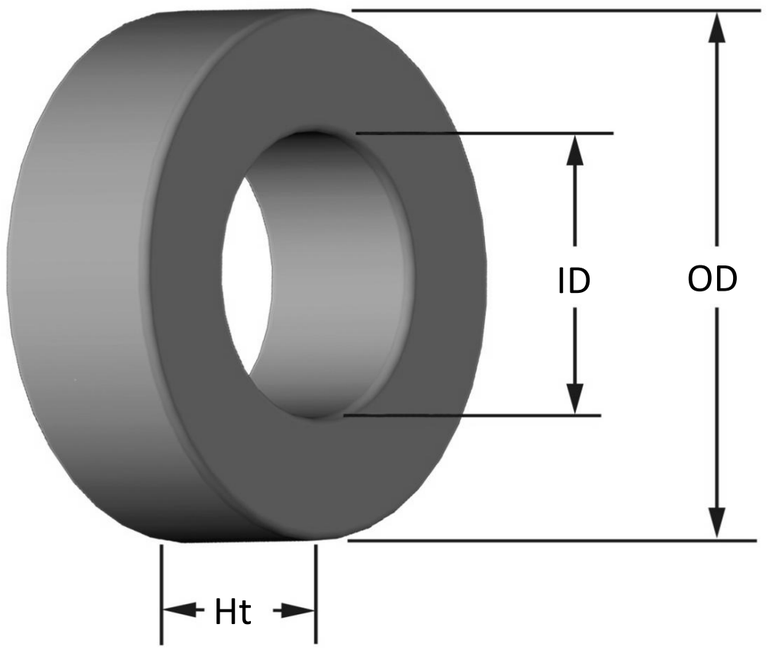
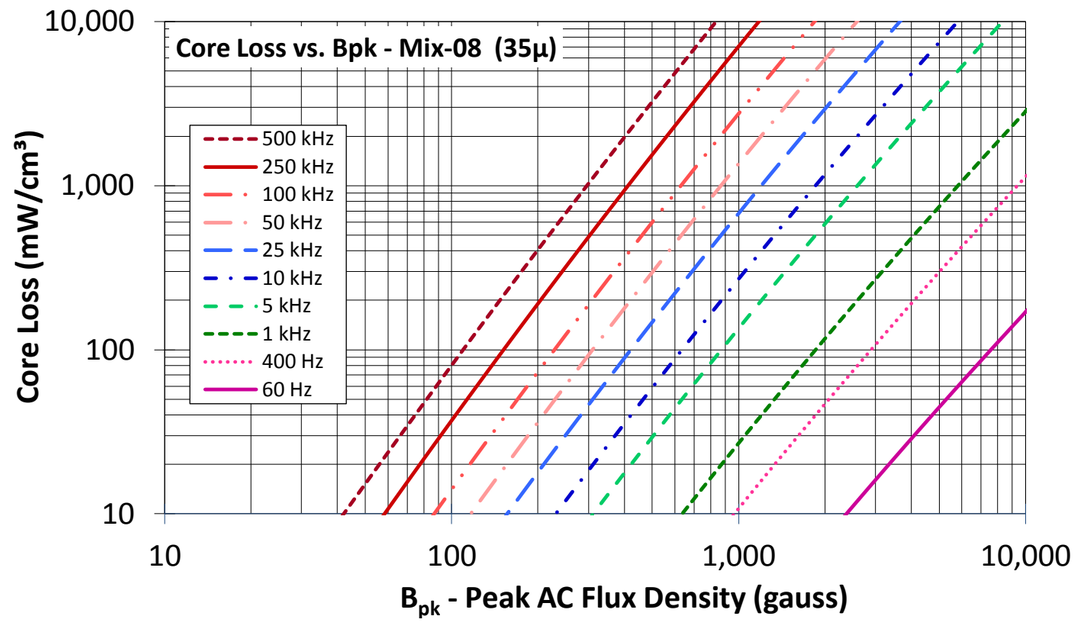
MICROMETALS™
POWDER CORE SOLUTIONS

