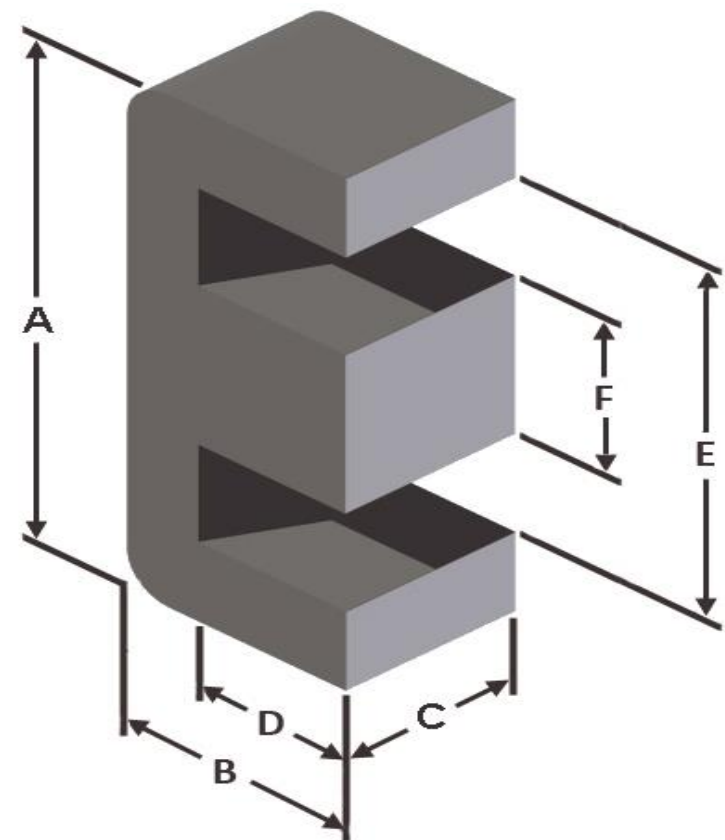




Part Number: EMS-0251007-090

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



A	25.4 ± 0.38 mm	1.000 ± 0.015 in
B	9.5 ± 0.18 mm	0.374 ± 0.007 in
C	6.5 ± 0.10 mm	0.256 ± 0.004 in
D	6.2 mm (min.)	0.244 in (min.)
E	18.8 mm (min.)	0.740 in (min.)
F	6.2 ± 0.13 mm	0.244 ± 0.005 in

Mass (approximate) 5.3 grams/half

Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.385 cm ²
	L _e - Eff. Mag. Path Length	4.85 cm
	V _e - Eff. Core Volume	1.87 cm ³
	WA - Min. Eff. Window Area	0.773 cm ²
	sa - Surface Area	19.4 cm ²
	mlt - mean length per turn	5.06 cm

