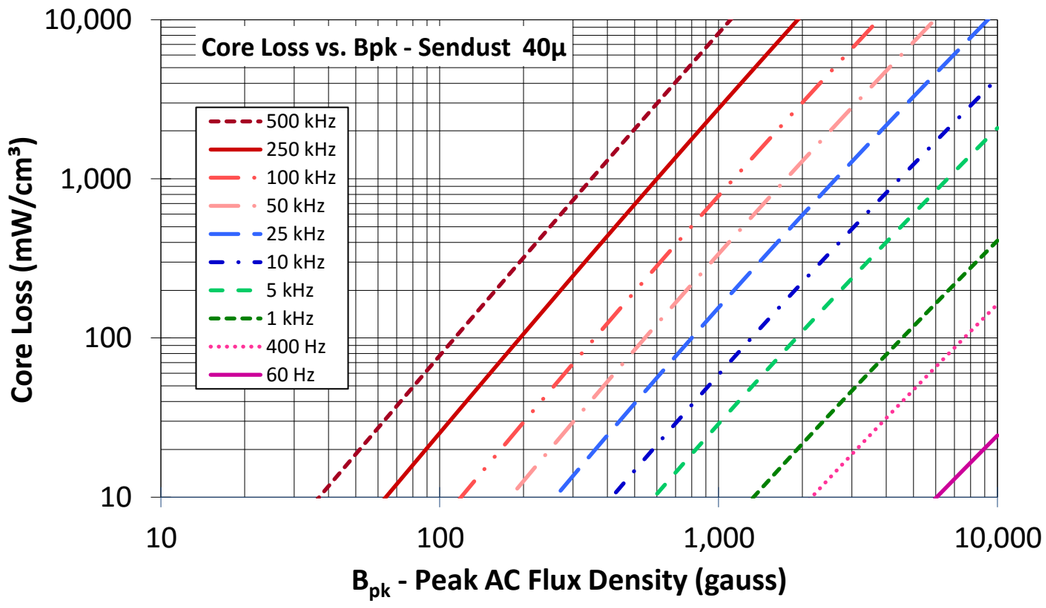
MICROMETALS
ALLOY POWDER CORES

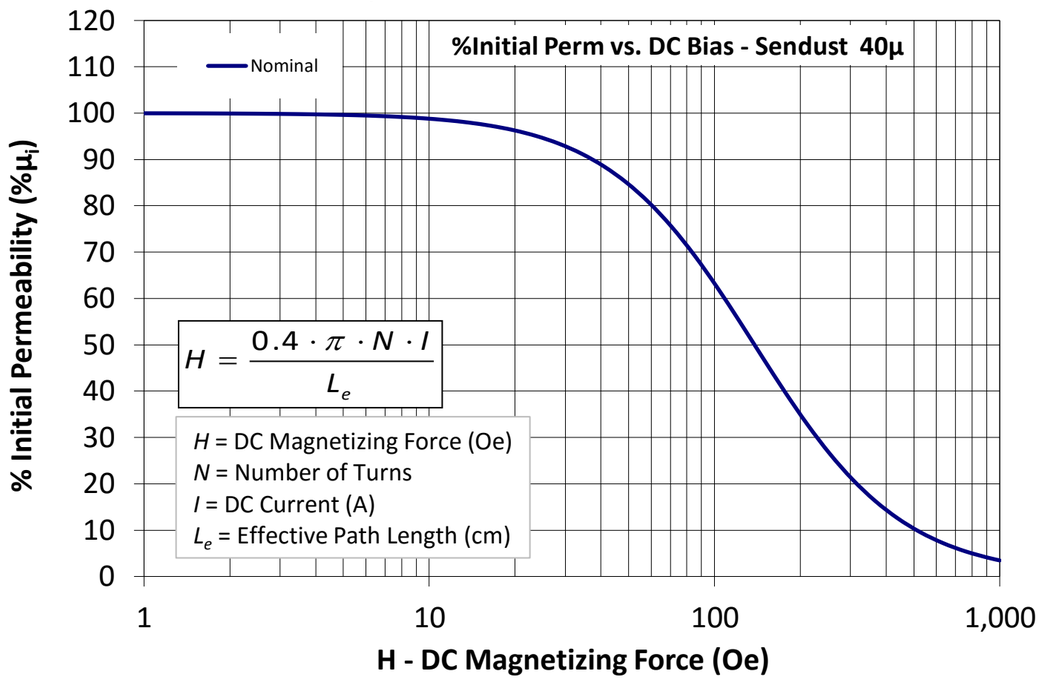