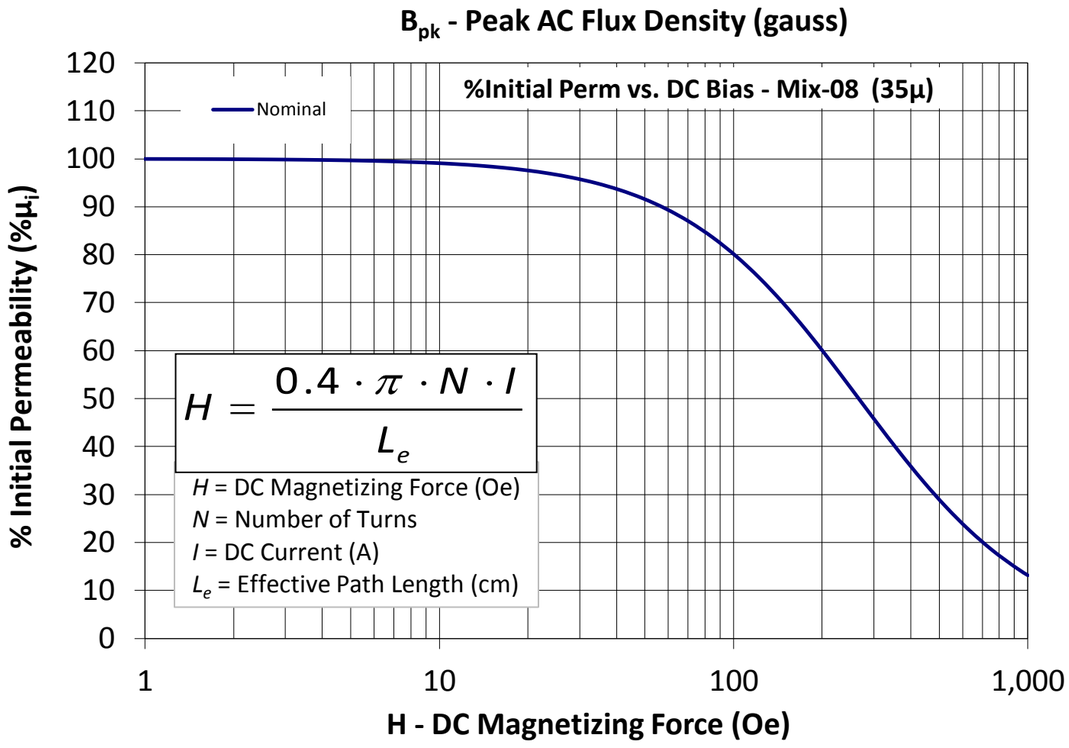
Part Number:	T157-8/90

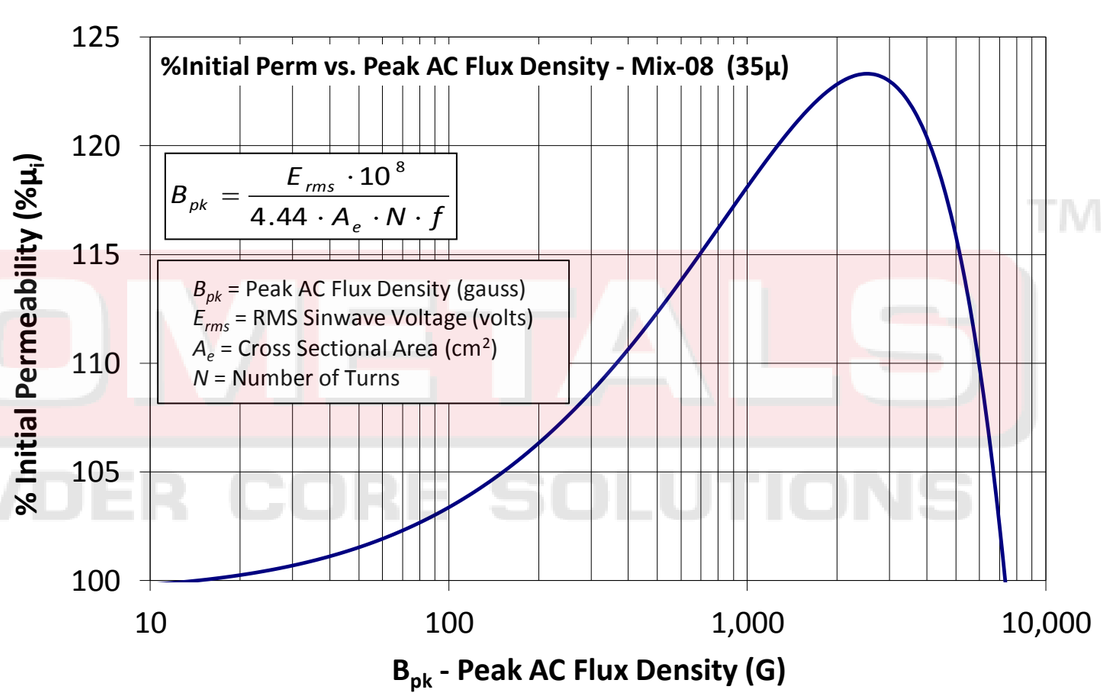
Revision 20190524 - Generated 2019-May-30

