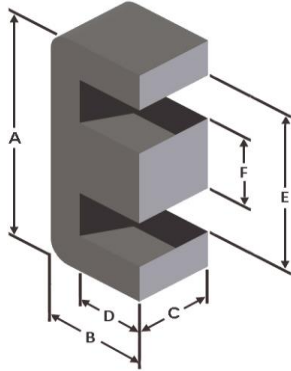




Part Number: EMS-0432115-014
Revision 20180523 - Generated 2018-May-23



A	42.8 ± 0.64 mm	1.685 ± 0.025 in
B	21.1 ± 0.33 mm	0.831 ± 0.013 in
C	15.4 ± 0.25 mm	0.606 ± 0.010 in
D	15 mm (min.)	0.591 in (min.)
E	30.4 mm (min.)	1.197 in (min.)
F	11.9 ± 0.25 mm	0.469 ± 0.010 in

Mass (approximate) 42 grams/half

Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.83 cm ²
	L_e - Eff. Mag. Path Length	9.84 cm
	V_e - Eff. Core Volume	18.0 cm ³
	WA - Min. Eff. Window Area	2.74 cm ²
	sa - Surface Area	73.5 cm ²
	mlt - mean length per turn	9.16 cm

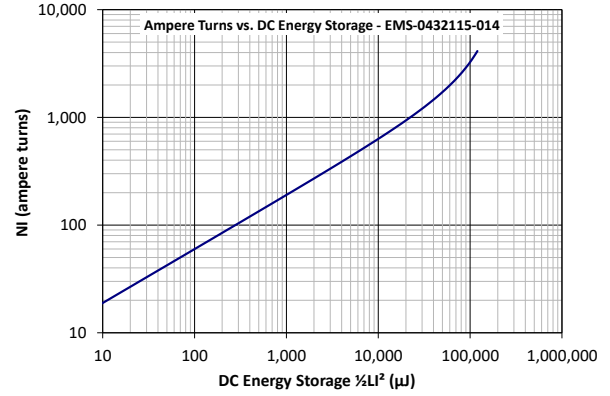
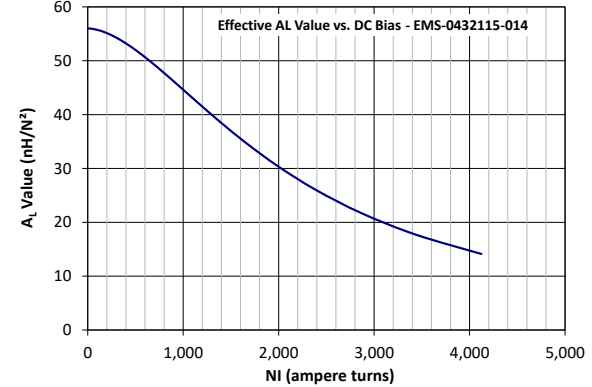
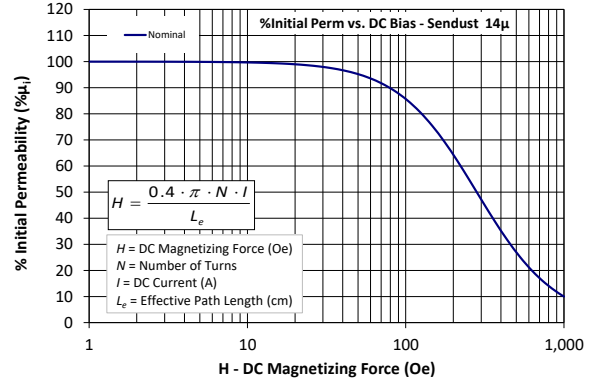
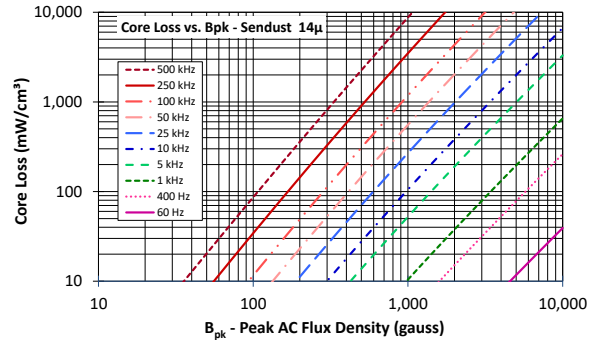
Inductance	μ_i (reference)	14
	A_L value (nominal)	56 nH/N ²
	Test Winding	N=100, #18 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.81 V
	A_L tolerance	±8%

Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{a} + \frac{b}{B_{pk}^3} + \frac{c}{B_{pk}^{2.3}} + \frac{d \cdot B_{pk}^2 \cdot f^2}{B_{pk}^{1.65}}$	
	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	175 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	15	23	35	55	85	131	203	314	486	752	1,164
		Rdc(Ω)	2.8 m	6.9 m	16.7 m	41.7 m	102.4 m	251.0 m	618.7 m	1.5	3.7	9.2	22.7



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.