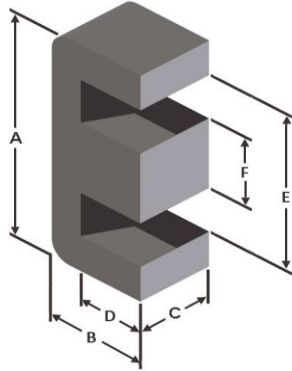




Part Number: EMS-0803820-014
Revision 20180523 - Generated 2018-May-23



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)	170 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
	mlt - mean length per turn	15.8 cm

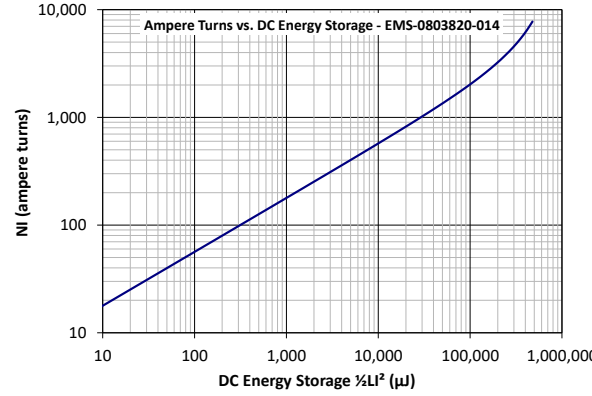
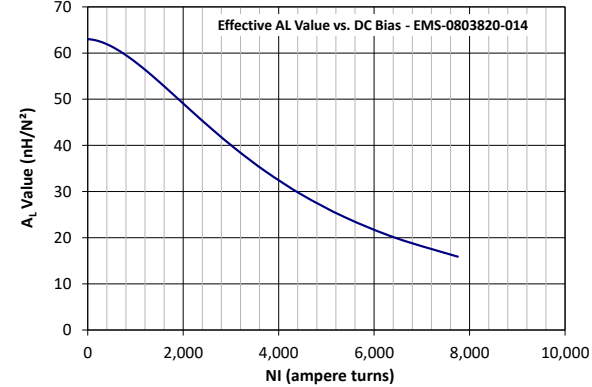
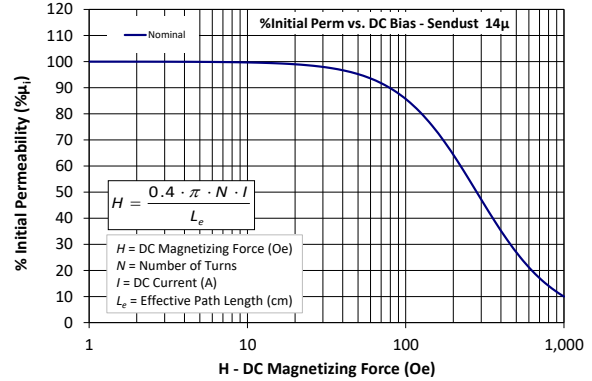
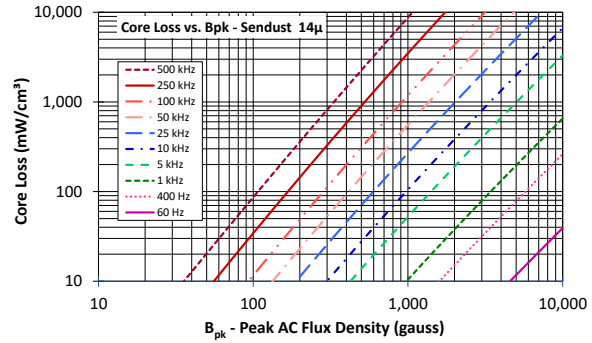
Inductance	μ _i (reference)	14
	A _i value (nominal)	63 nH/N ²
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.7 V
	A _i tolerance	±8%

Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.00E+06, b=2.84E+08, c=5.38E+06, d=1.42E-14	
	B _{pk}	300 G
	frequency	100 kHz
	Core Loss (nominal)	112 mW/cm ³
	Core Loss (maximum)	129 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=5.74E-07, c=1.73, d=0.00	
	H _{dc}	200 Oe
	Percent Initial Perm(nom.)	64.3%
	Percent Initial Perm(min.)	56.8%

Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	60 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.micrometalsapc.com.