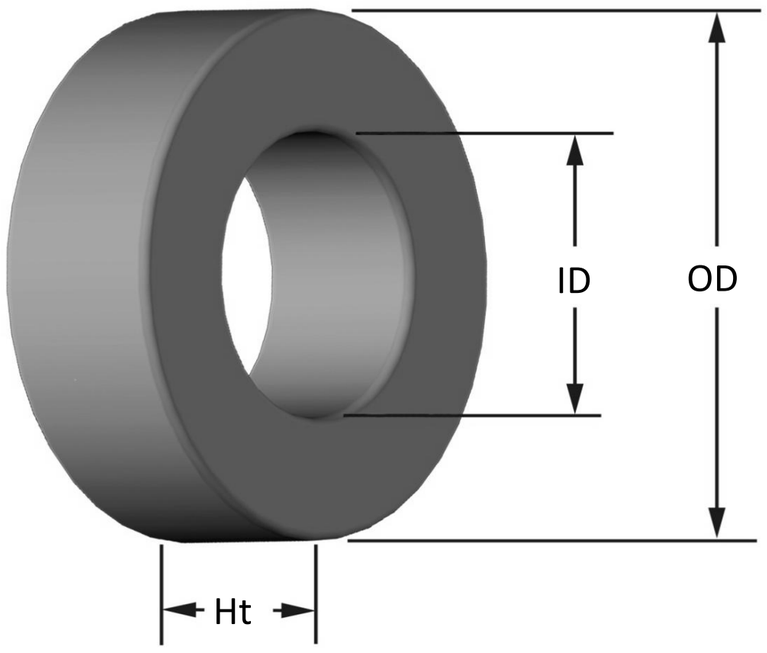
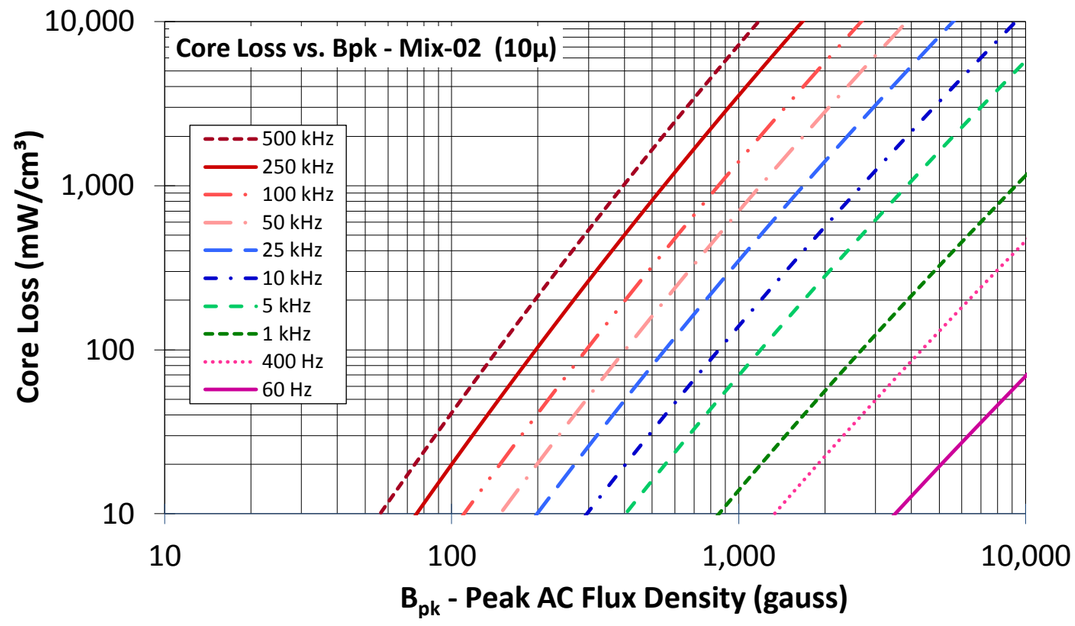
MICROMETALS™
POWDER CORE SOLUTIONS

