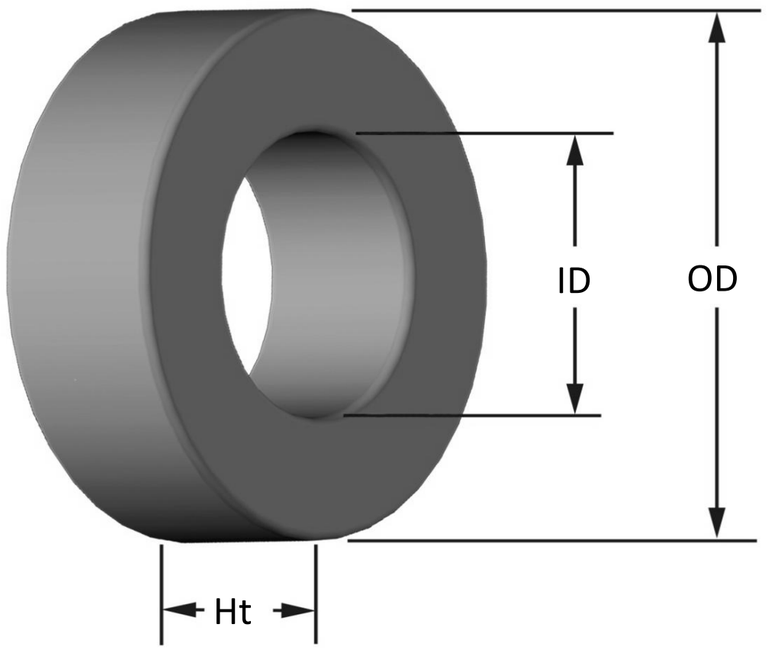
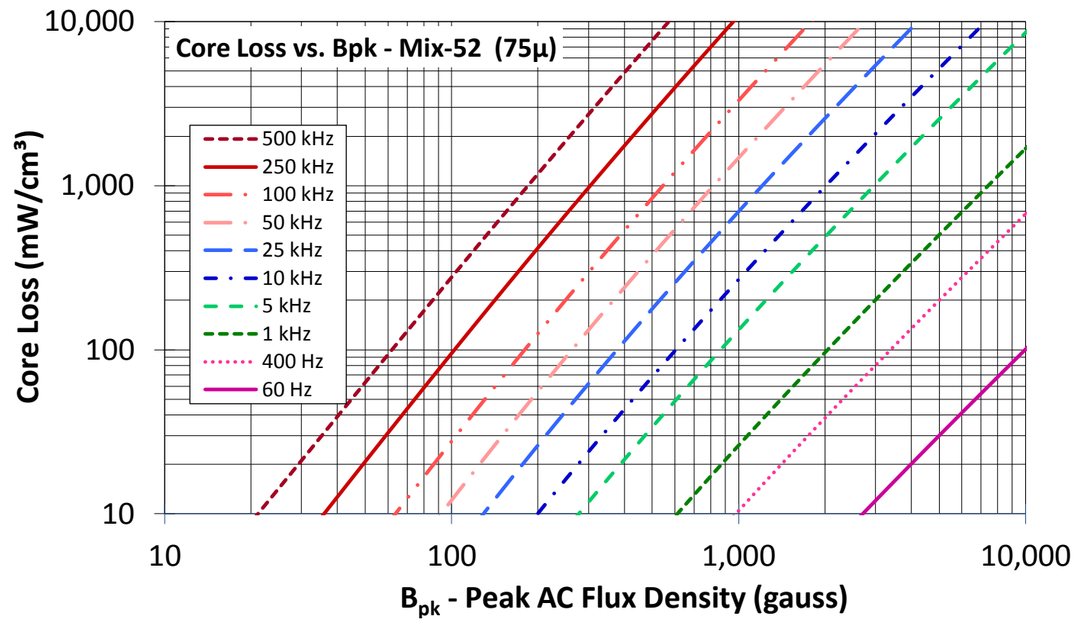
MICROMETALS™
POWDER CORE SOLUTIONS

