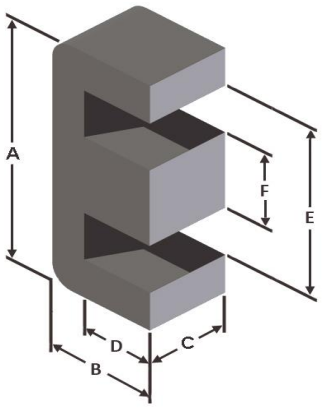
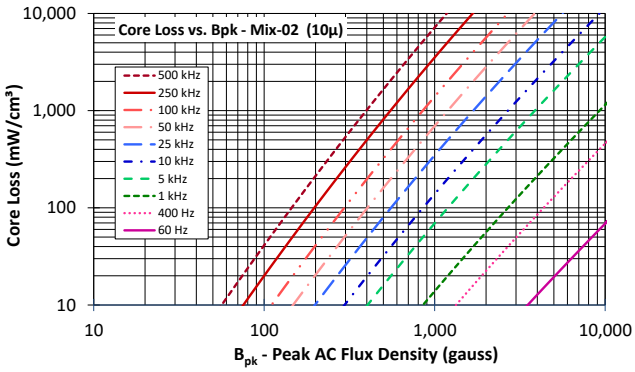
MICROMETALS™
POWDER CORE SOLUTIONS

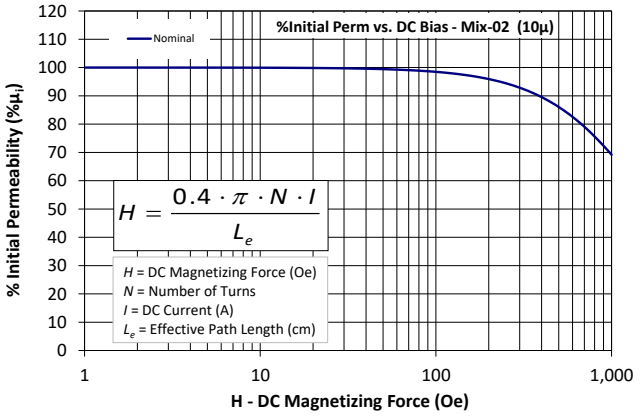
Part Number:	E450-2H

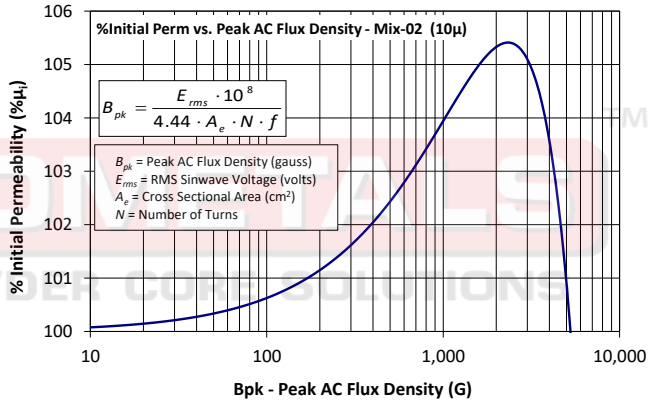
Revision 20210119 - Generated 2021-Jan-19

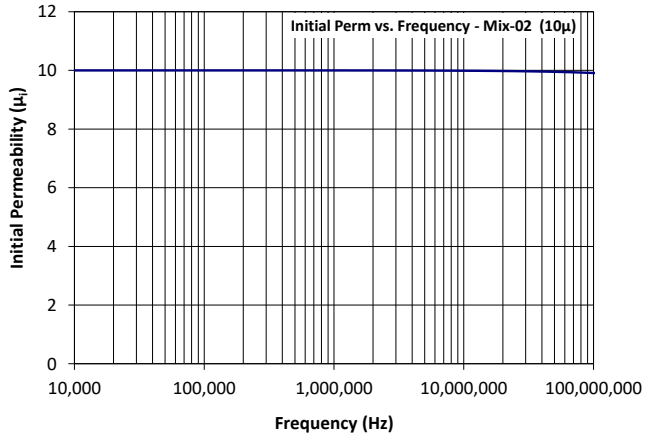


A	114.30 ± 0.76 mm	4.500 ± 0.030 in
B	46.18 ± 0.38 mm	1.818 ± 0.015 in
C	17.48 ± 0.38 mm	0.688 ± 0.015 in
D	28.58 mm (nom.)	1.125 in (nom.)
E	79.25 mm (nom.)	3.120 in (nom.)
F	34.93 ± 0.51 mm	1.375 ± 0.020 in
Mass	(approximate)	350 grams/half
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	6.10 cm²
	L_e - Eff. Mag. Path Length	22.9 cm
	V_e - Eff. Core Volume	140 cm³
	WA - Min. Eff. Window Area	12.5 cm²
	sa - Surface Area	344 cm²
	mlt - mean length per turn	19.3 cm
Inductance	μ_i(reference)	10
	A_L value (nominal)	66 nH/N²
	Test Winding	N=100, #14 AWG
	Frequency	1 kHz
	Voltage on Agilent 4284A	0.27 V
	A_L tolerance	±5%
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=4.00E+09, b=3.00E+08, c=2.70E+06, d=9.60E-16*	
	B_{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	18 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=1.83E-07, c=1.46, d=0.00*	
	H_{DC}	200 Oe
	Percent Initial Perm(nom.)	95.9%
	Percent Initial Perm(min.)	94.8%
Coating/Pkg	Coating Type:	None, Red/Clear Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	36 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	68	104	162	250	387	600	928	1,436	2,223	3,440	5,325
	Rdc(Ω)	27.0 m	65.8 m	163.0 m	400.0 m	984.8 m	2.4	6.0	14.7	36.2	89.1	219.3

Special Spec: AL tested with 2 pairs using E450 bobbin. Reported AL is half of the measured value.

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