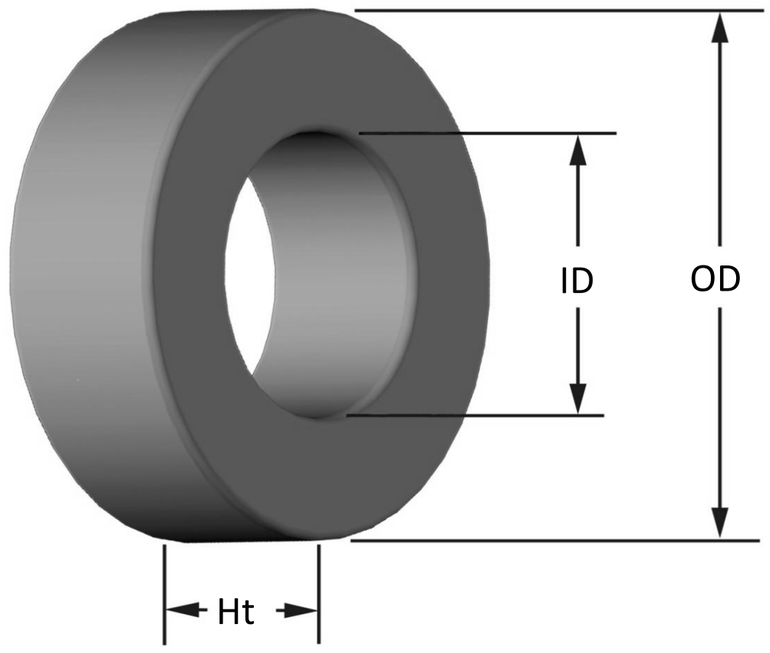
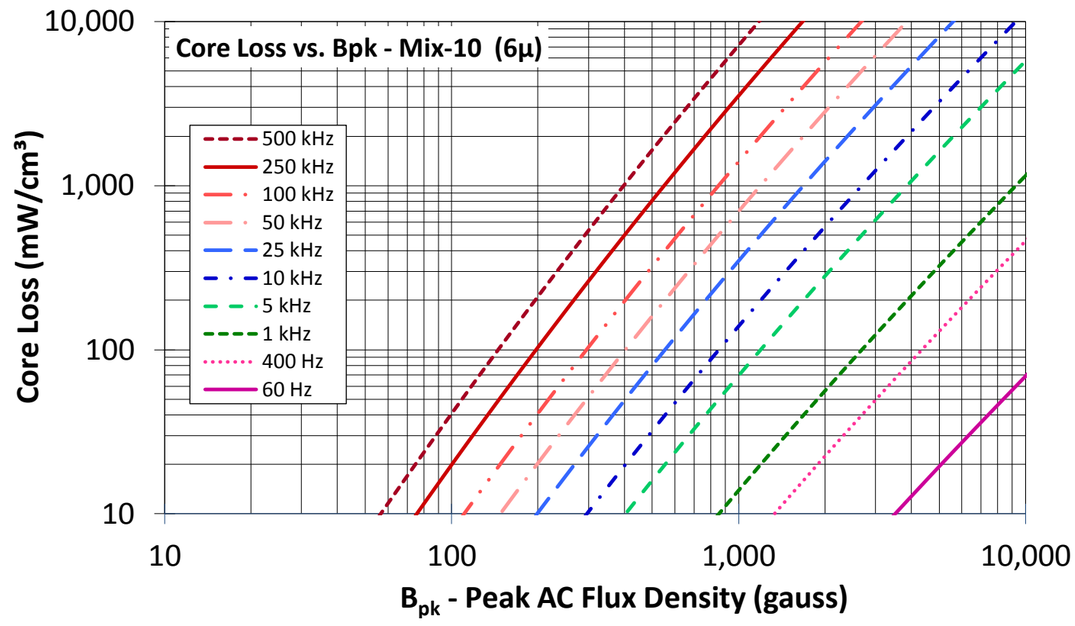
MICROMETALS™
POWDER CORE SOLUTIONS

