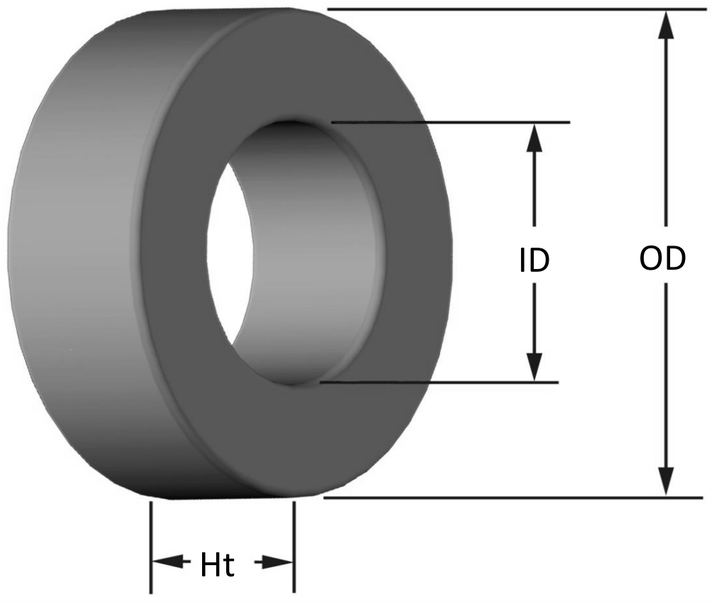
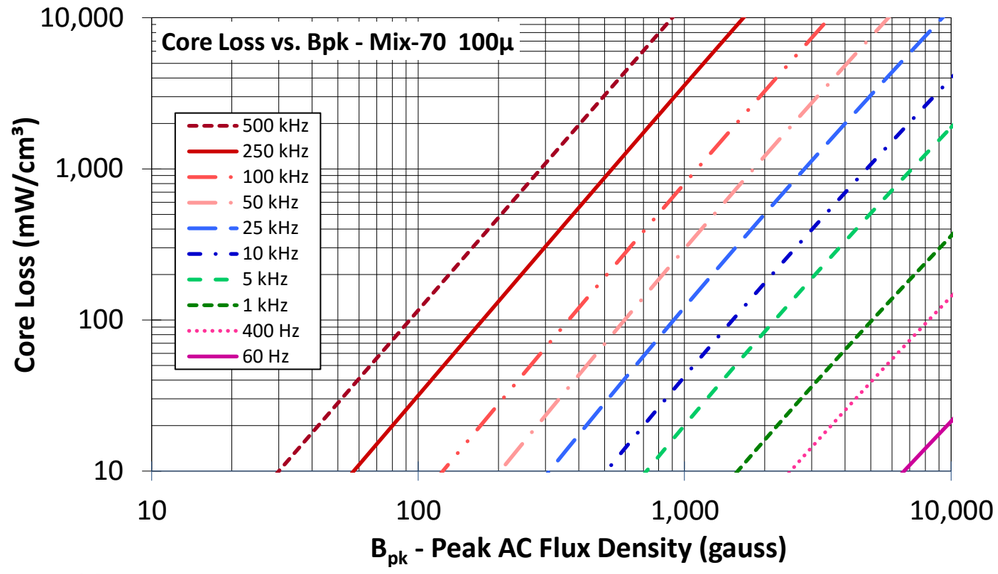
MICROMETALS
POWDER CORE SOLUTIONS