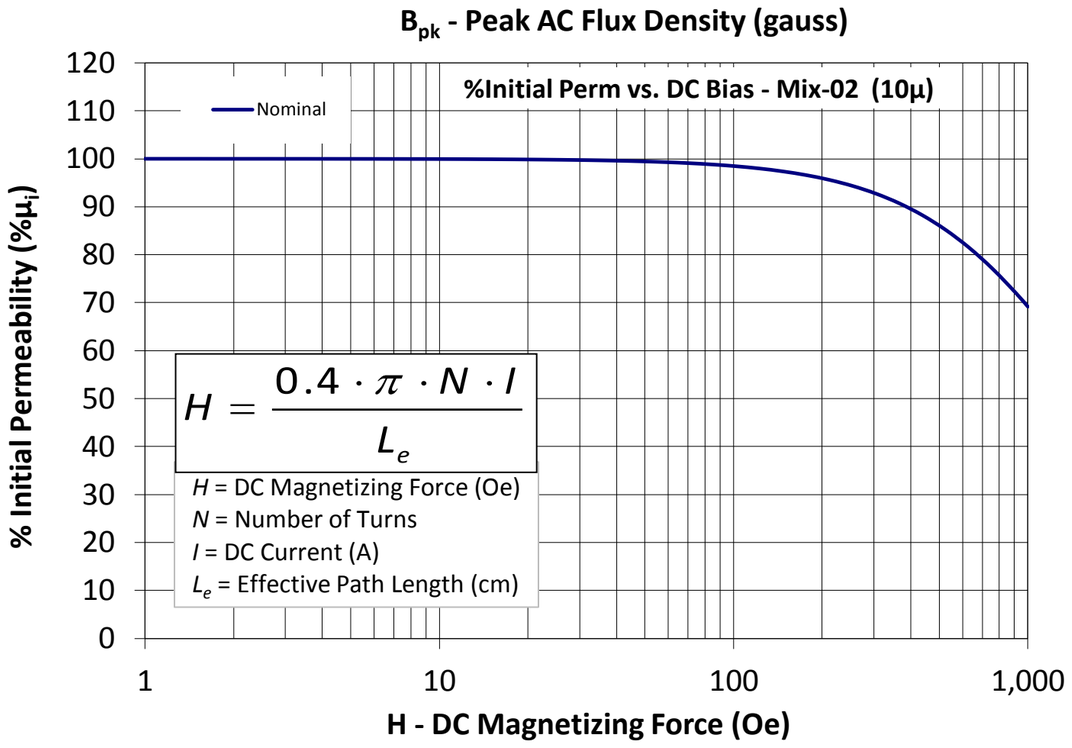
Part Number:	T184-2

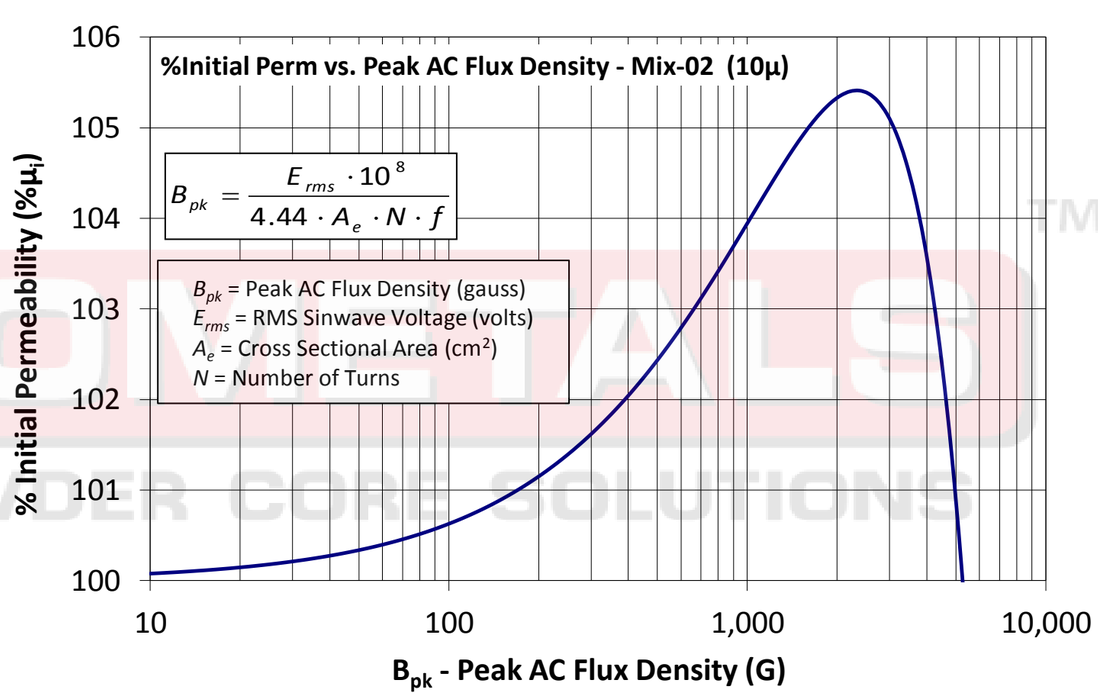
Revision 20190524 - Generated 2019-May-30