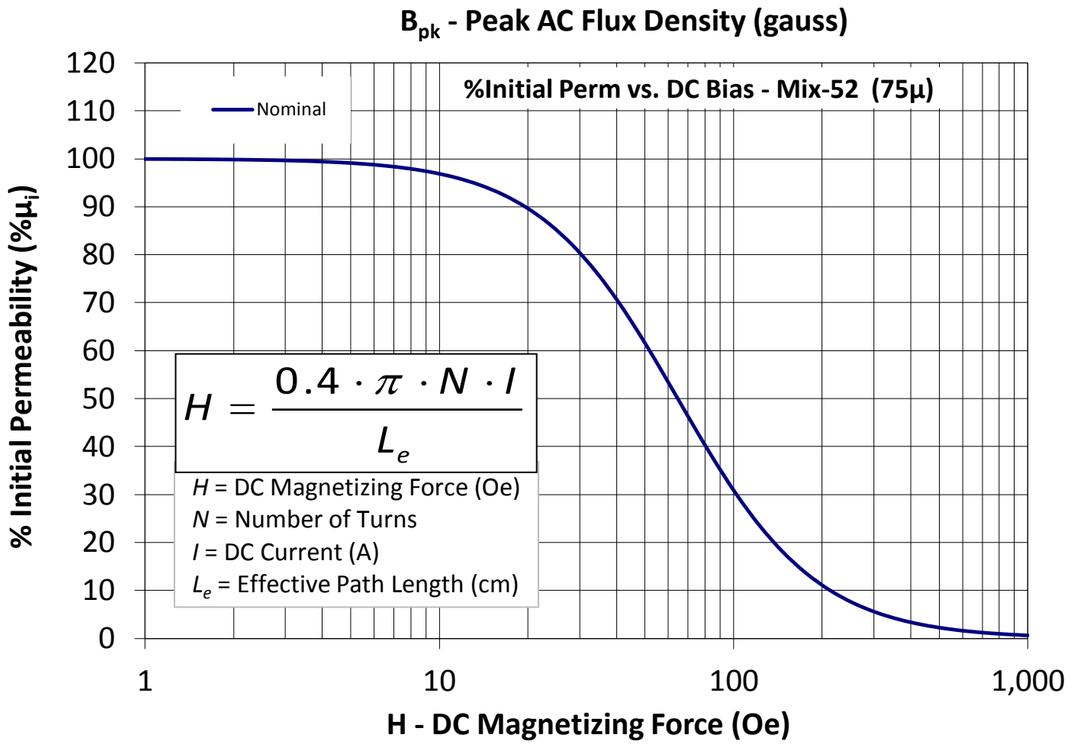
Part Number:	T224-52C

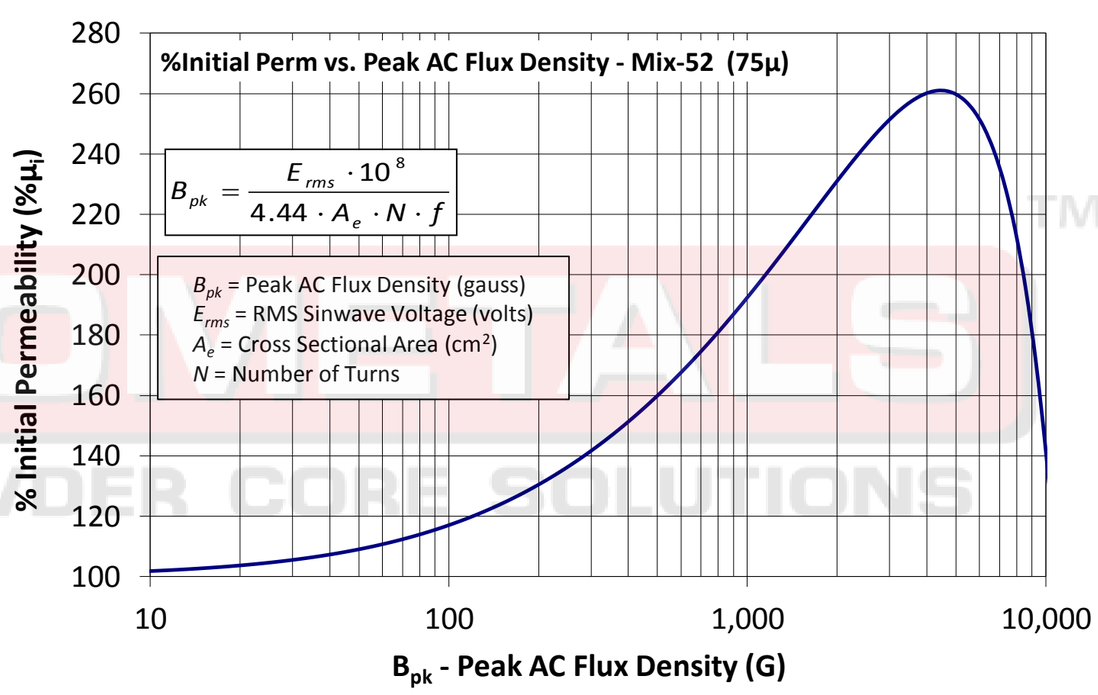
Revision 20190524 - Generated 2019-May-30

