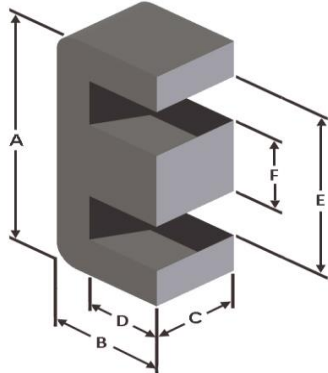




Part Number: EFS-0803820-040

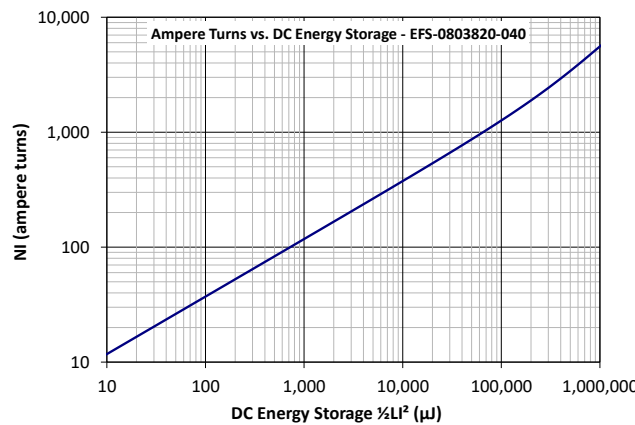
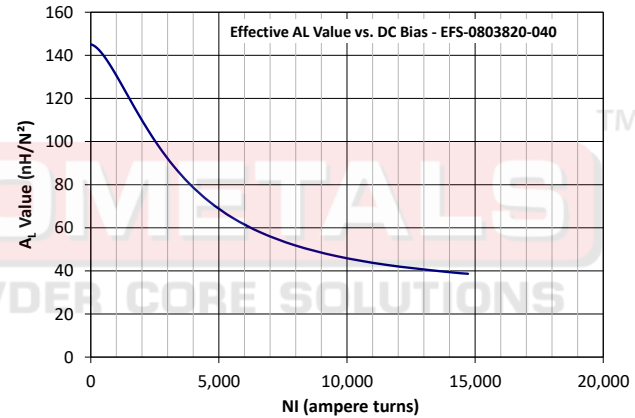
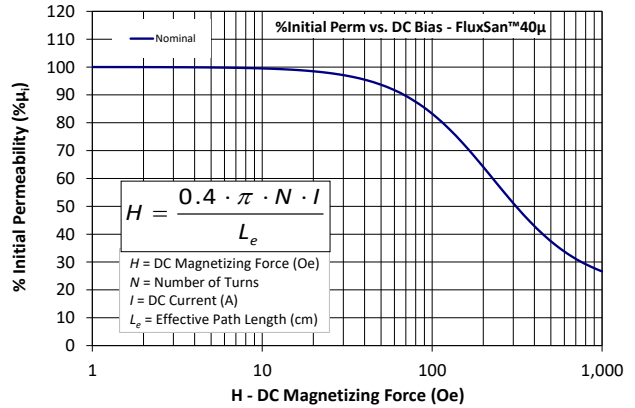
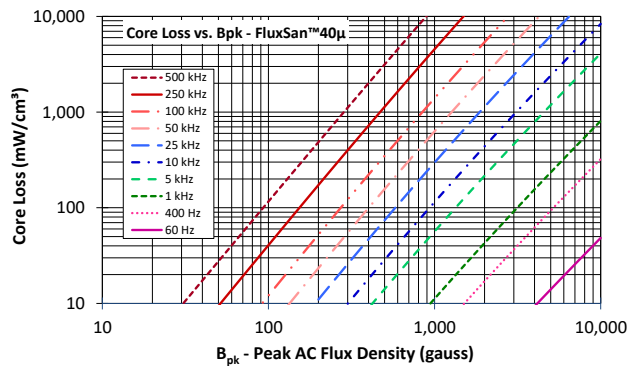
Revision: 2023-Dec-06



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

Mass	(approximate)	230 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.89 cm ²
	L _e - Eff. Mag. Path Length	18.5 cm
	V _e - Eff. Core Volume	72.1 cm ³
	WA - Min. Eff. Window Area	11.0 cm ²
	sa - Surface Area	229 cm ²
Inductance	μ _i (reference)	40
	A _L value (nominal)	145 nH/N ²
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.7 V
Core Loss	A _L tolerance	±8%
	Core Loss (mW/cm ³) = $\frac{f}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$	
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.000E+06, b=3.482E+08, c=4.063E+06, d=2.798E-14	
	B _{pk}	1000 G
	frequency	50 k Hz
DC Saturation	Core Loss (nominal)	629 mW/cm ³
	Core Loss (maximum)	755 mW/cm ³
	%μ _i = $\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=1.250E-02, b=1.927E-06, c=1.618, d=19.987	
	H _{bc}	100 Oe
Coating/Pkg	Percent Initial Perm.(nom.)	83.3 %
	Percent Initial Perm.(min.)	79.0 %
	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
Package Quantity	45 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	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.

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.Micrometals.com