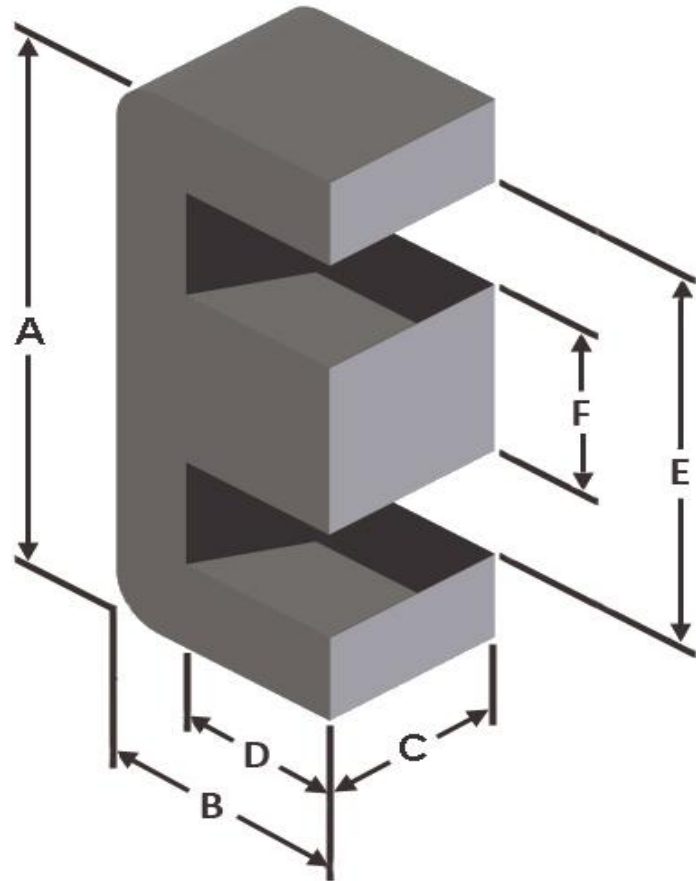




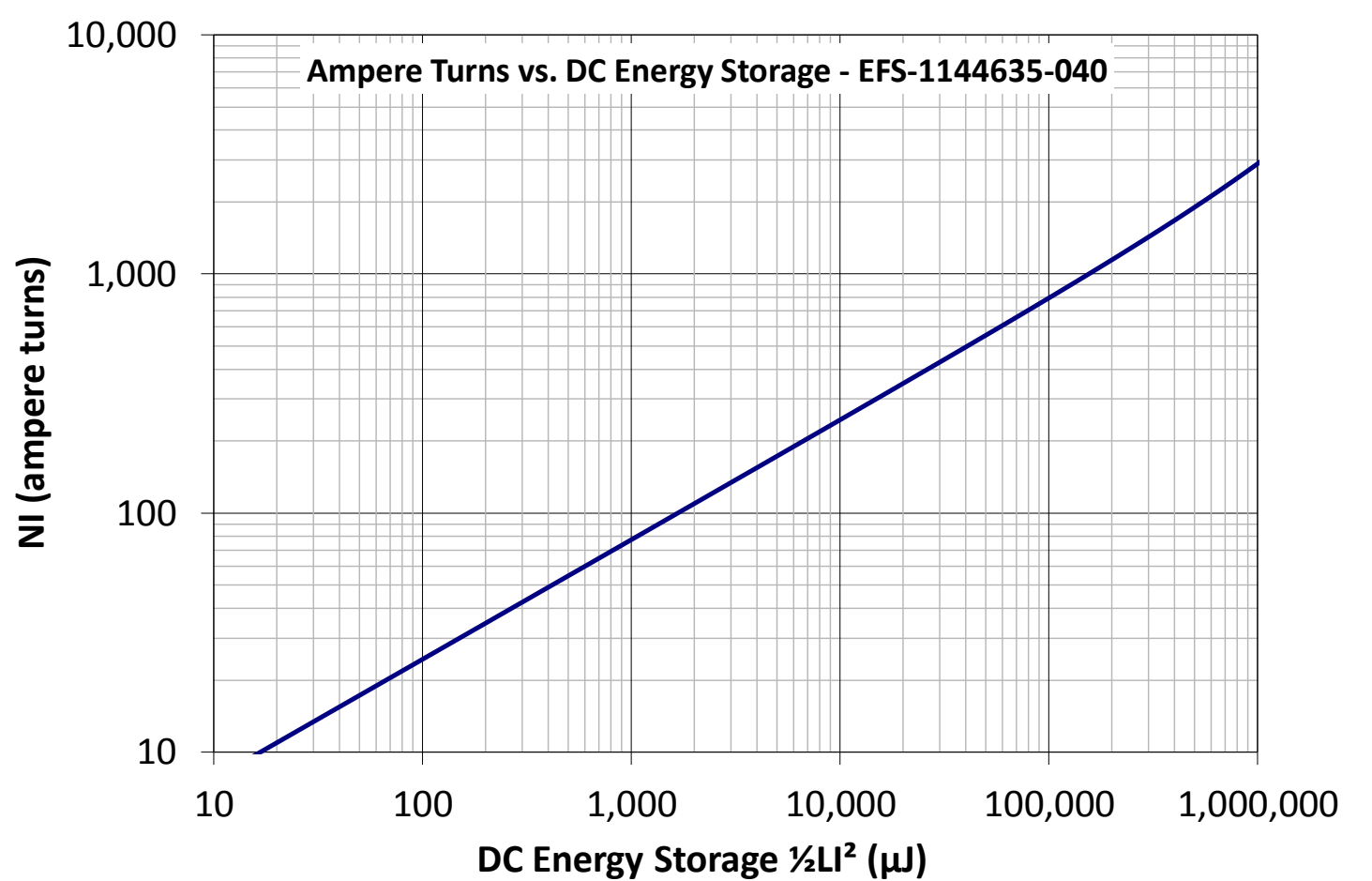
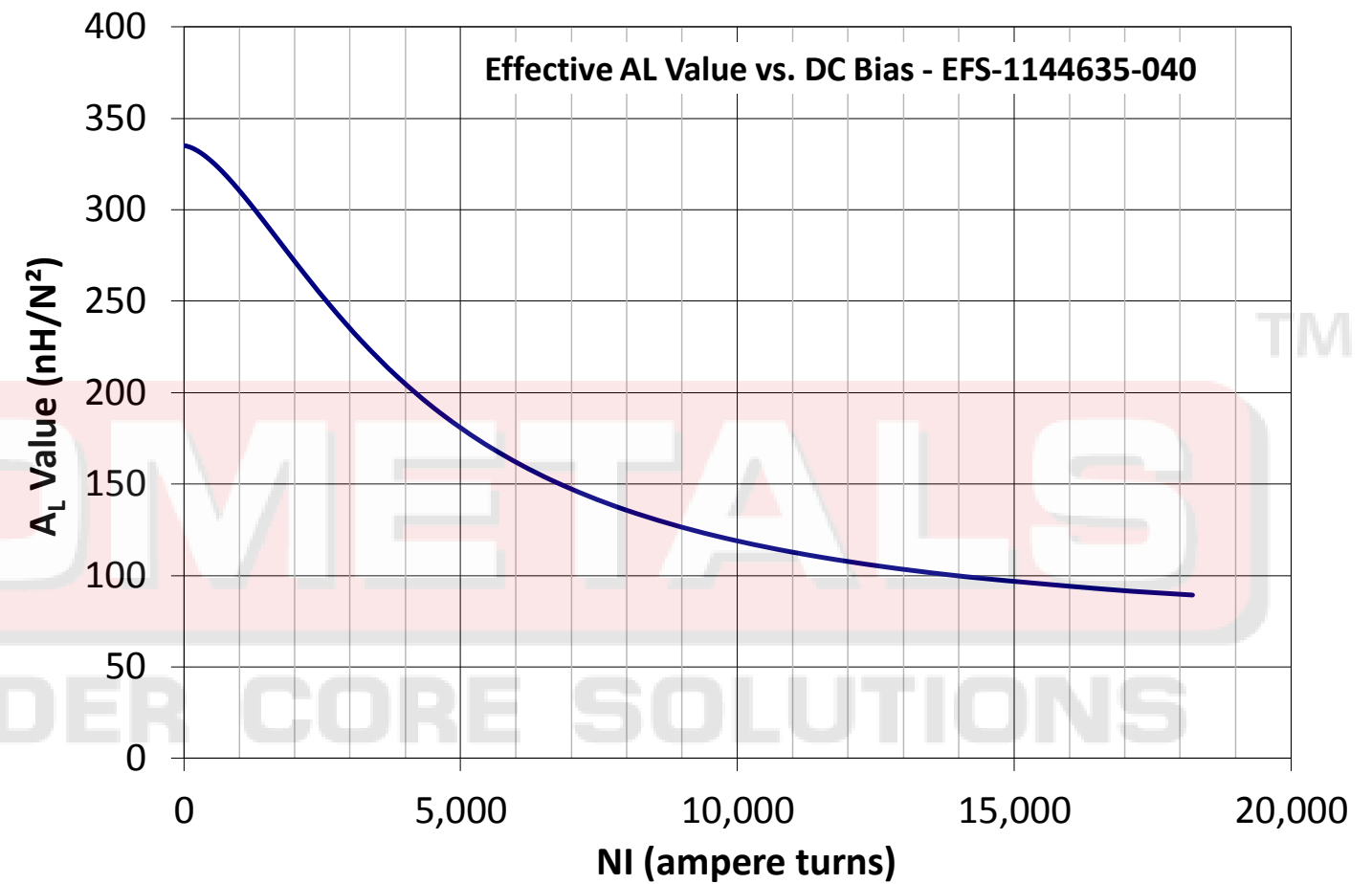
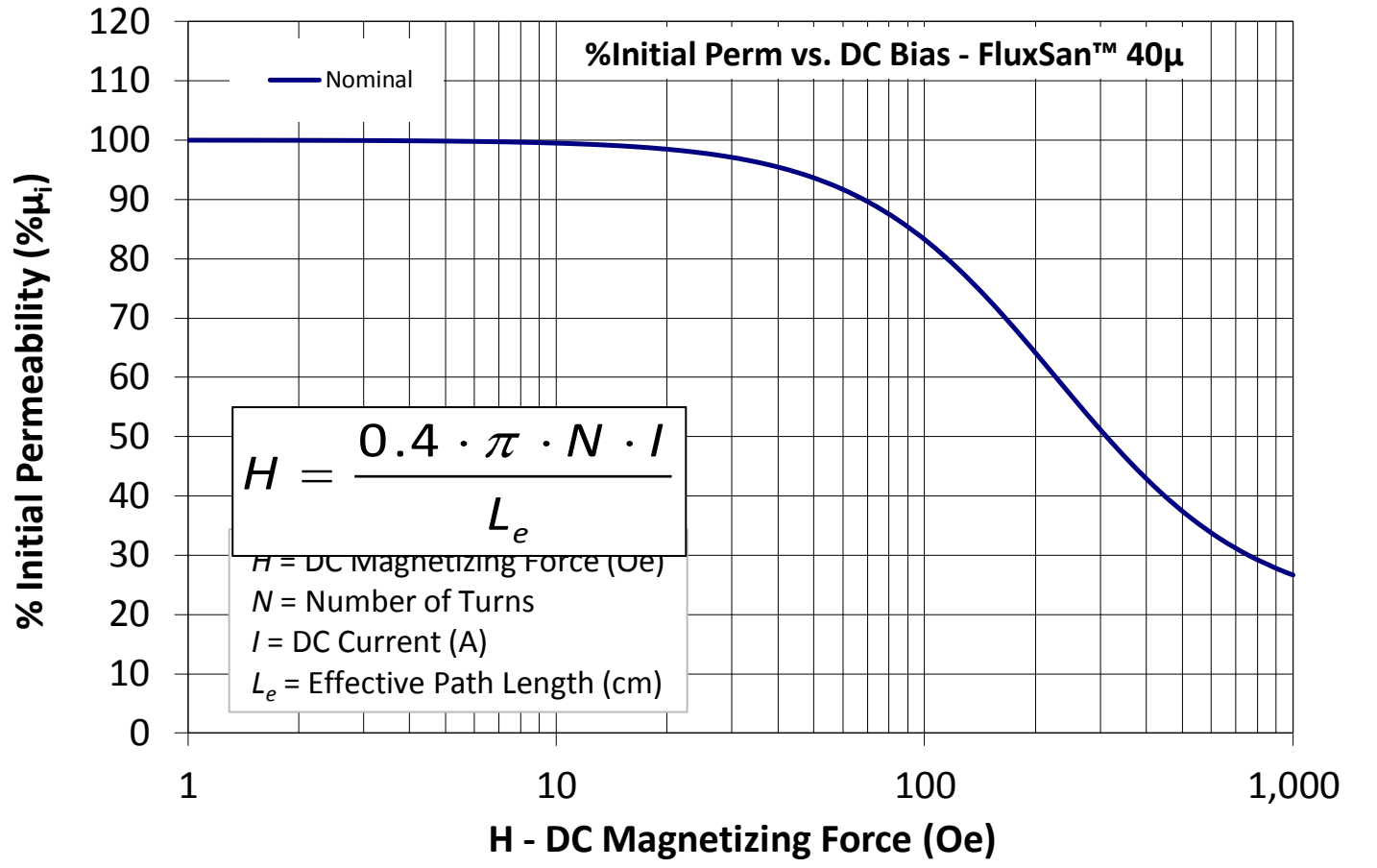
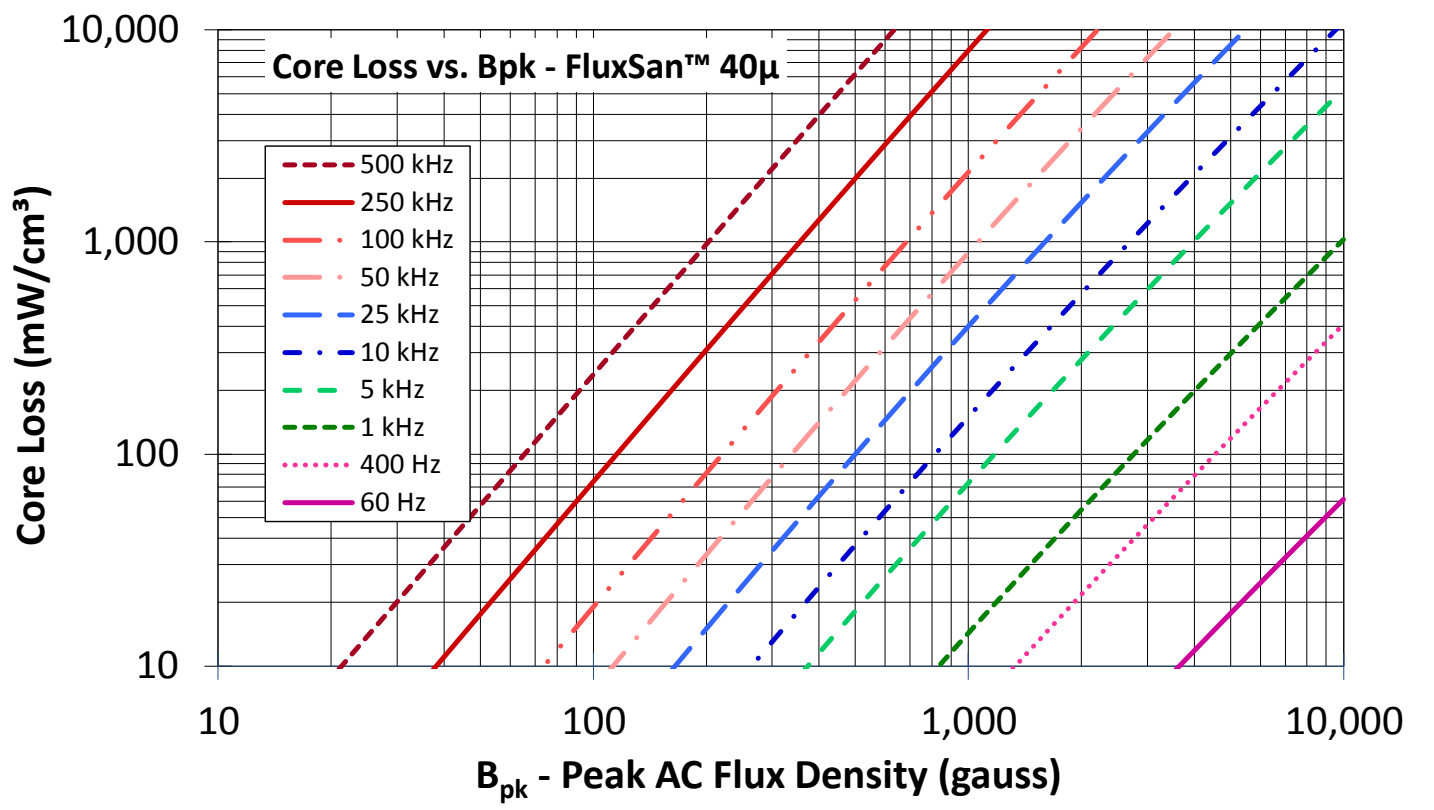
**Part Number:** EFS-1144635-040

Revision 20190529 - Generated 2019-May-29



<b>A</b>	114 ± 1.70 mm	4.488 ± 0.067 in
<b>B</b>	46.2 ± 0.69 mm	1.819 ± 0.027 in
<b>C</b>	34.9 ± 0.58 mm	1.374 ± 0.023 in