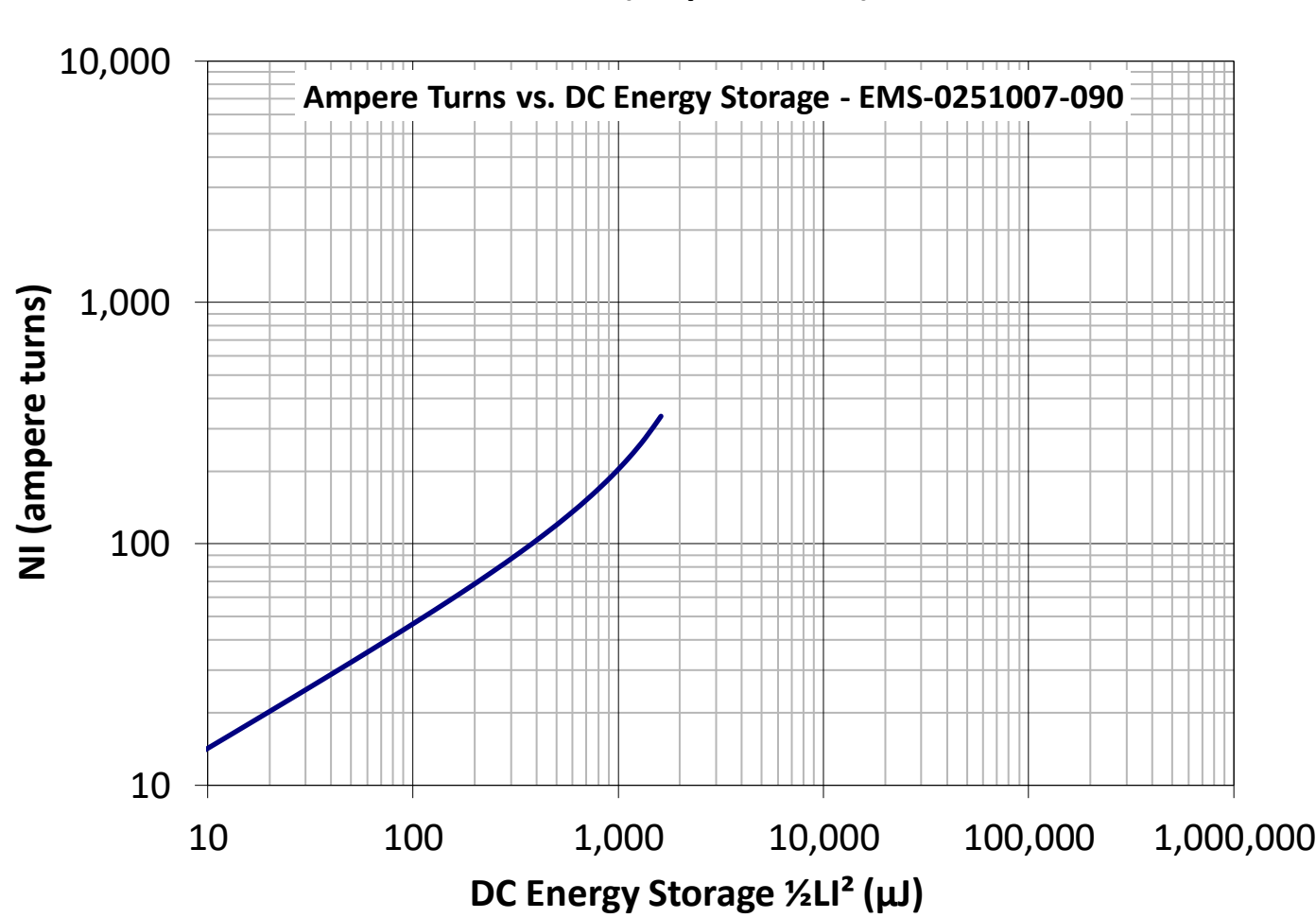
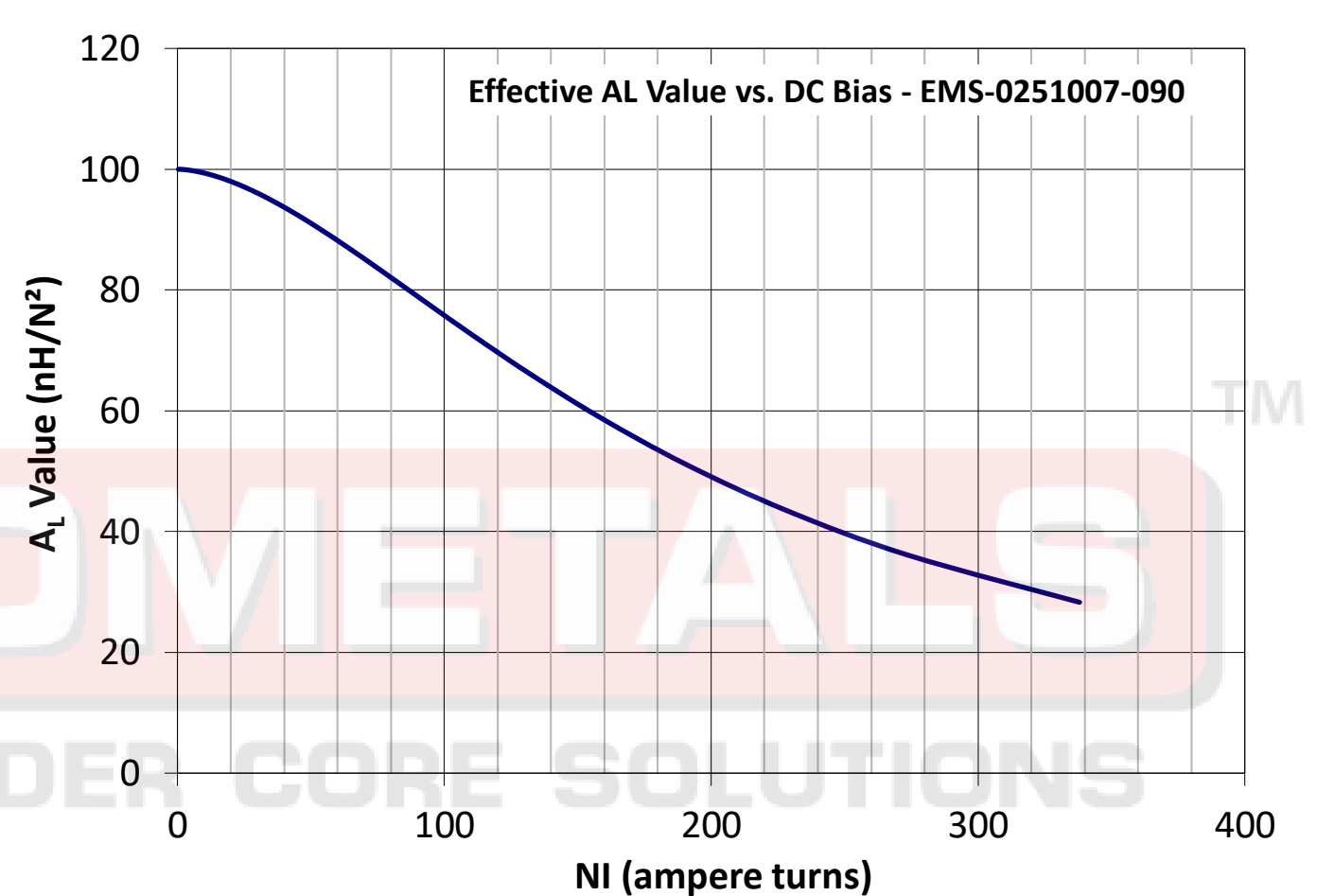
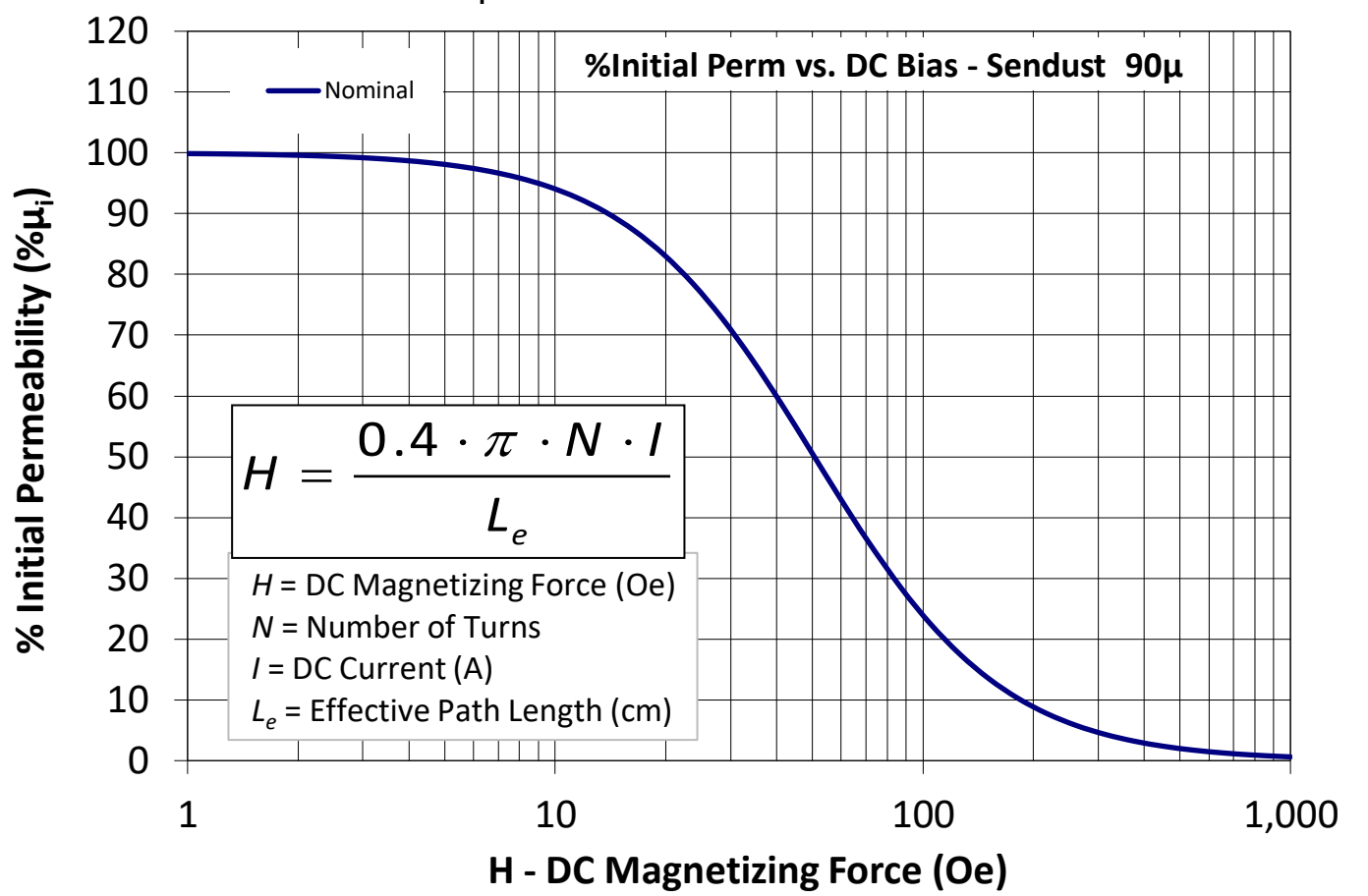
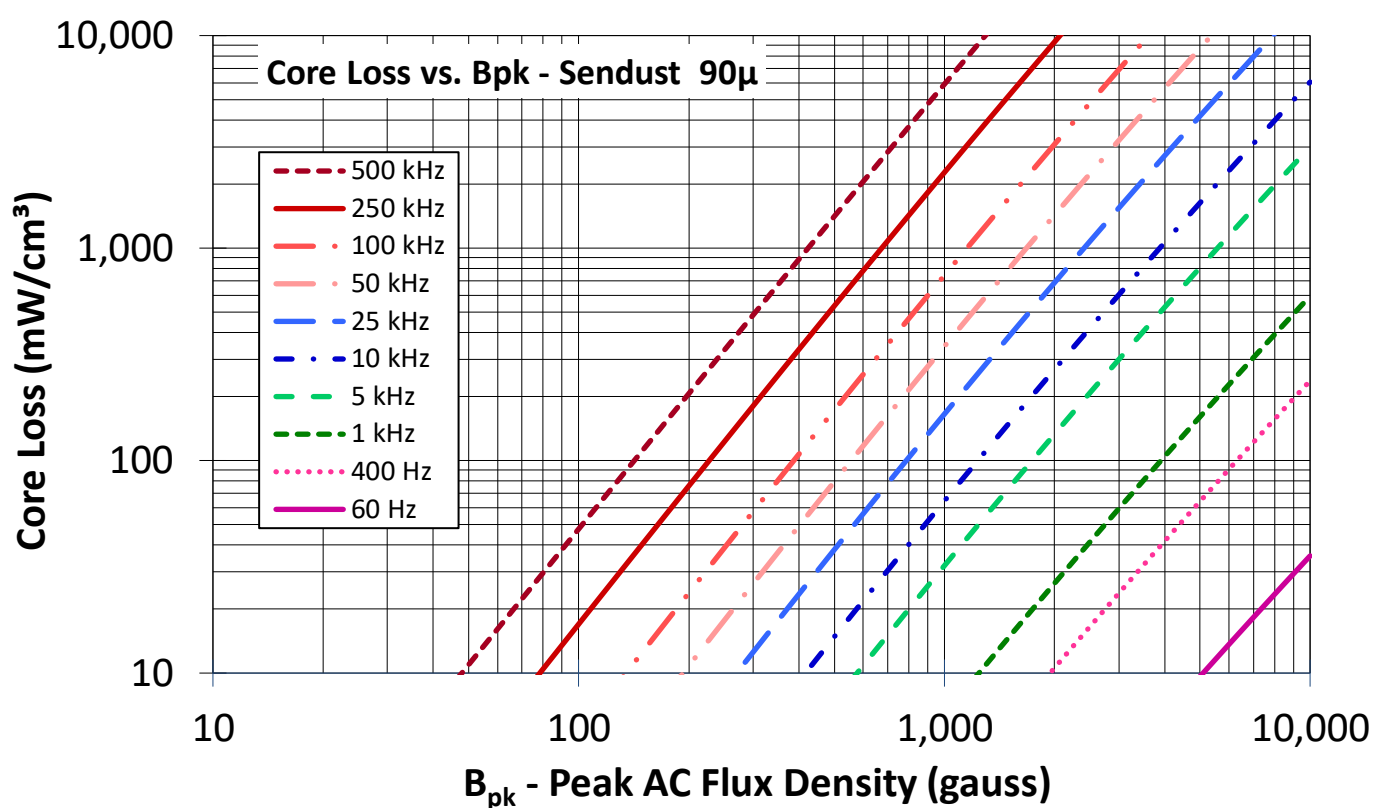
Inductance	μ _i (reference)	90
	A _L value (nominal)	100 nH/N ²
	Test Winding	N=100, #24 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.17 V
	A _L tolerance	±8%

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	2,000 Halves/Box

Winding Table	Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
		mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
	Full Winding	Turns	15	24	37	57	89	137	213	329	509	788	1,219
		Rdc(Ω)	6.3 m	16.0 m	39.2 m	96.0 m	238.3 m	583.4 m	1.4	3.5	8.7	21.5	52.8



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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