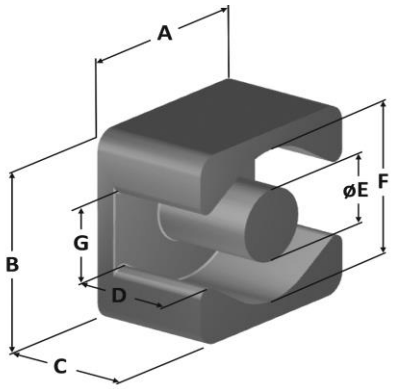
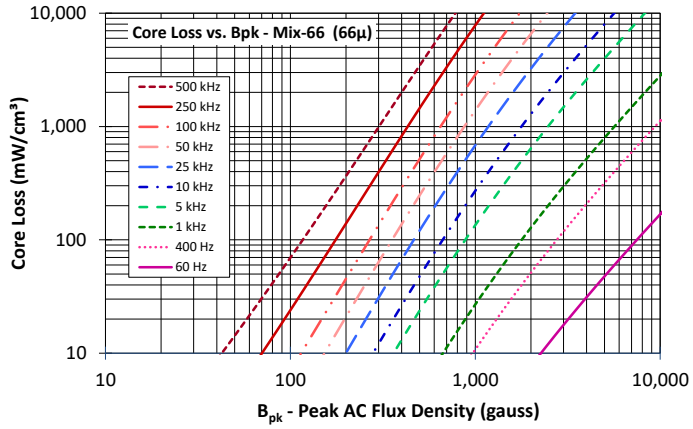
MICROMETALS™
POWDER CORE SOLUTIONS

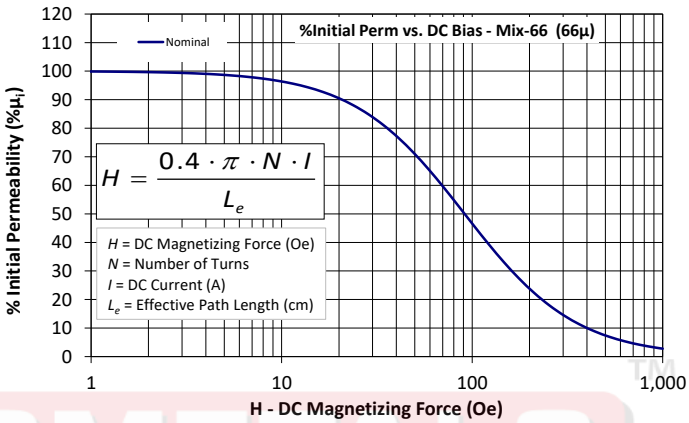
Part Number:	HC054B31A-66000

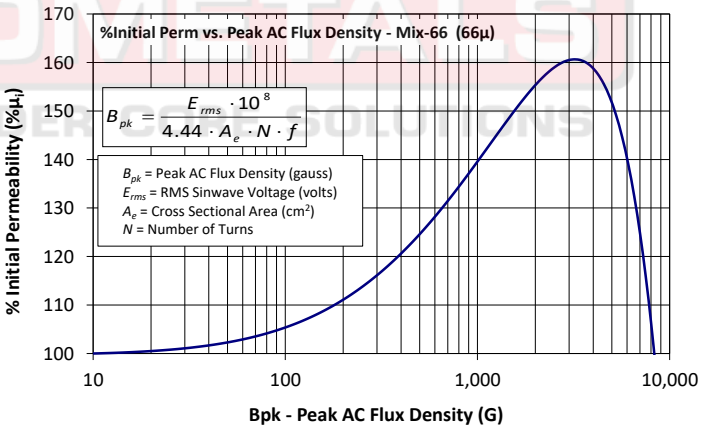
Revision 20200506 - Generated 2020-May-06

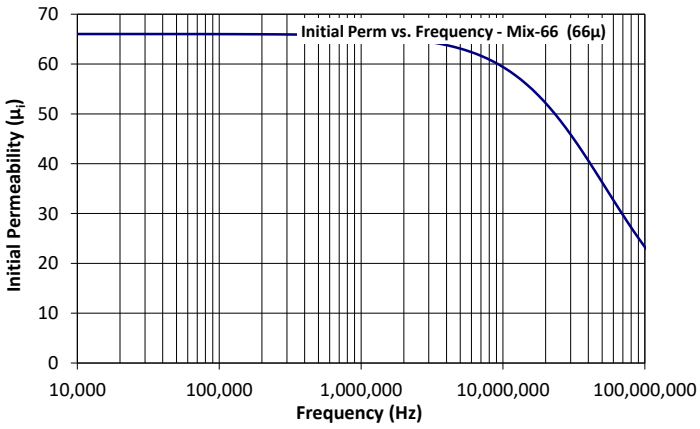


A	5.40 ± 0.15 mm	0.213 ± 0.006 in
B	5.10 ± 0.15 mm	0.201 ± 0.006 in
C	3.15 ± 0.10 mm	0.124 ± 0.004 in
D	2.40 mm (min.)	0.095 in (min.)
E	1.80 ± 0.10 mm	0.071 ± 0.004 in
F	4.10 mm (min.)	0.161 in (min.)
G	2.20 mm (nom.)	0.087 in (nom.)
Mass	(approximate)	0.31 grams/half
Magnetic Dimensions	when matched with IC (thickness=0.65 mm. nom.)	
	A_e - Eff. Mag. Cross Section	0.0582 cm²
	L_e - Eff. Mag. Path Length	1.09 cm
	V_e - Eff. Core Volume	0.0682 cm³
	WA - Min. Eff. Window Area	0.0275 cm²
	sa - Surface Area	1.35 cm²
	mlt - mean length per turn	0.950 cm
Core Loss	Core Loss(mW/cm³)= $\frac{f}{\frac{a}{Bpk^{3}}+\frac{b}{Bpk^{2.3}}+\frac{c}{Bpk^{1.65}}}+d\cdot Bpk^{2}\cdot f^{2}$	
	where B_{pk} expressed in gauss, f expressed in hertz, and:	
	a=1.72E+10, b=4.96E+07, c=1.23E+06, d=1.73E-14	
	B_{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	17 mW/cm³
	Core Loss (maximum)	20 mW/cm³
DC Saturation	$\%\mu_i = \frac{1}{a + b\cdot H^{c}} + d$	
	where H expressed in oersteds, and:	
	a=1.00E-02, b=1.23E-05, c=1.48, d=0.00	
	H_{DC}	50 Oe
	Percent Initial Perm(nom.)	71.0%
	Percent Initial Perm(min.)	65.1%
Coating/Pkg	Coating Type:	Per UL Card File #E140098(S), Black, Outer Surface only
	Voltage Breakdown (min.)	200Vrms, 60Hz
	Limit	3 mA, 5 s
	Package Quantity	24,000 Halves/Box









Winding Table													
Wire Size	AWG	26	28	30	32	34	36	38	40	42	44	#N/A
	mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A
Full Winding	Turns	8	12	18	28	43	67	104	161	249	385	#N/A
	Rdc(Ω)	10.2 m	24.3 m	57.9 m	143.3 m	349.9 m	867.1 m	2.1	5.3	13.0	31.9	#N/A

Micrometals Iron Powder Cores, A Division of Micrometals, Inc. - 5615 E. La Palma Ave., Anaheim, California 92807 USA
Ph: +1-714-970-9400, Toll Free in USA: +1-800-356-5977
www.Micrometals.com