<b>D</b>	28.6 mm (min.)	1.126 in (min.)
<b>E</b>	79.3 mm (min.)	3.122 in (min.)
<b>F</b>	34.9 ± 0.69 mm	1.374 ± 0.027 in
<b>Mass</b>	(approximate)	870 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	12.2 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	22.9 cm
	V <sub>e</sub> - Eff. Core Volume	280 cm <sup>3</sup>
	WA - Min. Eff. Window Area	12.5 cm <sup>2</sup>
	sa - Surface Area	415 cm <sup>2</sup>
mlt - mean length per turn	22.8 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	40
	A <sub>L</sub> value (nominal)	335 nH/N <sup>2</sup>
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	5.4 V
A <sub>L</sub> tolerance	±8%	
<b>Core Loss</b>	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and: a=1.00E+06, b=2.70E+08, c=3.23E+06, d=7.09E-14	
	B <sub>pk</sub>	1000 G
	frequency	50 kHz
	Core Loss (nominal)	889 mW/cm <sup>3</sup>
Core Loss (maximum)	1,022 mW/cm <sup>3</sup>	
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=0.01, b=1.93E-06, c=1.62, d=19.99	
	H <sub>DC</sub>	100 Oe
<b>Coating/Pkg</b>	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	16 Halves/Box

<b>Winding Table</b>	<b>Wire Size</b>	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
	<b>Full Winding</b>	Turns	67	104	161	250	387	599	927	1,434	2,220	3,436	5,317
	Rdc(Ω)	31.5 m	77.7 m	191.2 m	472.3 m	1.2	2.9	7.0	17.3	42.7	105.0	258.5	



**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.micrometalsapc.com](http://www.micrometalsapc.com).

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](http://www.MicrometalsAPC.com)