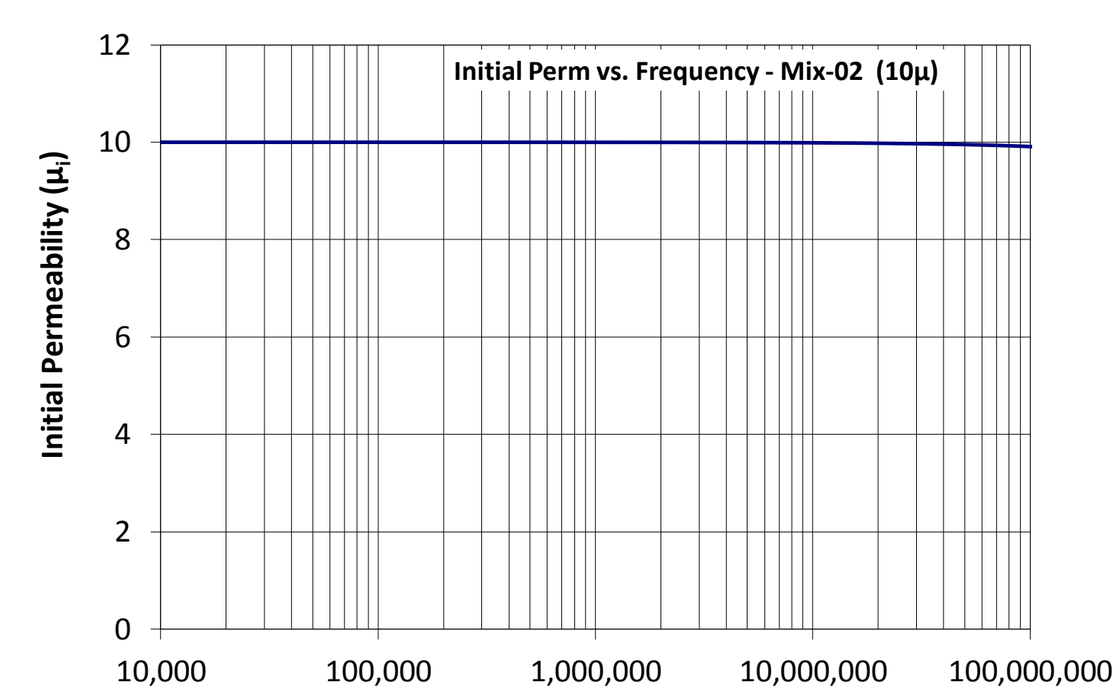


OD	(nom. - bare core)	46.74 mm	1.840 in
	(max. - after coating)	47.37 mm	1.865 in
ID	(nom. - bare core)	24.13 mm	0.950 in
	(min. - after coating)	23.50 mm	0.925 in
Ht	(nom. - bare core)	18.03 mm	0.710 in
	(max. - after coating)	18.80 mm	0.740 in
Mass	(approximate)	110 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.88 cm²	
	L_e - Eff. Mag. Path Length	11.2 cm	
	V_e - Eff. Core Volume	21.0 cm³	
	WA - Min. Eff. Window Area	4.34 cm²	
	sa - Surface Area	80.9 cm²	
	mlt - mean length per turn	7.32 cm	
Inductance	μ_i(reference)	10	
	A_L value (nominal)	24 nH/N²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.83 V	
	A_L tolerance	±5%	
Core Loss & Q	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		
	Q test winding	N=35, #18 AWG	
	Q frequency	2 MHz	
	Q min on HP4342A	285	
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:	Red/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	140 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	17	22	28	36	45	57	71	89	111	139	174
		Rdc(Ω)	2.6 m	5.3 m	10.7 m	21.8 m	43.3 m	87.3 m	173.0 m	344.8 m	683.9 m	1.4	2.7
	Full Winding	Turns	23	35	54	84	130	202	312	483	747	1,157	1,790
		Rdc(Ω)	3.5 m	8.4 m	20.6 m	50.9 m	125.2 m	309.4 m	760.0 m	1.9	4.6	11.3	27.9

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