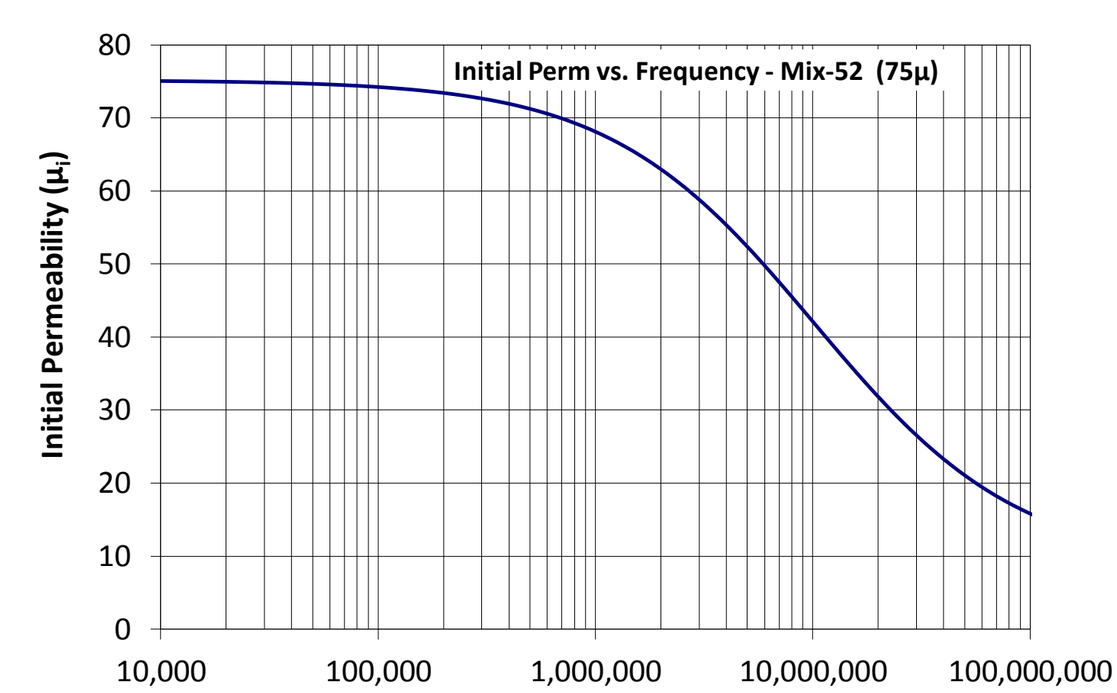


OD	(nom. - bare core)	57.15 mm	2.250 in
	(max. - after coating)	57.79 mm	2.275 in
ID	(nom. - bare core)	31.75 mm	1.250 in
	(min. - after coating)	31.12 mm	1.225 in
Ht	(nom. - bare core)	19.05 mm	0.750 in
	(max. - after coating)	19.81 mm	0.780 in
Mass	(approximate)	230 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	2.31 cm²	
	L_e - Eff. Mag. Path Length	14.0 cm	
	V_e - Eff. Core Volume	32.2 cm³	
	WA - Min. Eff. Window Area	7.60 cm²	
	sa - Surface Area	116 cm²	
	mlt - mean length per turn	8.19 cm	
Inductance	μ_i(reference)	75	
	A_L value (nominal)	155 nH/N²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	1.0 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	90 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	24	30	38	48	60	76	95	119	149	185	231
	Rdc(Ω)	4.0 m	8.0 m	16.2 m	32.5 m	64.6 m	130.1 m	258.7 m	515.4 m	1.0	2.0	4.0
Full Winding	Turns	40	62	95	148	228	353	547	847	1,311	2,029	3,140
	Rdc(Ω)	6.7 m	16.6 m	40.4 m	100.2 m	245.5 m	604.5 m	1.5	3.7	9.0	22.2	54.7

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