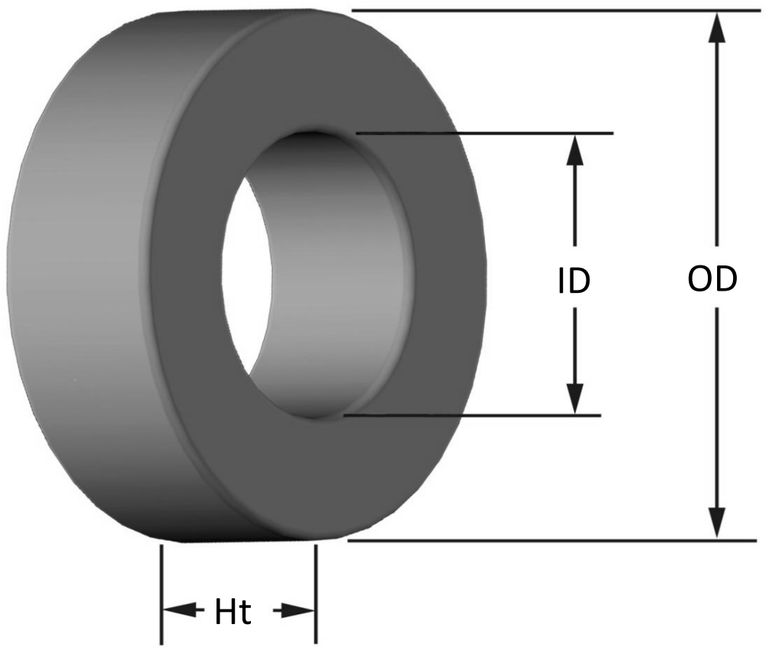
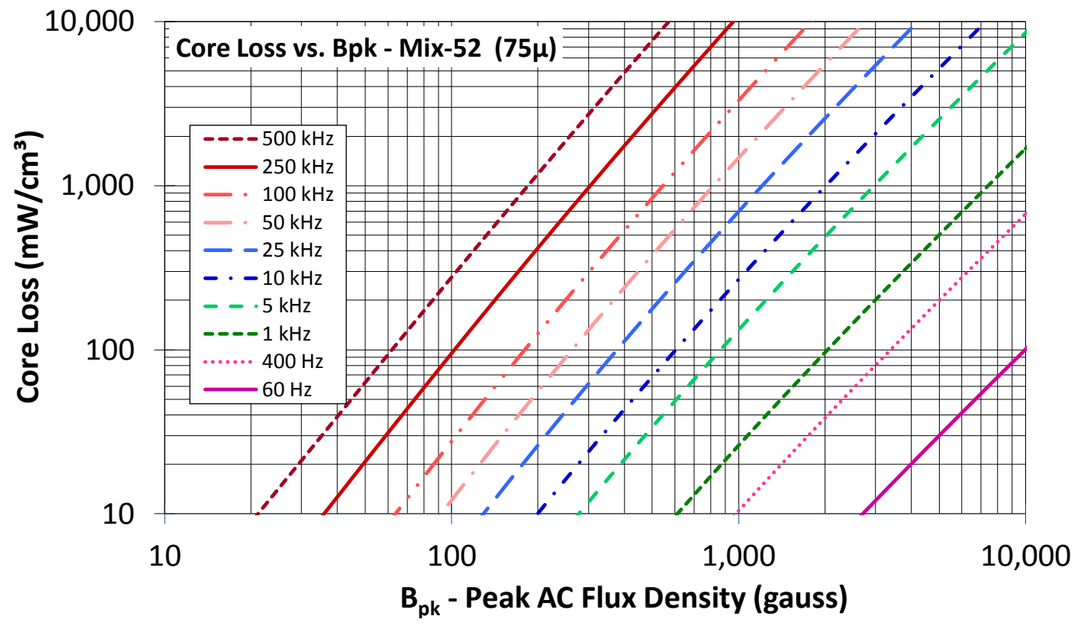
MICROMETALS™
POWDER CORE SOLUTIONS