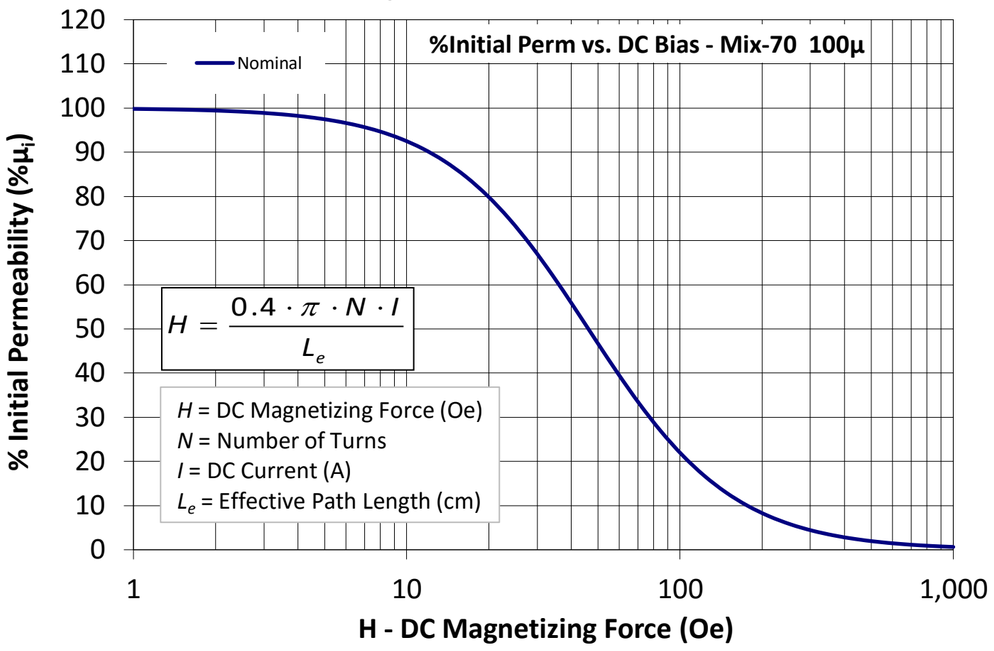
Part Number:	T94-70

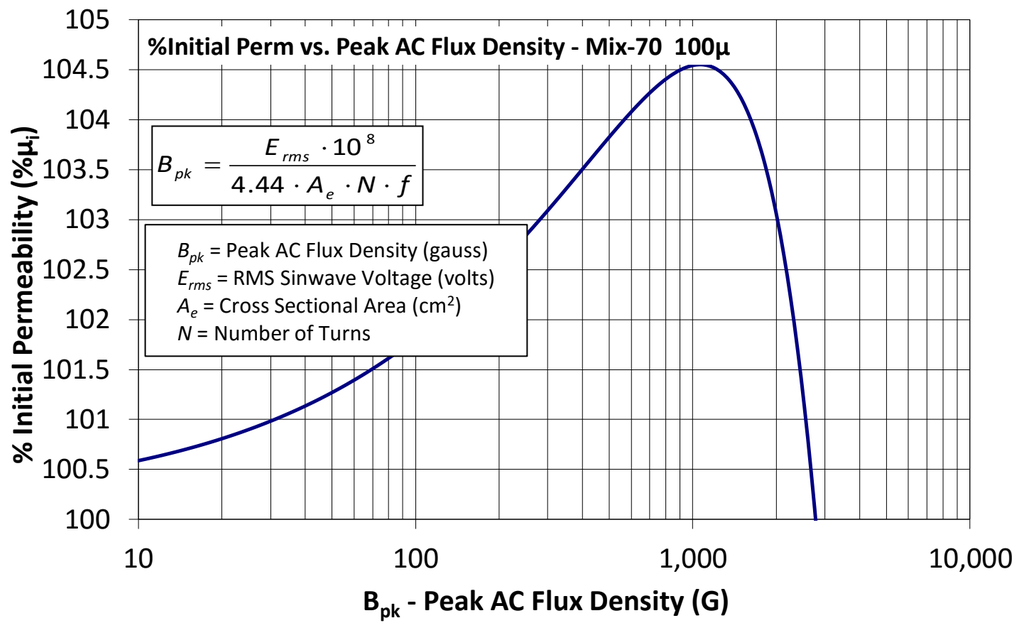
Revision 20160713 - Generated 2016-Aug-15

