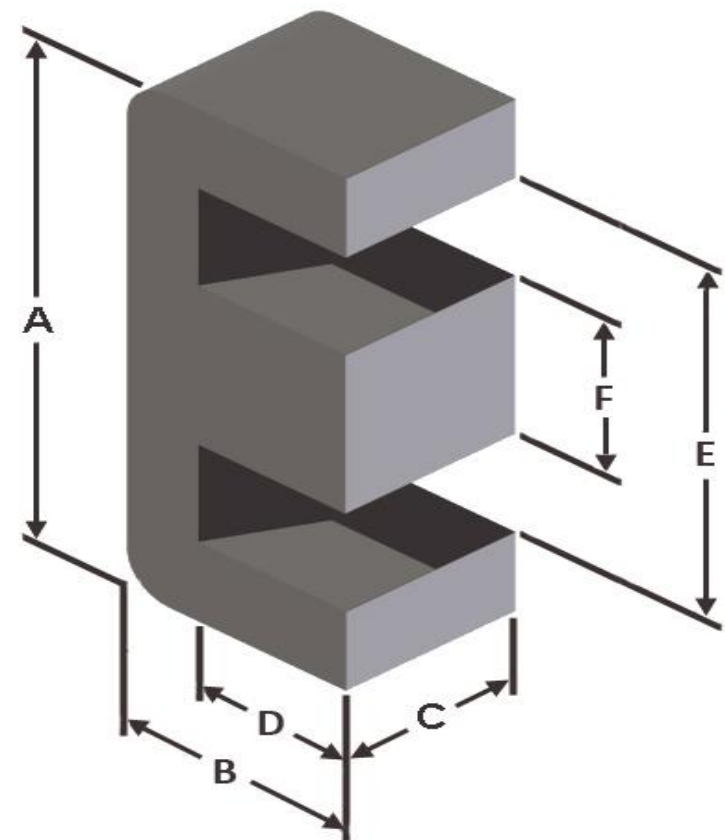




Part Number: EMS-0351409-090

Revision 2021-Oct-22 - Generated 2022-Jan-17



A	34.5 ± 0.51 mm	1.358 ± 0.020 in
B	14.1 ± 0.23 mm	0.555 ± 0.009 in
C	9.4 ± 0.18 mm	0.370 ± 0.007 in
D	9.6 mm (min.)	0.378 in (min.)
E	25.3 mm (min.)	0.996 in (min.)
F	9.3 ± 0.20 mm	0.366 ± 0.008 in

Mass (approximate) 16 grams/half

Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.840 cm ²
	L _e - Eff. Mag. Path Length	6.94 cm
	V _e - Eff. Core Volume	5.83 cm ³
	WA - Min. Eff. Window Area	1.52 cm ²
	sa - Surface Area	38.4 cm ²
	mlt - mean length per turn	6.94 cm