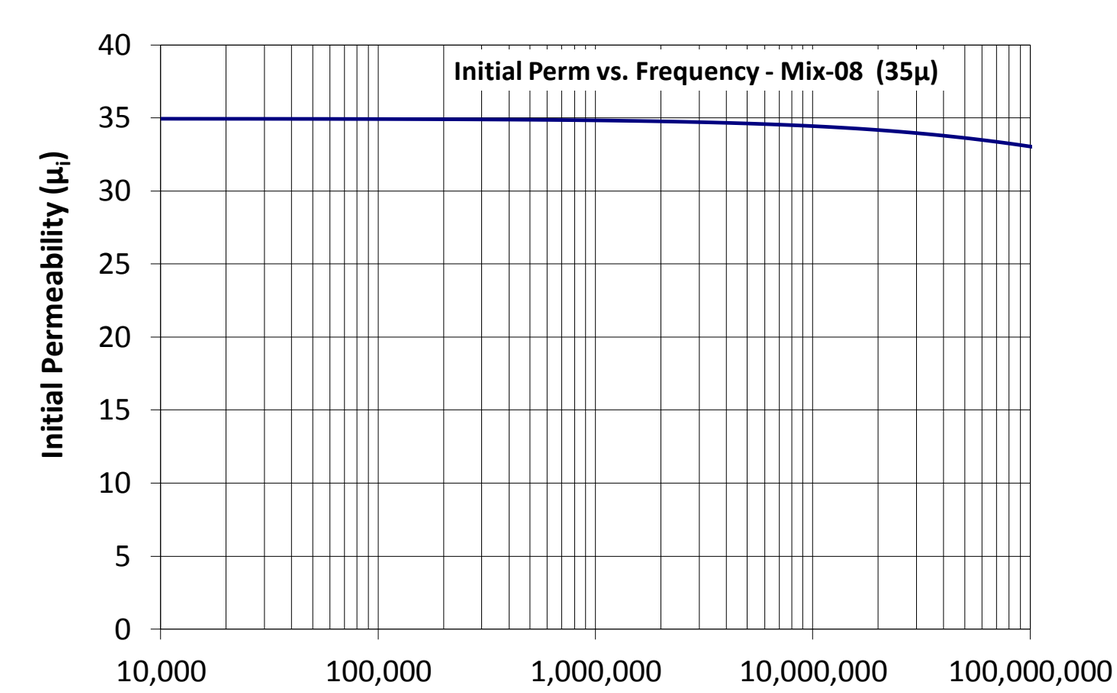


OD	(nom. - bare core)	39.88 mm	1.570 in
	(max. - after coating)	40.51 mm	1.595 in
ID	(nom. - bare core)	24.13 mm	0.950 in
	(min. - after coating)	23.50 mm	0.925 in
Ht	(nom. - bare core)	14.48 mm	0.570 in
	(max. - after coating)	15.24 mm	0.600 in
Mass	(approximate)	70 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.06 cm²	
	L_e - Eff. Mag. Path Length	10.1 cm	
	V_e - Eff. Core Volume	10.7 cm³	
	WA - Min. Eff. Window Area	4.34 cm²	
	sa - Surface Area	59.7 cm²	
	mlt - mean length per turn	5.92 cm	
Inductance	μ_i(reference)	35	
	A_L value (nominal)	42 nH/N²	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.47 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=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15*		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	32 mW/cm³	
	Core Loss (maximum)	36 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=3.49E-06, c=1.43, d=0.00*		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	60.1%	
	Percent Initial Perm(min.)	53.7%	
Coating/Pkg	Coating Type:	Yellow/Red Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	240 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)	2.1 m	4.3 m	8.6 m	17.6 m	35.1 m	70.6 m	140.0 m	279.0 m	553.4 m	1.1	2.2
Full Winding	Turns	23	35	54	84	130	202	312	483	747	1,157	1,790
	Rdc(Ω)	2.8 m	6.8 m	16.6 m	41.2 m	101.3 m	250.4 m	615.0 m	1.5	3.7	9.2	22.6

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