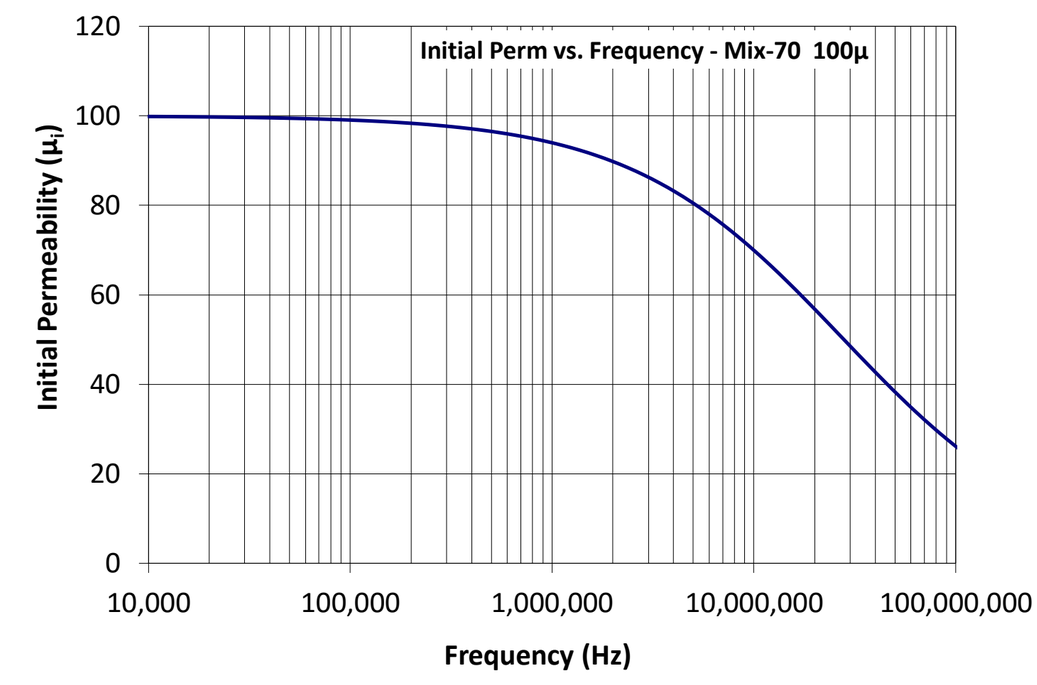


OD	(nom. - bare core)	23.93 mm	0.942 in
	(max. - after coating)	24.43 mm	0.962 in
ID	(nom. - bare core)	14.22 mm	0.560 in
	(min. - after coating)	13.72 mm	0.540 in
Ht	(nom. - bare core)	7.92 mm	0.312 in
	(max. - after coating)	8.56 mm	0.337 in
Mass	(approximate)	16 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.362 cm²	
	L_e - Eff. Mag. Path Length	5.97 cm	
	V_e - Eff. Core Volume	2.16 cm³	
	WA - Min. Eff. Window Area	1.48 cm²	
	sa - Surface Area	21.0 cm²	
	mlt - mean length per turn	3.47 cm	
Inductance	μ_i(reference)	100	
	A_L value (nominal)	76 nH/N²	
	Test Winding	N=100, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.16 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+10, b=1.30E+09, c=7.90E+06, d=4.20E-14		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	13 mW/cm³	
	Core Loss (maximum)	15 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=1.85E-05, c=1.64, d=0.00		
	H_{DC}	50 Oe	
	Percent Initial Perm(nom.)	46.8%	
	Percent Initial Perm(min.)	39.4%	
Coating/Pkg	Coating Type:	Beige/Black Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	0.1 mA, 5 s	
	Package Quantity	1,250 Pcs/Box	









Winding Table	**Wire Size**	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	12	15	20	25	32	40	51	64	80	100	126
		Rdc(Ω)	1.4 m	2.7 m	5.7 m	11.4 m	23.2 m	46.2 m	93.6 m	186.9 m	371.5 m	738.5 m	1.5
	Full Winding	Turns	12	19	29	44	69	106	165	255	394	610	944
		Rdc(Ω)	1.4 m	3.4 m	8.3 m	20.1 m	50.1 m	122.4 m	302.9 m	744.6 m	1.8	4.5	11.1

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