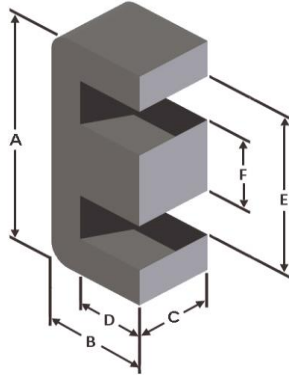




Part Number: EMS-0301507-090
 Revision 20190318 - Generated 2019-Mar-18



A	30.1 ± 0.46 mm	1.185 ± 0.018 in
B	15.01 ± 0.23 mm	0.591 ± 0.009 in
C	7.06 ± 0.15 mm	0.278 ± 0.006 in
D	9.7 mm (min.)	0.382 in (min.)
E	19.5 mm (min.)	0.768 in (min.)
F	6.96 ± 0.20 mm	0.274 ± 0.008 in

Mass (approximate) 11 grams/half

Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.601 cm ²
	L_e - Eff. Mag. Path Length	6.56 cm
	V_e - Eff. Core Volume	3.94 cm ³
	WA - Min. Eff. Window Area	1.20 cm ²
	sa - Surface Area	31.4 cm ²
mlt - mean length per turn		5.31 cm

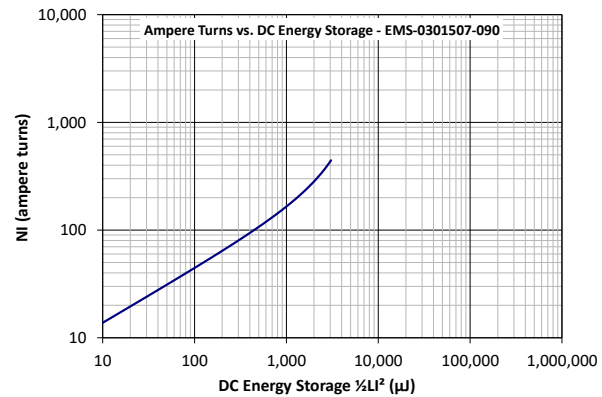
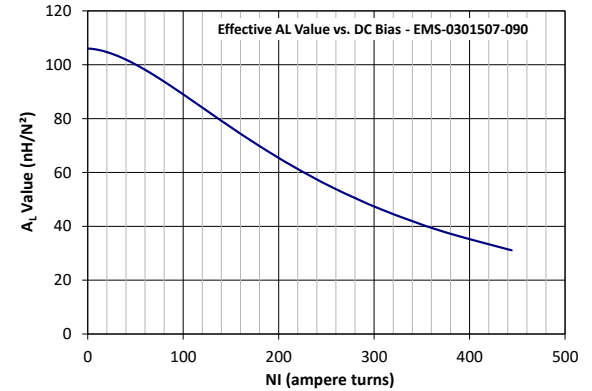
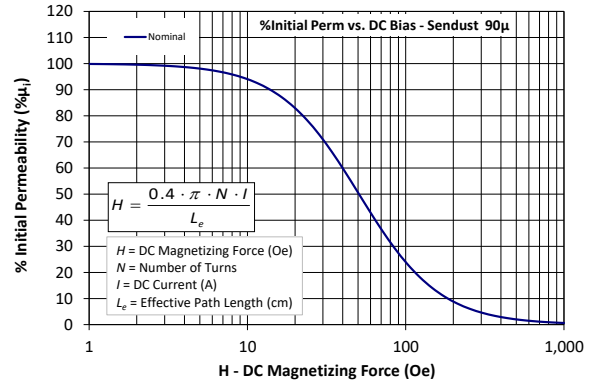
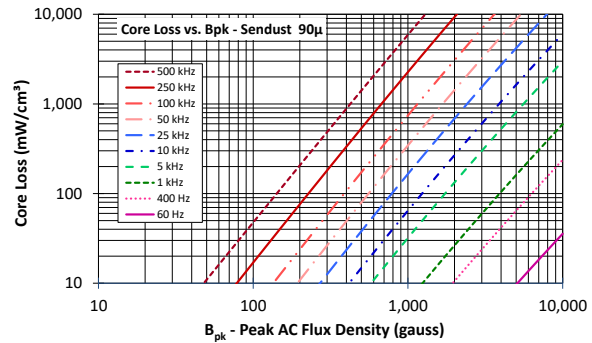
Inductance	μ_i (reference)	90
	A_L value (nominal)	106 nH/N ²
	Test Winding	N=100, #22 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.27 V
A_L tolerance		±8%

Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{a} + \frac{b}{B_{pk}^3} + \frac{c}{B_{pk}^{2.3}} + \frac{d}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.46E+09$, $b=8.28E+08$, $c=4.62E+06$, $d=1.09E-14$	
	B_{pk}	1000 G
	frequency	50 kHz
Core Loss (nominal)		345 mW/cm ³
Core Loss (maximum)		396 mW/cm ³

DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: $a=0.01$, $b=1.26E-05$, $c=1.70$, $d=0.00$	
	H_{dc}	50 Oe
Percent Initial Perm(nom.)		50.6%
Percent Initial Perm(min.)		42.9%

Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	360 Halves/Box

Winding Table	Wire Size	AWG	12	14	16	18	20	22	24	26	28	30	32
		mm	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200
	Full Winding	Turns	15	24	37	57	89	137	212	329	509	788	1,219
		Rdc(Ω)	4.1 m	10.5 m	25.9 m	63.3 m	157.3 m	385.1 m	947.7 m	2.3	5.8	14.2	34.9



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.