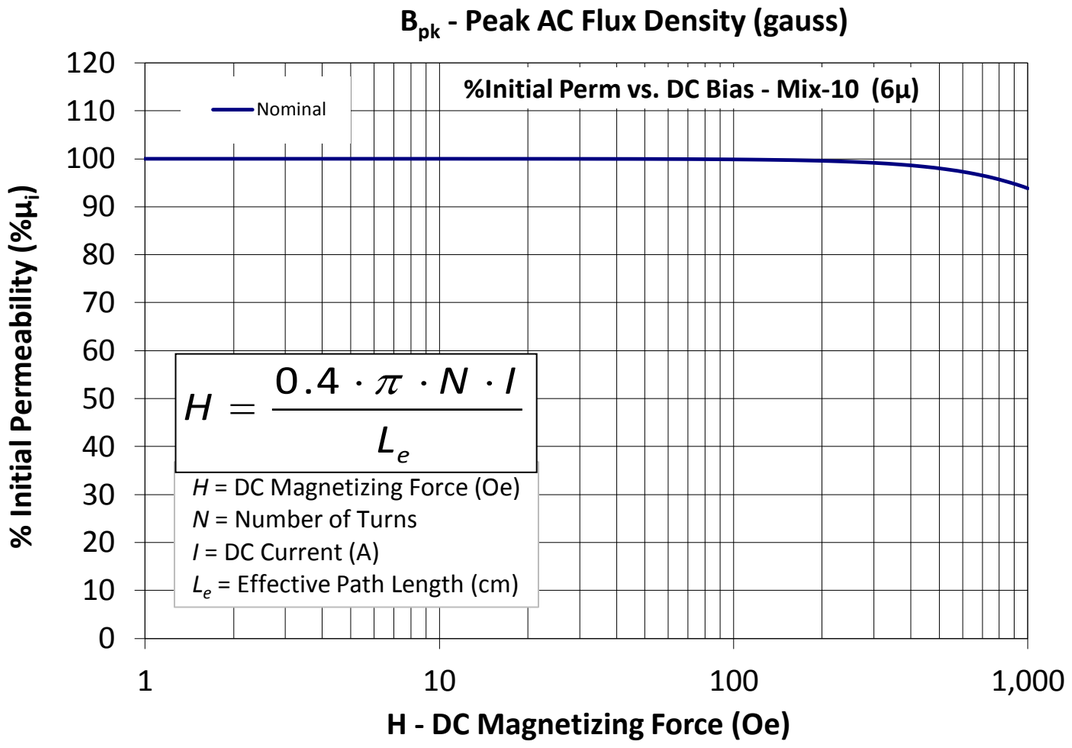
Part Number:	T68-10

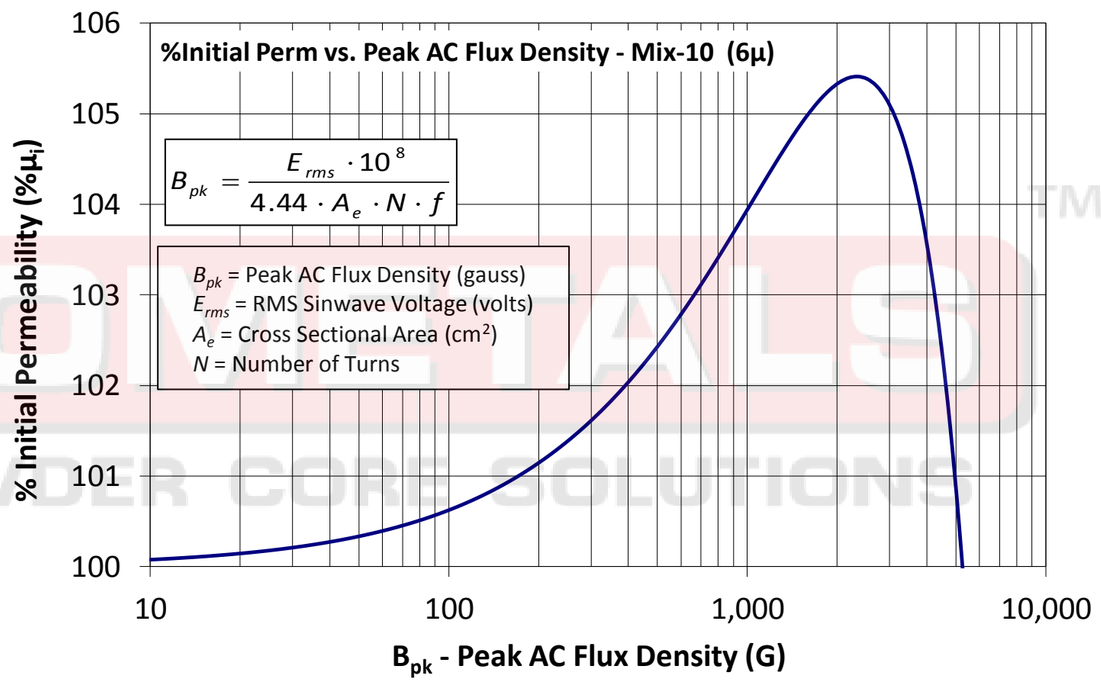
Revision 20190524 - Generated 2019-May-30