Part Number:	EMS-1205532-040

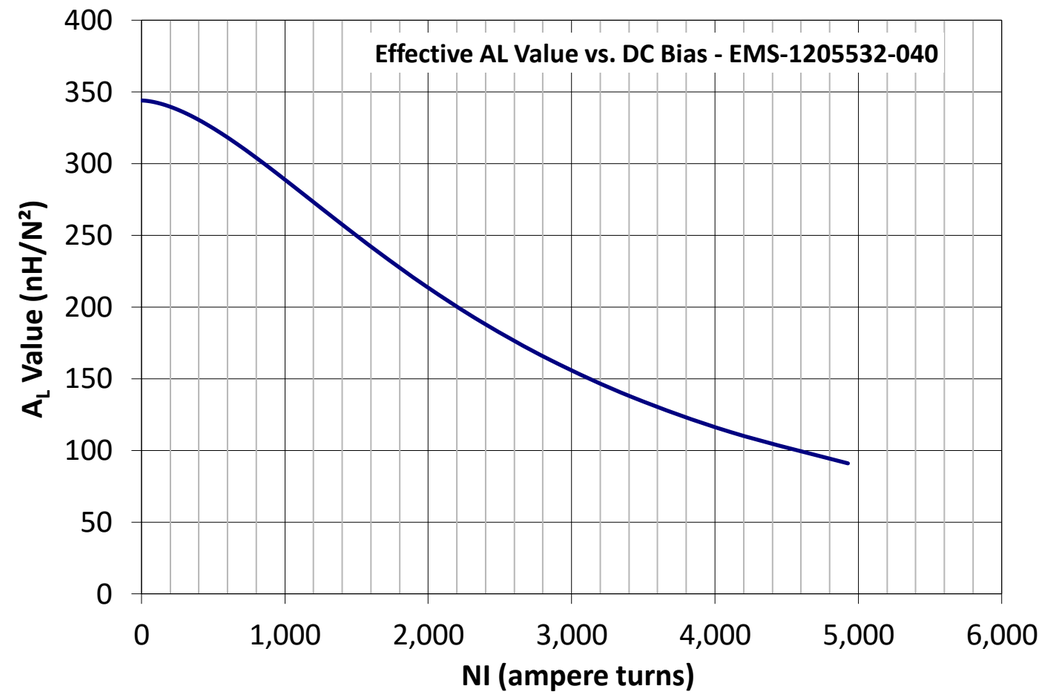
Revision 20160816 - Generated 2016-Aug-16

