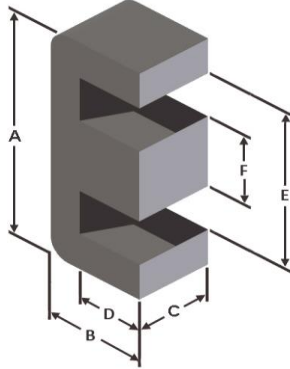




**Part Number:** EMS-1205232-014  
Revision 20180523 - Generated 2018-May-23



<b>A</b>	120 ± 1.80 mm	4.724 ± 0.071 in
<b>B</b>	52 ± 0.79 mm	2.047 ± 0.031 in
<b>C</b>	31.5 ± 0.64 mm	1.240 ± 0.025 in
<b>D</b>	31.5 mm (min.)	1.240 in (min.)
<b>E</b>	80.4 mm (min.)	3.165 in (min.)
<b>F</b>	39.6 ± 0.71 mm	1.559 ± 0.028 in

<b>Mass</b>	(approximate)	730 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	13.03 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	23.78 cm
	V <sub>e</sub> - Eff. Core Volume	310 cm <sup>3</sup>
	WA - Min. Eff. Window Area	12.6 cm <sup>2</sup>
	sa - Surface Area	449 cm <sup>2</sup>
	mlt - mean length per turn	22.4 cm

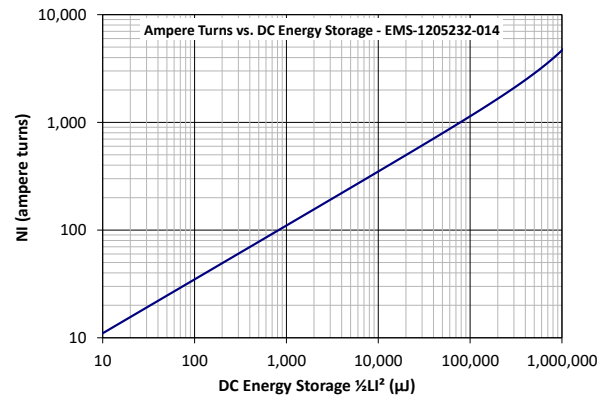
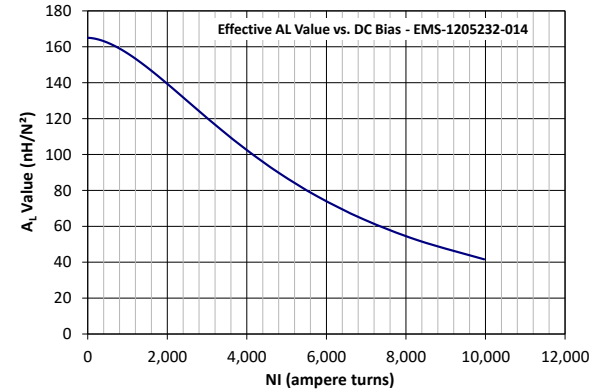
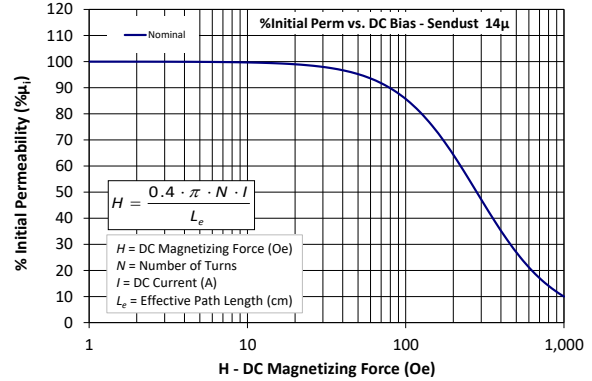
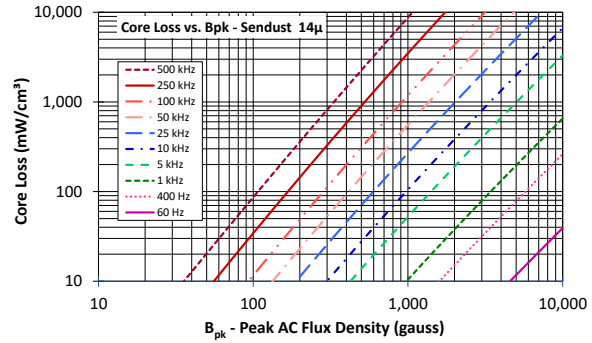
<b>Inductance</b>	μ <sub>i</sub> (reference)	14
	A <sub>i</sub> value (nominal)	165 nH/N <sup>2</sup>
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	5.8 V
	A <sub>i</sub> tolerance	±8%

<b>Core Loss</b>	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B <sub>pk</sub> 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 <sub>pk</sub>	300 G
	frequency	100 kHz
	Core Loss (nominal)	112 mW/cm <sup>3</sup>
	Core Loss (maximum)	129 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=5.74E-07, c=1.73, d=0.00	
	H <sub>dc</sub>	200 Oe
	Percent Initial Perm(nom.)	64.3%
	Percent Initial Perm(min.)	56.8%

<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	68	105	163	252	391	605	936	1,449	2,242	3,470	5,371
		Rdc(Ω)	31.3 m	76.8 m	189.7 m	466.5 m	1.2	2.8	7.0	17.2	42.2	103.9	255.9



**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).