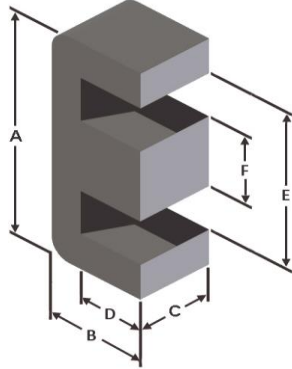




**Part Number:** EMS-0552825-014  
Revision 20180523 - Generated 2018-May-23



<b>A</b>	54.9 ± 0.81 mm	2.161 ± 0.032 in
<b>B</b>	27.6 ± 0.41 mm	1.087 ± 0.016 in
<b>C</b>	24.61 ± 0.48 mm	0.969 ± 0.019 in
<b>D</b>	18.5 mm (min.)	0.728 in (min.)
<b>E</b>	37.5 mm (min.)	1.476 in (min.)
<b>F</b>	16.8 ± 0.33 mm	0.661 ± 0.013 in

<b>Mass</b>	(approximate)	120 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	4.17 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	12.3 cm
	V <sub>e</sub> - Eff. Core Volume	51.4 cm <sup>3</sup>
	WA - Min. Eff. Window Area	3.77 cm <sup>2</sup>
	sa - Surface Area	130 cm <sup>2</sup>
	mlt - mean length per turn	12.4 cm

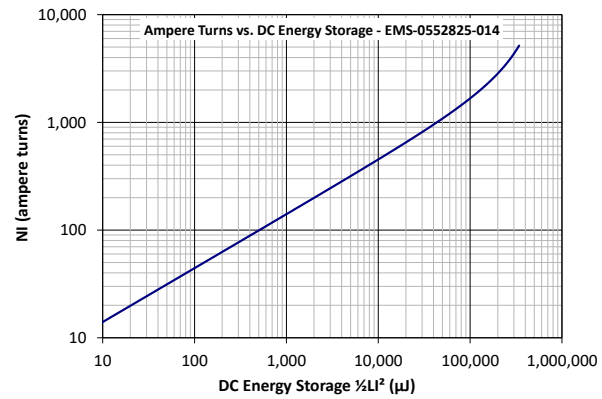
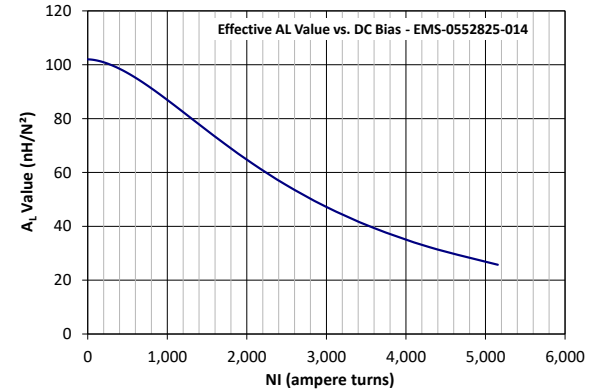
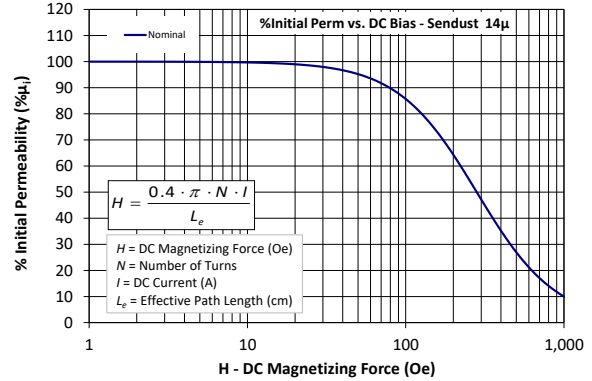
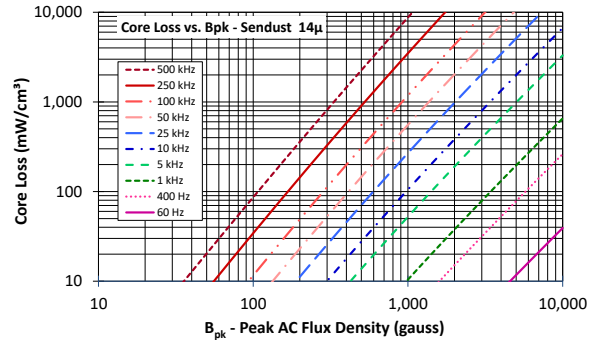
<b>Inductance</b>	μ <sub>i</sub> (reference)	14
	A <sub>i</sub> value (nominal)	102 nH/N <sup>2</sup>
	Test Winding	N=100, #16 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.9 V
	A <sub>i</sub> tolerance	±8%

<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	72 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	20	31	49	75	117	180	279	432	669	1,036	1,603
		Rdc(Ω)	5.1 m	12.6 m	31.7 m	77.1 m	191.2 m	467.8 m	1.2	2.8	7.0	17.2	42.4



**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).