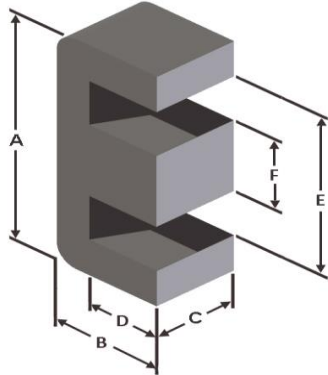




**Part Number: EFS-0803820-014**

Revision: 2023-Dec-06



<b>A</b>	80 ± 1.19 mm	3.150 ± 0.047 in
<b>B</b>	38.1 ± 0.58 mm	1.500 ± 0.023 in
<b>C</b>	19.8 ± 0.41 mm	0.780 ± 0.016 in
<b>D</b>	28.1 mm (min.)	1.106 in (min.)
<b>E</b>	59.3 mm (min.)	2.335 in (min.)
<b>F</b>	19.8 ± 0.41 mm	0.780 ± 0.016 in

<b>Mass</b>	(approximate)	210 grams/half
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<b>Magnetic Dimensions</b>	$A_e$ - Eff. Mag. Cross Section	3.89 cm <sup>2</sup>
	$L_e$ - Eff. Mag. Path Length	18.5 cm
	$V_e$ - Eff. Core Volume	72.1 cm <sup>3</sup>
	WA - Min. Eff. Window Area	11.0 cm <sup>2</sup>
	sa - Surface Area	229 cm <sup>2</sup>
	mlt - mean length per turn	15.8 cm

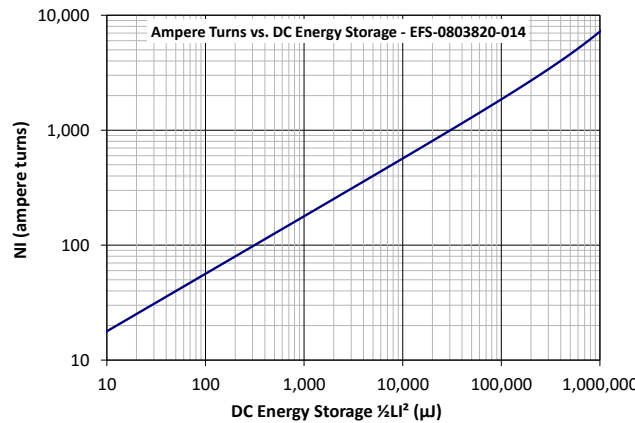
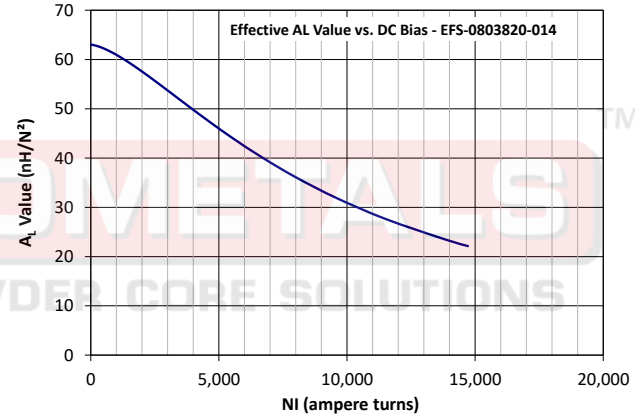
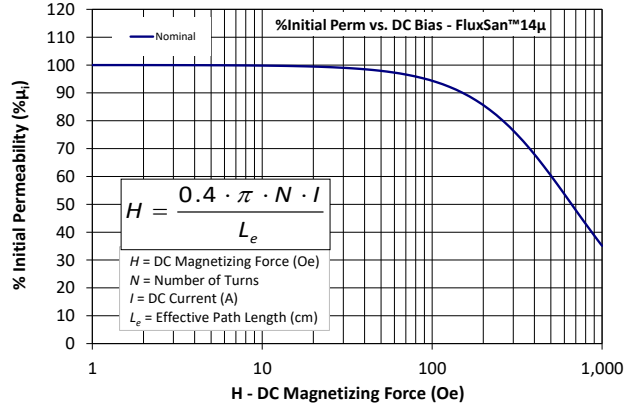
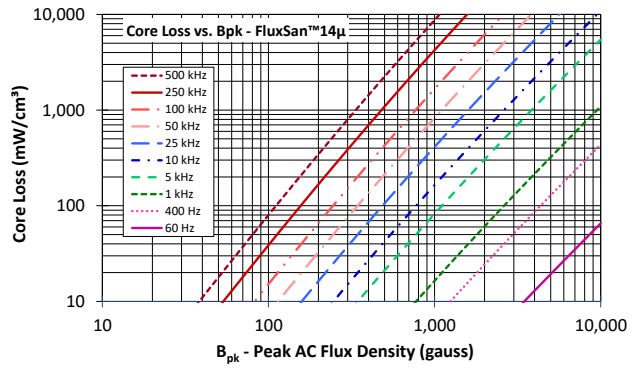
<b>Inductance</b>	$\mu_i$ (reference)	14
	$A_L$ value (nominal)	63 nH/N <sup>2</sup>
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.7 V
	$A_L$ tolerance	±8%

<b>Core Loss</b>	Core Loss (mW/cm <sup>3</sup> ) = $\frac{f}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$	
	where $B_{pk}$ expressed in gauss, $f$ expressed in hertz, and: $a=1.000E+06$ , $b=2.031E+08$ , $c=3.145E+06$ , $d=2.041E-15$	
	$B_{pk}$	300 G
	frequency	100 k Hz
	Core Loss (nominal)	152 mW/cm <sup>3</sup>
Core Loss (maximum)	175 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: $a=1.000E-02$ , $b=6.294E-07$ , $c=1.489$ , $d=0.000$	
	$H_{bc}$	200 Oe
	Percent Initial Perm.(nom.)	85.6 %
Percent Initial Perm.(min.)	81.9 %	

<b>Coating/Pkg</b>	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	45 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	59	92	142	220	340	526	814	1,260	1,950	3,019	4,672
		Rdc(Ω)	19.2 m	47.6 m	116.8 m	287.9 m	707.5 m	1.7	4.3	10.5	26.0	63.9	157.3



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

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