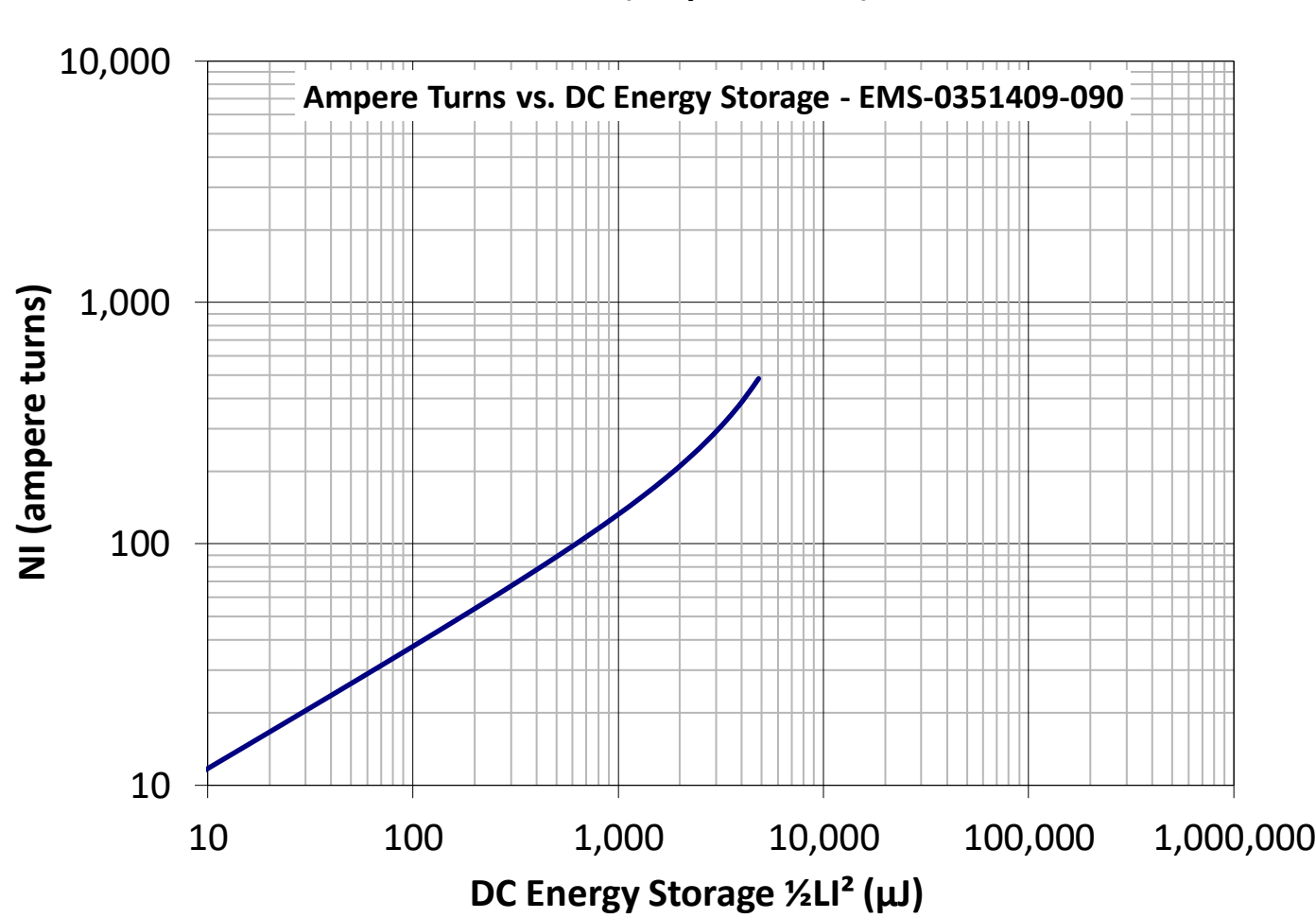
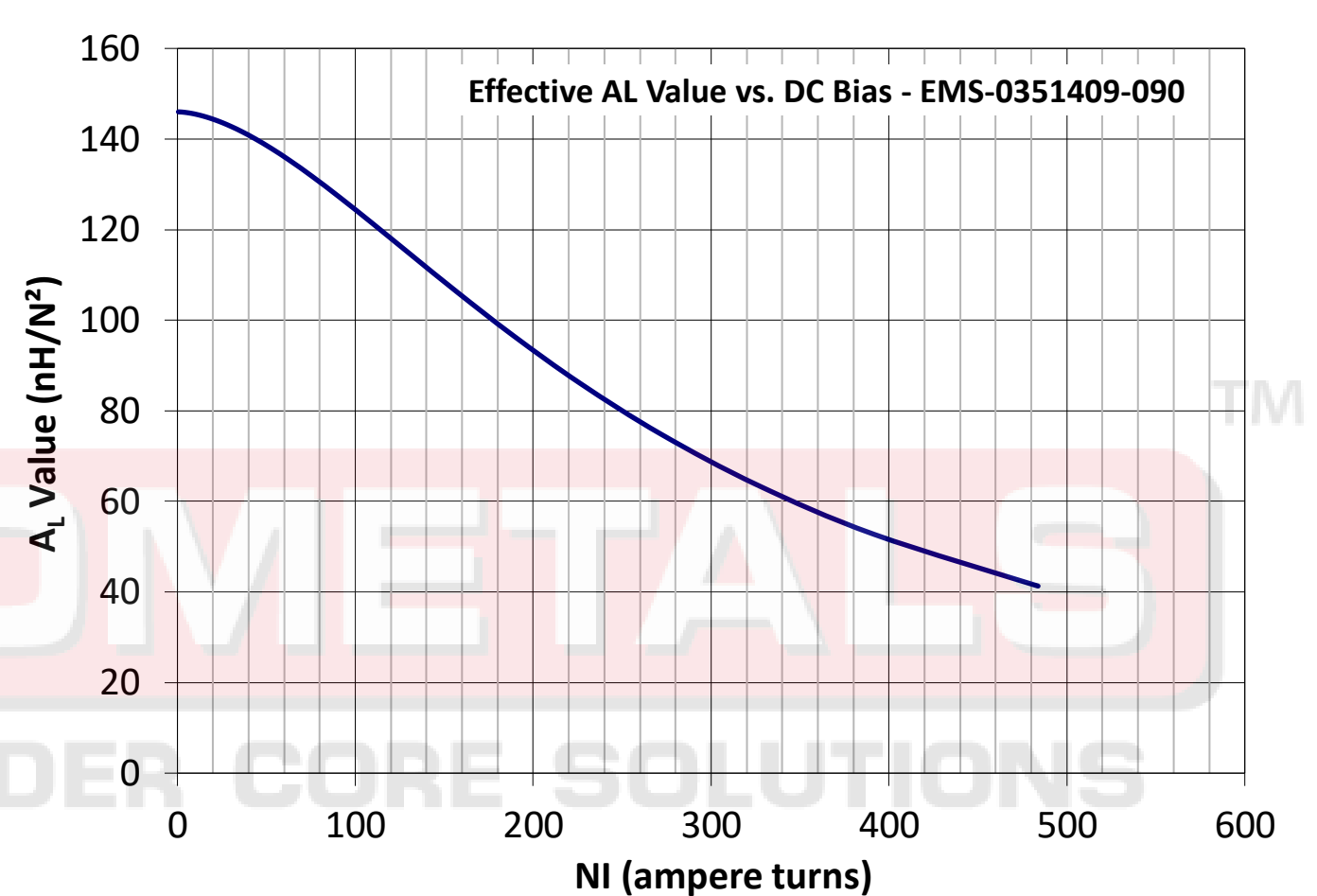
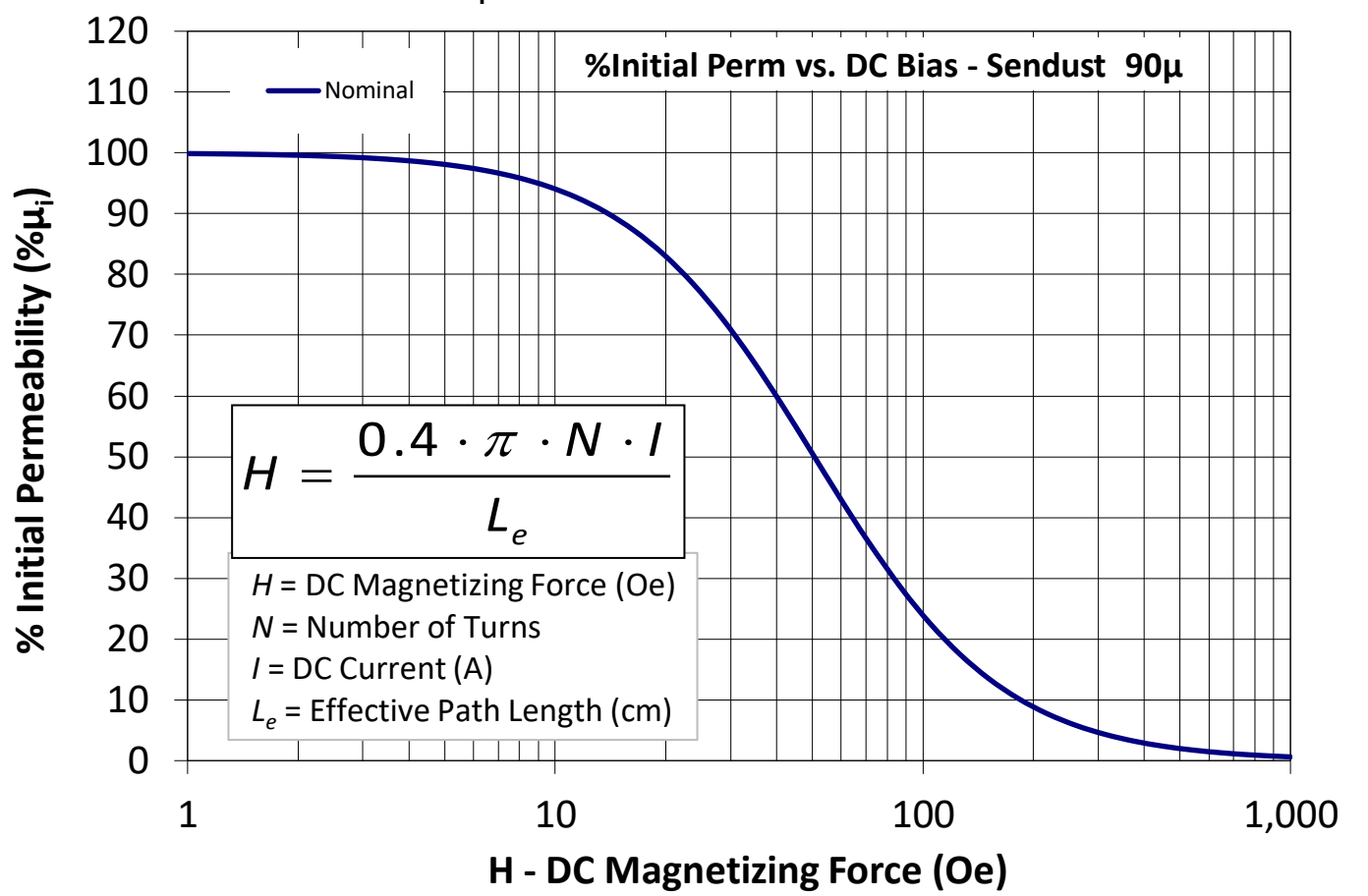