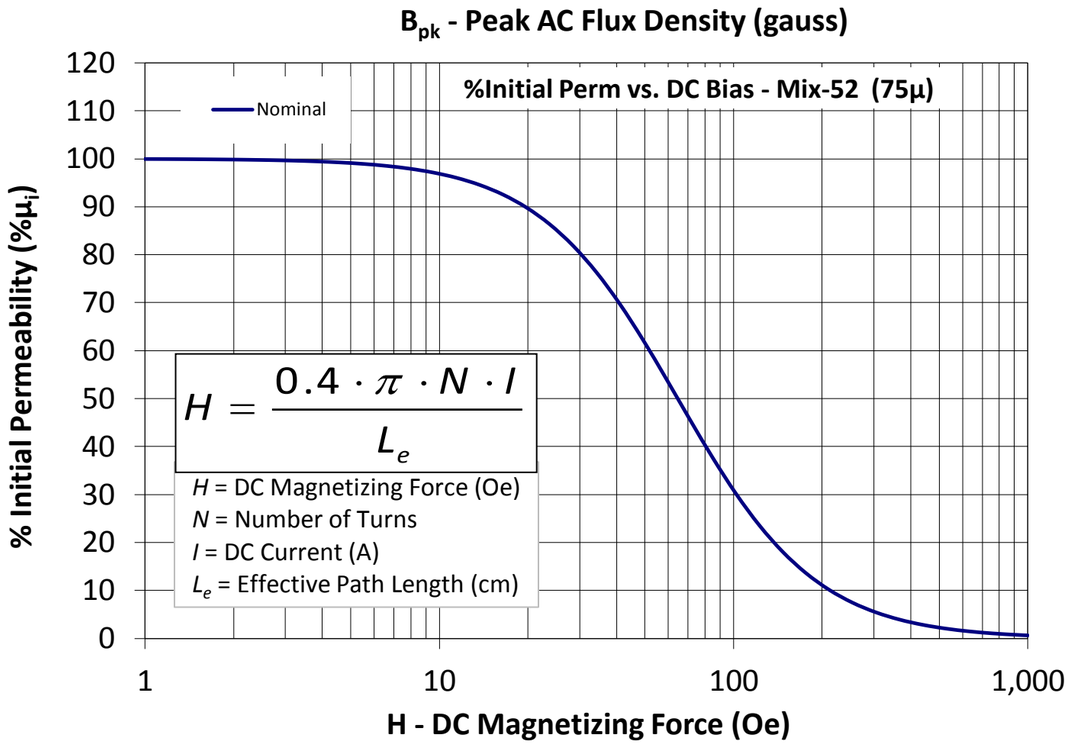
Part Number:	T130-52

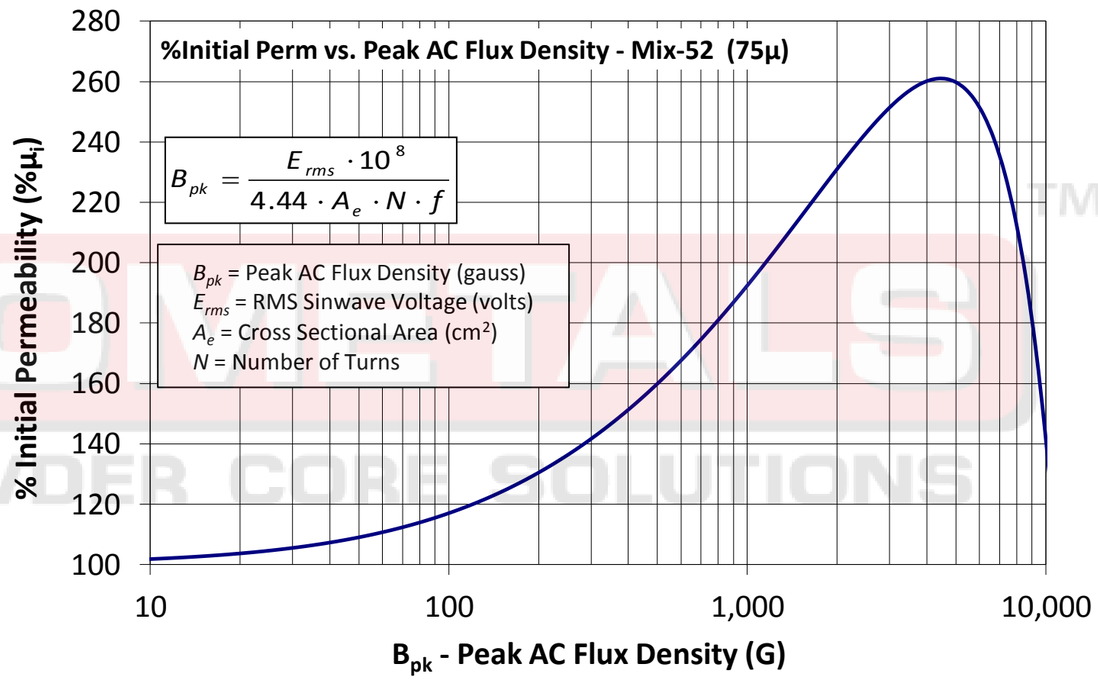
Revision 20190524 - Generated 2019-May-30