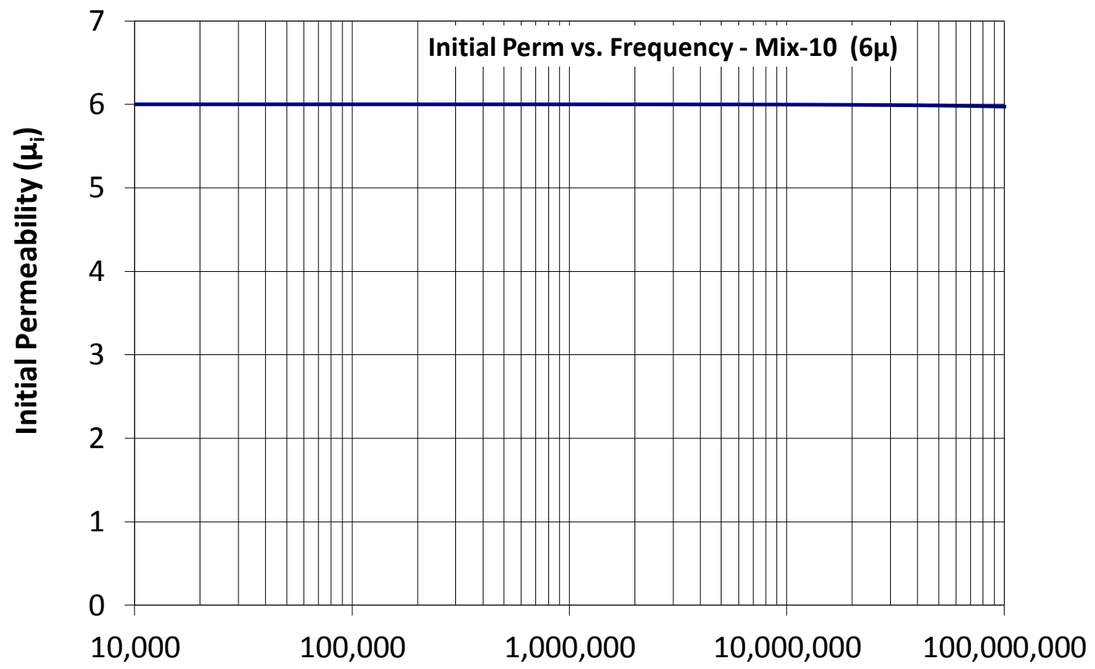


OD	(nom. - bare core)	17.53 mm	0.690 in
	(max. - after coating)	18.03 mm	0.710 in
ID	(nom. - bare core)	9.40 mm	0.370 in
	(min. - after coating)	8.89 mm	0.350 in
Ht	(nom. - bare core)	4.83 mm	0.190 in
	(max. - after coating)	5.33 mm	0.210 in
Mass	(approximate)	3.7 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.179 cm²	
	L_e - Eff. Mag. Path Length	4.23 cm	
	V_e - Eff. Core Volume	0.759 cm³	
	WA - Min. Eff. Window Area	0.621 cm²	
	sa - Surface Area	10.6 cm²	
	mlt - mean length per turn	2.43 cm	
Inductance	μ_i(reference)	6	
	A_L value (nominal)	3.2 nH/N²	
	Test Winding	N=100, #30 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 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=8.00E-16		
	Q test winding	N=10, #22 AWG	
	Q frequency	18 MHz	
	Q min on HP4342A	199	
DC Saturation	$\%\mu_i = \frac{1}{a+b\cdot H^{c}}+d$		
	where H expressed in oersteds, and:		
	a=1.00E-02, b=5.54E-09, c=1.69, d=0.00		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	99.6%	
	Percent Initial Perm(min.)	99.4%	
Coating/Pkg	Coating Type:	Black/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	3,000 Pcs/Box	









Winding Table												
Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
	mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
Single Layer	Turns	12	15	20	25	32	40	51	64	80	101	126
	Rdc(Ω)	2.4 m	4.8 m	10.1 m	20.2 m	41.1 m	81.7 m	165.6 m	330.4 m	656.9 m	1.3	2.6
Full Winding	Turns	12	19	29	45	69	107	166	256	397	614	950
	Rdc(Ω)	2.4 m	6.1 m	14.7 m	36.3 m	88.6 m	218.4 m	538.9 m	1.3	3.3	8.0	19.7

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