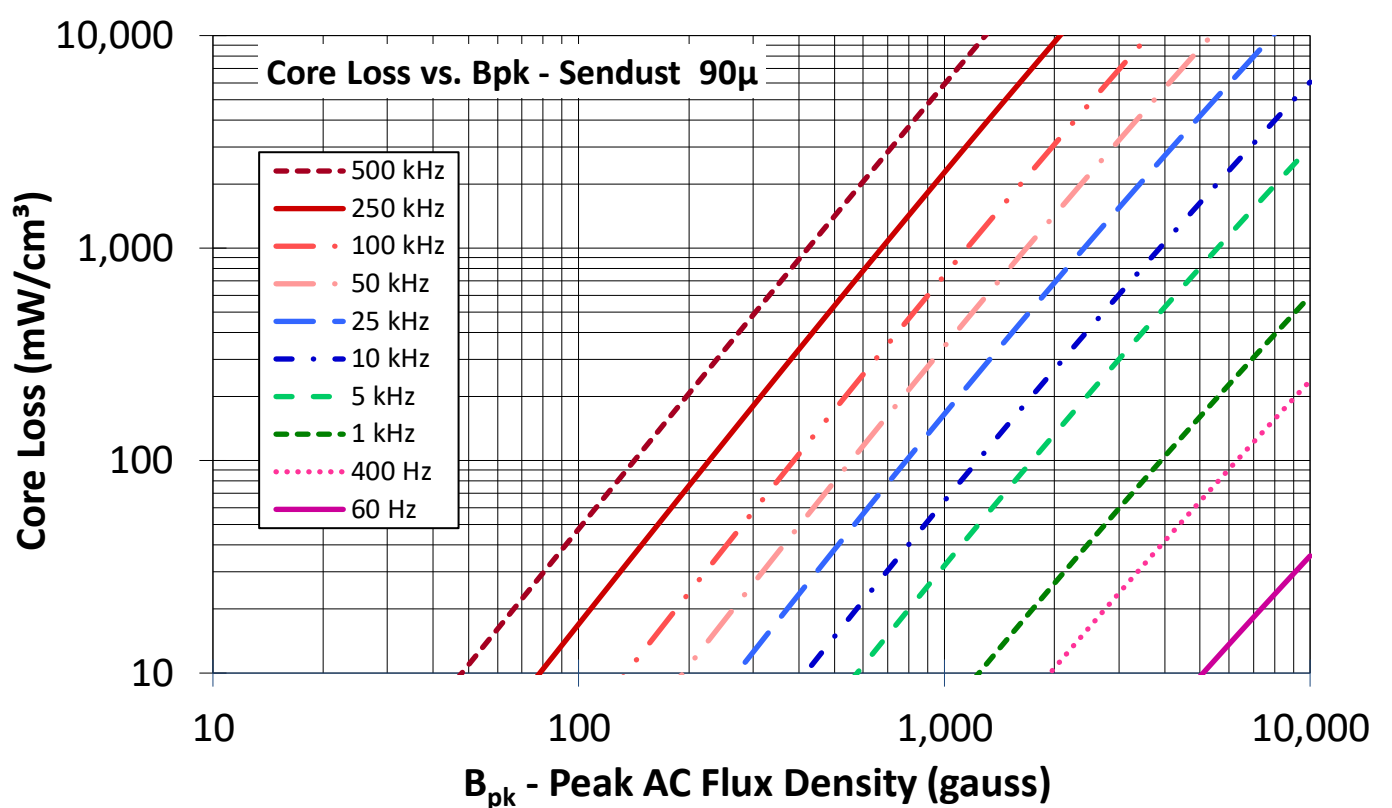
Inductance	μ _i (reference)	90
	A _L value (nominal)	146 nH/N ²
	Test Winding	N=100, #20 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.37 V
	A _L tolerance	±8%