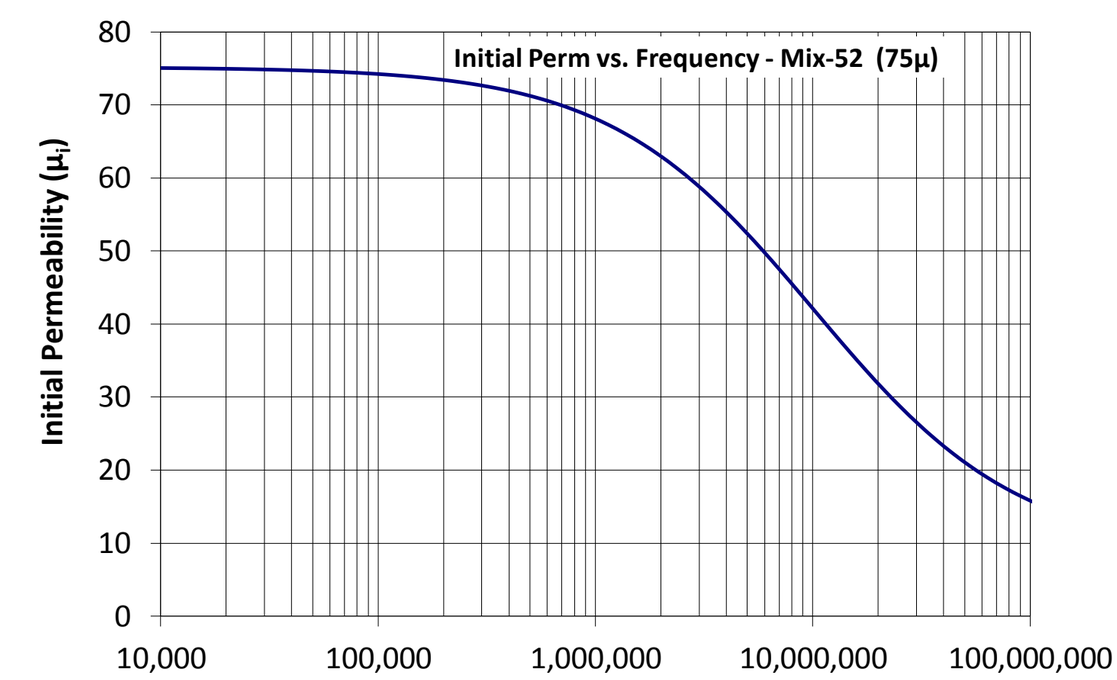


OD	(nom. - bare core)	33.02 mm	1.300 in
	(max. - after coating)	33.53 mm	1.320 in
ID	(nom. - bare core)	19.81 mm	0.780 in
	(min. - after coating)	19.30 mm	0.760 in
Ht	(nom. - bare core)	11.10 mm	0.437 in
	(max. - after coating)	11.73 mm	0.462 in
Mass	(approximate)	40 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.698 cm²	
	L_e - Eff. Mag. Path Length	8.28 cm	
	V_e - Eff. Core Volume	5.78 cm³	
	WA - Min. Eff. Window Area	2.93 cm²	
	sa - Surface Area	39.8 cm²	
	mlt - mean length per turn	4.73 cm	
Inductance	μ_i(reference)	75	
	A_L value (nominal)	79 nH/N²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.31 V	
	A_L tolerance	±10%	
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=1.00E+09, b=1.10E+08, c=2.10E+06, d=6.90E-14		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	58 mW/cm³	
	Core Loss (maximum)	67 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=4.66E-06, c=1.84, d=0.00		
	H_{DC}	50 Oe	
	Percent Initial Perm(nom.)	61.6%	
	Percent Initial Perm(min.)	53.4%	
Coating/Pkg	Coating Type:	Green/Blue Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	500 Pcs/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
	Single Layer	Turns	14	18	22	29	36	46	58	73	91	114	142
		Rdc(Ω)	1.4 m	2.8 m	5.4 m	11.4 m	22.4 m	45.6 m	91.4 m	182.9 m	362.6 m	722.4 m	1.4
	Full Winding	Turns	15	24	37	57	88	136	211	326	504	781	1,208
		Rdc(Ω)	1.5 m	3.7 m	9.1 m	22.3 m	54.8 m	134.7 m	332.4 m	816.7 m	2.0	4.9	12.2

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