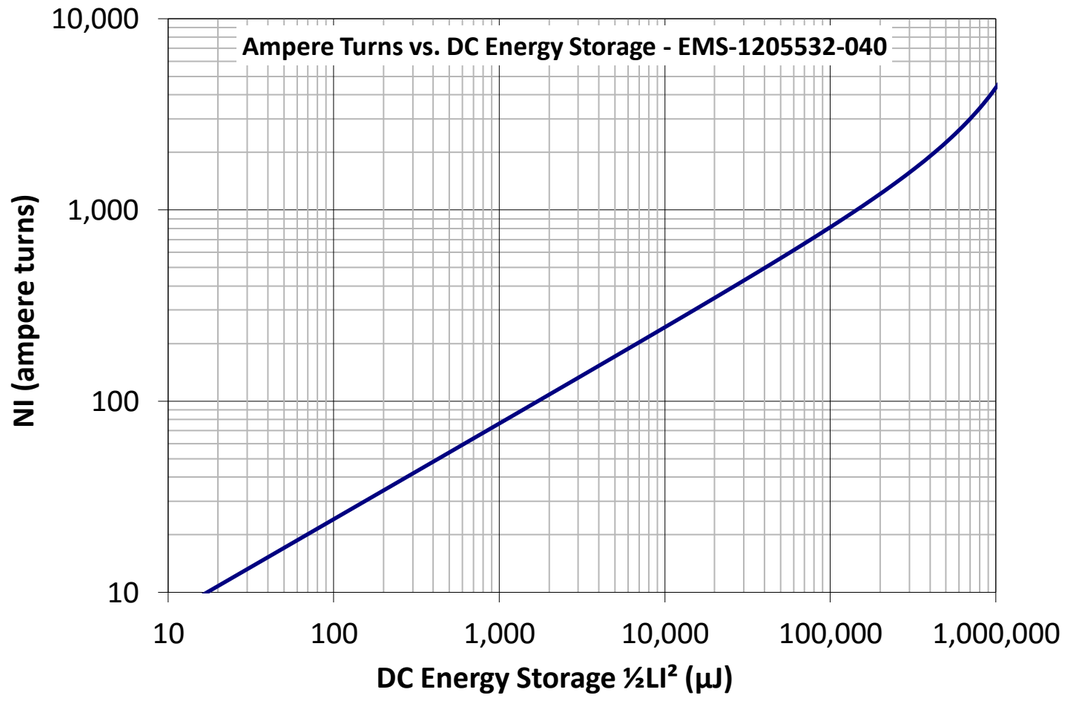


A	120 ± 1.80 mm	4.724 ± 0.071 in
B	55 ± 0.79 mm	2.165 ± 0.031 in
C	31.5 ± 0.64 mm	1.240 ± 0.025 in
D	34.5 mm (min.)	1.358 in (min.)
E	80.4 mm (min.)	3.165 in (min.)
F	39.6 ± 0.71 mm	1.559 ± 0.028 in
Mass	(approximate)	870 grams/half
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	12.152 cm²
	L_e - Eff. Mag. Path Length	24.38 cm
	V_e - Eff. Core Volume	318 cm³
	WA - Min. Eff. Window Area	13.8 cm²
	sa - Surface Area	470 cm²
	mlt - mean length per turn	22.4 cm
Inductance	μ_i(reference)	40
	A_L value (nominal)	344 nH/N²
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	5.4 V
	A_L 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=1.00E+06, b=6.80E+08, c=8.07E+06, d=2.16E-14*	
	B_{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	338 mW/cm³
	Core Loss (maximum)	388 mW/cm³
DC Saturation	$\%\mu_i = \frac{1}{a + b\cdot H^{c}} + d$	
	where H expressed in oersteds, and: *a=0.01, b=2.54E-06, c=1.68, d=0.00*	
	H_{DC}	100 Oe
	Percent Initial Perm(nom.)	63.2%
	Percent Initial Perm(min.)	55.9%
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	16 Halves/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
Full Winding	Turns	75	115	179	276	428	662	1,025	1,587	2,456	3,801	5,882
	Rdc(Ω)	34.5 m	84.2 m	208.3 m	510.9 m	1.3	3.1	7.6	18.8	46.3	113.8	280.2

Micrometals Alloy Powder Cores, A Division of Micrometals, Inc. - 5615 E. La Palma Ave., Anaheim, California 92807 USA
Ph: +1-714-970-9400, Toll Free in USA: +1-800-356-5977, Asia Pacific Sales: +852 3106 3736
www.MicrometalsAPC.com