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=1.46E+09, b=8.28E+08, c=4.62E+06, d=1.09E-14	
	B _{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	345 mW/cm ³
Core Loss (maximum)	396 mW/cm ³	

DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=0.01, b=1.26E-05, c=1.70, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm.(nom.)	50.6%
Percent Initial Perm.(min.)	42.9%	

Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	630 Halves/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
	Full Winding	Turns	20	30	47	73	112	174	269	417	645	998	1,545
		Rdc(Ω)	7.2 m	17.2 m	42.9 m	106.0 m	258.6 m	639.0 m	1.6	3.9	9.5	23.4	57.7



Handling and Storage: Cores should be stored in the original unopened packaging between -10°C and +50°C and less than 60% relative humidity. After the original packaging is opened, the cores should be stored between -8°C and +25°C less than 30% relative humidity. Gloves should be used when handling uncoated cores. The cores should also be sheltered from rain, moisture, salt water, salt air, plasters, ashes, sulfur, sulfur dioxide, ammonia sulfates, soils, acids, metals shavings, and solvents.

Operating Temperature: Cores can be used continuously at operating temperatures between -60°C and +200°C.

RoHS 2.0, REACH and ISO (TS16949, ISO 9001, ISO 14001) compliant. Statements available for download at www.micrometals.com.

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